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**Abdulgani stepping down after
reviving Garuda Indonesia's fortunes**

**Splits over ICAO
global insurance plan**

**Safety & security:
Special Report**

Asia-Pacific Fleet Census: UPDATE



**PETER SUTCH:
CEOs pay tribute**

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MOUNTAINS TO CLIMB

In recent weeks new chief executives have been appointed at Thai Airways International (THAI), China Airlines (CAL) and Air New Zealand (Air NZ) and Abdulgani has tendered his resignation as Garuda Indonesia's president. His successor has not been confirmed.

All four new chief executives will have very different, but equally demanding challenges in their new jobs. Two of the new leaders, Kanok Abhiradee at THAI and Air NZ's Ralph Norris, do not have airline backgrounds, although their carriers look like they will be the toughest to put back on a correct course.

THAI is US\$2 billion in the red. Its attempts to part-privatise in the last six years have been continually thwarted by a depressed economy and the peculiarities of Thai politics. Kanok also will have to heal wounds between factions within the airline and, traditionally, will have to contend with government interference.

While the Thai Government wants to offload 23% of its shareholding, the New Zealand Government has recently bought back 82% of its national carrier to stave off the bankruptcy which was threatened by Air NZ's calamitous acquisition of Ansett Australia. The purchase led to the airline suffering the largest loss in New Zealand's corporate history and the closure of Ansett.

New boy Norris has said Air NZ will not turn a profit for up to two years. Some might say even that forecast is optimistic. Another problem exists. If it is to succeed in the Australian market it must make its peace with Australian travellers, many of whom hold Air NZ responsible for the demise of popular

Ansett.

At CAL, Philip Hsing-Hsiung Wei has a hard act to follow. Christine Tsung succeeded in breathing new life into the airline and gave it a new and modern image. But after 18 months, she left the airline in February to become economic affairs minister of Taiwan. Wei will probably spend a lot of his time developing the airline's China interests and tip-toeing through the always delicate political minefield of Taiwan.



















Abdulgani and his board at government-owned Garuda have recommended executive vice-president finance, Emirsyah Satar, as the new president. One hopes the government will listen. Former banker Abdulgani has restructured the carrier's US\$1.8 billion debt and brought a new pride to Garuda which, during the Suharto era, was wracked with corruption and mismanagement.

Each new chief executive each faces formidable tasks in difficult economic conditions. They must hope that when the time comes for them to step down they can do it like Abdulgani – with smiles on their faces and thoughts of jobs well done.



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PETER SUTCH CBE: 1945-2002

‘A darn good airline man’

By Barry Grindrod

Peter Sutch, Cathay Pacific Airways’ former chairman and managing director, who died aged 56 on March 6 after a long illness, could not have wished for a better epitaph.

The words in our headline were those of another good airline man, Dr Cheong Choong Kong, Singapore Airlines’ deputy chairman and chief executive. The two men had known each other since the days when their individual airlines were attempting to find a foot hold on the international stage. And although they were professional competitors they had developed a great respect and liking for each other as Cathay and SIA evolved from small regional carriers into two of the world’s finest airlines.

As the tributes on this page illustrate, Peter Sutch had a great many admirers and loyal life-long friends. The authors are some of the best-known names in commercial aviation. But his professional life extended far beyond the boardroom and executive airline offices. He was also a man of the people and knew just about everybody at his beloved Cathay Pacific in whatever office or far flung country they worked in. To many of the younger employees he became more of a father figure than a boss.

One Hong Kong journalist who knew him well wrote that he “broke the mould” and “brought a new management style [to the parent Swire Group] where former chief executives generally favoured a lofty, secluded approach”. True.

He was loyal, modest, down-to-earth and genuinely caring. He described Cathay’s black Monday in January, 1998, when the airline laid off 760 staff in a bid to come to terms with its worst ever financial crisis, as “by far my worst experience at Cathay, the worst, worst, worst,” in an interview



Peter Sutch with the first Cathay aircraft – an A330 – to be painted in the new ‘brushwing’ livery in an Orient Aviation cover photo taken at the Farnborough Airshow in 1994

with Orient Aviation some months later.

The staff cuts, which were not the last at the carrier, were fuelled by the Asian economic crisis and a decline in visitors to Hong Kong after the handover of the territory’s sovereignty to China in 1997.

In 1999, at his last press conference in Hong Kong as chairman of the airline, before he left for London to become

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DAVID TURBULL, deputy chairman and chief executive, Cathay Pacific Airways.

“Peter had enormous enthusiasm for all that he did. Cathay Pacific Airways was clearly his great love.

He had an extraordinary memory for names and faces and always made time to discuss personal or professional problems with staff at every level. He created a strong family atmosphere and was much loved and respected by many people throughout the community.

He still had much to contribute and it is our great loss that we are to be denied his wisdom, friendship and leadership.”

ROD EDDINGTON, chief executive, British Airways, and former managing director of Cathay Pacific Airways

“Peter was a wonderful boss and a real friend. He loved the aviation business and the people in it — industry wide not just those of us who worked for him at Cathay Pacific.

He had a great capacity to get the best out of people and to get them to work as a team. He was only too happy to see others get the credit when things went well and yet would always step forward when they didn’t.

He loved Hong Kong and we will all miss him. He was a great man in every way.”

DR CHEONG CHOONG KONG, deputy chairman and chief executive Singapore Airlines

“I spoke to Peter not so long ago. Despite his illness he was his usual self and in excellent spirits. I have never known

him to be anything else but, even in times of extreme stress, which in our business are not uncommon, I have always enjoyed working and competing with him.

He was easy to talk to, played fair and possessed a good sense of humour. Above all, he was a darn good airline man.”

ISAO KANEKO, president of Japan Airlines

“Peter Sutch had a lot of friends at JAL, many of them going back to the days when Peter was Cathay’s dynamic young marketing manager in Japan, some 27 years ago. He was a man with great drive and personal charm and a pleasure to work with. He did much to build Cathay into an airline with a global reach. His presence will be sorely missed by his many friends in the industry.”

an executive director of the Swire Group, he announced Cathay's first loss in 35 years.

He deserved a better send-off, but cometh the hour, cometh the man. "I would prefer to leave Cathay Pacific having gone through the difficulties and tried to sort them out rather than be bowing out at the top and leaving the downturn to my successor," he told *Orient Aviation*.

"I have seen some of Cathay's best years and my successor would like to see even better ones. It is painful, but I personally feel happier that I am sharing the difficulties."

Yes, he saw Cathay's best years. Indeed, he contributed significantly towards them.

Peter Dennis Antony Sutch CBE graduated from Exeter College, Oxford, before joining the family-owned, London-based Swire Group, in 1966. After four years with the shipping division, in Hong Kong and Japan, he transferred to its subsidiary, Cathay Pacific Airways, in 1970. It was then a modest regional carrier.

His first job was manager for West Japan, a country with which he developed strong airline ties over the years. From then on his career, which was spent in either Hong Kong or Japan in the early years, followed that of the airline – onward and upward.

In 1984, he was appointed managing director. It was only five years earlier that Cathay took delivery of its first B747 and launched its first long-haul route – to London – in 1980.

He recalled in the mid-1990s: "I remember the words of one of our eminent chairman saying in the 1970s that Cathay would never buy B747s because they would be too big for us. We now have 36 of them!"

But by the time he was appointed deputy chairman in 1988 expansion was the name of the game at Cathay – the airline was in the major league. When he became chairman of Cathay and the parent Swire Group in 1992, Cathay was among the three most profitable and also most well-respected carriers in the world.

JEAN PIERSON, former president and CEO of Airbus Industrie

"Peter Sutch was not only a great executive, he was also a very straight-forward, but very demanding negotiator.

Peter had an outstanding knowledge of Hong Kong's political situation, including the very complex economic relations between mainland China and Hong Kong, and of the Chinese families running business there. I always appreciated and followed his advice.

From a purely personal point of view, we had the opportunity several times to put aside the business issues and spend some good time together both in Asia and in Europe. Peter was not only an extraordinary businessman, but also a very likable, enjoyable and highly cultivated person. I have lost a great friend."



Peter Sutch with Singapore Airlines chief executive, Dr Cheong Choong Kong, at an AAPA Assembly of Presidents meeting

ALAN MULALLY, president and CEO, Boeing Commercial Airplanes

"Peter Sutch will always be remembered as a great leader. With gentility, he asserted enormous influence that made Cathay Pacific Airways what it is today, a world-class airline. His foresight and leadership were instrumental in the launch of the Boeing 777 family, and he profoundly influenced today's air travel industry."

Capt. MIKE MILLER, Cathay Pacific Airways base training captain B747-400 who has flown with the airline since 1984.

"Peter Sutch was the aviator's friend. There is not a senior pilot in Cathay that did not have a great respect and fondness for the man. He was an old style airline

Within weeks of Peter Sutch becoming managing director of the airline in 1984, the then Chinese leader, Deng Xiaoping, and British Prime Minister, Margaret Thatcher, signed the Joint Declaration, the blueprint that laid out Hong Kong's return to China – on June 30, 1997.

The doom mongers speculated that China's influence would threaten Cathay's dominance in the Hong Kong market. They were wrong and while there were a few political hiccoughs along the way, Peter Sutch, the consummate diplomat, could always be found at the sharp end of any awkward moments smoothing the waters in his own inimitable, quietly spoken and good-humoured way.

What is not widely known is that he had many contacts and friends at government and airline levels in China and that his personal style kept open many doors on the main-

land that a less sensitive man would never have managed in China.

In recent years, Cathay's relationship with its pilots has been poor to say the least. But the flight crews loved their former chairman. Firm but fair was how they described him. So popular was he that he was made an honorary member of the Guild of Air Pilots and Air Navigators.

Twice married and with four grown children, he also was heavily involved in charity and community work in Hong Kong, including the ORBIS flying eye hospital.

But his heart was never far away from the "Heart of Asia" as Cathay cleverly branded itself in the nineties.

One regular Cathay passenger tells the story of being at the airport check-in desk when the chairman came along for a London flight. When told the flight was full he immediately told the check-in clerk not to "bump" any fare-paying passengers for him. He would travel later.

This he did, and not for the first time.

He also used to often travel in economy class, a "good way to keep an eye on things", he once told *Orient Aviation*.

Peter Sutch, a darn good airline man, indeed. ■

man, he managed us firmly, but fairly. He was good at it.

He was at the helm during Cathay's good times and a lot of that was down to him. From the piloting point of view, he has been one of the few chief executives that kept everyone "on-side".

When he was travelling on the plane he always asked permission to visit the flight deck. When he arrived he invariably knew everyone, asked about our families and even knew our likes and dislikes. He had obviously done his homework before leaving for the airport. He would talk about the company and what it was doing and ask our views about it.

He was so well liked that when a captain got a new command he would be invited to the command party and usually turned up for a few beers. ■

REGIONAL ROUND-UP

HAINAN, SHANDONG BUY 'BIZ' JETS, LOOK TO INVEST IN CARRIERS

As China dots the 'i's and crosses the 't's of its upcoming consolidation of the **Civil Aviation Administration of China's (CAAC)** 10 major carriers, two of the mainland's most go-ahead second tier airlines are looking to secure their own futures as the threat of added competition looms.

Both **Shandong Airlines** and **Hainan Airlines** are looking to buy into other carriers and have invested in corporate jets.

Entrepreneurial Hainan, which is never far away from the headlines, is set to become the first mainland carrier to acquire equity in a foreign flag carrier when it takes a 49% share in start-up airline **Air Cambodia**.

The airline will replace the operations of **Royal Air Cambodge**, which went bankrupt and was grounded last October. Air Cambodia will have a registered capital of US\$10 million of which Hainan will contribute US\$4.9 million.

The Cambodian Government will take a 41% stake in the carrier with Cambodian company, CTG, investing the remaining 10% of the start-up capital. The airline will launch with two leased B737-400s. Air crew and maintenance services will be provided by Hainan.

Meanwhile, Hainan provided **Gulfstream** with its first China customer when it ordered three Gulfstream 200 business jets valued at US\$60 million.

Two of the aircraft will be delivered to Hainan's charter company, **Deer Jet**, in the third quarter of this year and the third in early 2003.

Shandong Airlines is hoping to negotiate an 8% stake in Chengdu-based **Sichuan Airlines** in a bid to strengthen its hand as the mainland



Air Hong Kong: troubled early days, but now wholly-owned by Cathay Pacific

Cathay takes 100% in cargo carrier Air Hong Kong

Cathay Pacific Airways, a 75% stakeholder in dedicated Hong Kong cargo carrier, **Air Hong Kong (AHK)**, has agreed to buy the final 25% for HK\$194 million (US\$24.9 million).

AHK, which operates to Japan, Korea, Europe and the Middle East, almost went bankrupt a few years ago, but was rescued by Macau gambling tycoon, Stanley Ho. Cathay later bought 75% in the carrier to head off a sale to **China Southern Airlines** in the mid-Nineties.

Said Cathay chairman, **James Hughes-Hallett**: "Although there is a current surplus of capacity in the air cargo market, Cathay Pacific sees this [the AHK purchase] as an opportunity to invest in the future and position itself to take advantage of the upturn in the market when economic conditions improve."

It is understood Ho agreed to sell his share in AHK to enable him to explore further aviation interests in Macau, which has recently sold lucrative gaming licenses to U.S. interests and is tipped to become the Las Vegas of the East, and possibly Thailand.

airline industry restructures.

China Eastern Airlines and **Citic Pacific** also were reported to be interested in buying a piece of Sichuan. The managing director of the **Citic Group** said talks with Sichuan had ended without a deal being agreed. However, Fan said Citic was interested in buying into **Air China**, the country's flag carrier. Air China will be part of an influential grouping with CNAC and China Southwest under the new consolidation plan.

The first of four Challenger 604s went into service with

Shandong Airlines in March through its charter services company, **Shandong Rainbow Business Aircraft Company**. The charter service already has six CRJ-200s in its fleet.

SHANGHAI ACTS TO BOOST PUDONG TRAFFIC

All international traffic will be moved from Shanghai's older, but more popular **Hongqiao Airport** in October to bolster flagging traffic at the city's new **Pudong International Airport**.

Hongqiao will become a domestic hub and supplement Pudong operations.

Last year, 13.8 million passengers passed through Hong-qiao, exactly double Pudong's 6.9 million passengers. It handled 1.1 million tonnes of cargo compared to Pudong's 410,000 tonnes.

The Shanghai Airport (Group) chairman, **Xia Ke-qiang**, told media that passenger throughput was expected to triple at Pudong to 21 million by 2005 when a second runway would be in operation.

It takes more than an hour by taxi to reach Shanghai's city centre from Pudong, but less than half that time from Hongqiao. Next year a train will link the new airport with Shanghai's metro system.

FORMER MAS CHIEF TAJUDIN UNDER SIEGE

Former **Malaysia Airlines (MAS)** chairman, **Tajudin Ramli**, once had the ear of the high and the mighty in the Malaysian Government. He used to be one of the trusted, role model businessmen Prime Minister **Maha-thir Mohamad** had identified to fast-track the country into a modern industrial age. Not any more.

Tajudin has been cut adrift by the government and is under police investigation following an audit at MAS covering his time at the airline. Also there is speculation that it is only a matter of time before he will have to step down from his telecommunications company, Technology Resources, where he is chairman and a 24% stakeholder.

Mahathir appointed himself finance minister last July after **Daim Zainuddin** resigned from the post. He ordered a corporate clean-up that led to the exit of a number of top businessmen from flagship Malaysian companies that were linked to Daim. Tajudin was among them.

But this was not before he had quit MAS and sold the government his 29% stake at more than twice the market price in a deal sanctioned by Daim.

The *Asian Wall Street Journal* reported that police, following a complaint by the present MAS management, were looking into alleged management irregularities at the carrier. They are focusing on contracts between MAS and a German-based cargo handler, **ACL Advanced Cargo Logistic**, controlled by Tajudin. ACL owns a facility that MAS contracted to use as its local cargo hub in 1999.

The police also are investigating leasing arrangements between MAS and **Atlas Air Worldwide Holdings** for four cargo planes used to service the ACL facility. MAS officials allege the airline's contracts with ACL and Atlas Air failed to protect MAS's interests. Police are looking at "possible criminal negligence" involving Tajudin.

KANSAI TO SLASH FEES TO HALT EXODUS

Kansai International Airport will cut landing fees by 50% from April 1 in a bid to halt an exodus to Narita where a second runway will add capacity to the more lucrative Tokyo market, writes **Daniel Baron**.

Kansai has lost several foreign carriers over the past year and most recently saw **Japan Air System** drop all its international services and some domestic flights from the facility. Already operating well below capacity with its single runway, the airport can ill afford to lose business, particularly as it is proceeding with construction of its own second runway.

The Kansai airport authority is also offering additional landing fee discounts to carriers that will improve connections between Kansai and domestic cities.

ARIANA LOOKING TO REBUILD FLEET

Afghanistan's national airline, **Ariana Afghan Airlines**, was all but wiped out in the U.S. "war on terror"

against the Taliban Government and Al Qaeda group, but now Boeing is talking to the carrier about replacing the lost aircraft.

All but one of the airline's seven aircraft were destroyed in the fighting. The remaining B727-200 is flying to cities including Delhi and Sharjah.

The interim Afghan Government has asked the U.S. to replace the planes it lost on the ground during the air strikes on Kabul. Furthermore, Ariana has asked the interim government for five widebody aircraft, five narrowbodies and a number of planes for domestic operations.

But what has not been lost on Ariana executives is the huge potential for cargo



Flight attendants hand leaflets out in downtown Tokyo promoting the Association of Asia Pacific Airlines' "Travel Moves You" campaign designed to boost passenger confidence in air travel following the events of September 11. In recent weeks campaigns have been launched in cities across the region

operations for the airline as Afghanistan starts to re-build its shattered infrastructure.

AIR DO IN SURVIVAL BATTLE

Sapporo-based **Hokkaido International Airlines**, otherwise known as **Air Do**, may not be doing it alone for much longer. The carrier is, according to president, **Michimasu Ishiko**, seeking to partner with other Japanese airlines in an attempt to survive.

Already straddled with debt and in arrears in facility and landing fees, Air Do may have difficulty finding a sympathetic ear. Launched in 1998 as a low-cost alternative on the Sapporo-Tokyo Haneda

route, the airline saw its *raison d'être* fade when domestic fare deregulation allowed **Japan Airlines**, **All Nippon Airways** and **Japan Air System** to flood the market with discounted seats. Air Do's troubles were compounded by higher costs and lighter loads after September 11.

AIRPORT SALE COULD TOP US\$2.6B

The **Australian Government** could collect a cash bonanza with the upcoming sale of Sydney Airport. After **Sydney Airports Corp. (SACL)** tripled its six-month profit, the airport sale is back on track to earn the government up to A\$5 billion (US\$2.6

kicks off. But it also is preparing "for the unthinkable".

"If you happen to see an aircraft in a secluded corner of IIA being cordoned off by heavily armed men in black clothes don't be alarmed. It's only a drill," said the airport's monthly newsletter.

In February, the IIA formed a security task force comprised of people from airport departments and government agencies. Their training will include "contingencies to deal with neglected baggage, which represents potential bomb threats and trespassers who represent potential security threats".

But IIA is also "thinking the unthinkable", a terrorist attack. One major exercise involved the **Korean Police, Military Special Weapons and Tactical Units, the National Intelligence Service, the Ministry of Construction and Transportation** and IIA in February. Another will be staged during April on the supposition that terrorists may hijack a plane and force it to land in Seoul.

Meanwhile, the **Incheon International Airport Corporation (IIAC)** is creating a Duty Free Zone. The **Ministry of Finance and Economy** has designated about 992,000 sq metres of land at the IIA for the zone. The development is scheduled to be completed in late 2005.

ANA ON GUARD

All Nippon Airways (ANA) is to hire "sky guards" on international and domestic flights to combat outbreaks of hooliganism on board its aircraft during the World Soccer Cup in June. An airline spokesman said the guards had been hired from a European company and were "trained professionals ready to anticipate when trouble is going to occur and also handle riotous passengers".

VIRGIN BLUE IN THE PINK

Within days of the demise of **Ansett Australia**, transport logistics company, **Patrick Corporation**, announced it was buying a 50% share in Australian low-cost domestic operator **Vir-**

billion).

SACL posted a net profit of A\$44.1 million for the period. Chief executive **Tony Stuart** said he was pleased with the result in view of the downturn in traffic after the September 11 U.S. terror attacks and the upheaval caused by **Ansett Australia**, which has closed. The tendering process was suspended after September 11.

INCHEON ON ALERT FOR 'UNTHINKABLE'

The Winged City, as South Korea's **Incheon International Airport (IIA)** calls itself, is hoping to have a ball during June when the FIFA World Soccer Cup, jointly hosted by Korea and Japan,

gin Blue for A\$260 million (US\$135.1 million).

The deal will give Virgin Blue the financial strength to pursue the opportunities arising from the collapse of Ansett. Virgin Blue also will be able to operate international routes in the future "if it should wish to do so".

The carrier operates 16 aircraft and has another seven ordered for delivery this year. **Sir Richard Branson** said he expected to see Virgin Blue's market share rise from 15% to 30% of the Australian domestic market by the end of the year and 50% over the next five years.

It has about 1,500 workers, but has said it will hire 1,000 ex-Ansett staff.

TRAINING

Sichuan Airlines has become the first mainland Chinese carrier to train its pilots at the **GE Capital Aviation Training (GECAT)** facility in Hong Kong.

GECAT Asia managing director, **John Bent**, said a number of other Chinese airlines have signed agreements with GECAT and will soon begin training at the **Cathay Pacific Training Centre** where it leases four bays and can provide training on seven different commercial aircraft types.

CAE will install an Airbus A320 full flight simulator at **Singapore Airlines Training Centre (STC)** in Singapore. The simulator will be

used for SIA subsidiary **Silk-Air's** pilot training. Excess simulator time will be offered to airlines in the region.

IN BRIEF:

The 15 board members of the **Asian Business Aviation Association (AsBAA)** met for the first time at **Asian Aerospace 2002** in Singapore. The association was launched in June 2001. The operator of Guangzhou's **New Baiyun International Airport** has had its two billion yuan (US\$244 million) listing plan approved by the **China Securities Regulatory Commission**. The proceeds will be used to help fund the construction of the 20 billion yuan airport that is scheduled

to open in 2004. After serving Haneda Airport in Japan for 27 years, **China Airlines** will switch its Taipei-Tokyo flights to Narita Airport when the airport's second runway opens on April 18. **Malaysia Airlines (MAS)** resumes its New York services from May 30 with a three-times-a-week service via Dubai. It also will start flying again to Rome, Karachi, Manchester, Istanbul and Cairo. **Singapore Airlines (SIA)** is to launch three-times-a-week B777-200ER flights to Las Vegas via Hong Kong. SIA also increased freighter services to key markets in Asia, Europe and North America in March after taking delivery of its 11th B747-400 freighter. ■

Asian Aerospace 2002 Review

Better times ahead

A **Asian Aerospace 2002** in Singapore may have lacked a little of the buzz of recent years, but given the circumstances surrounding the industry in the last 12 months the mood was of cautious optimism, writes **Barry Grindrod**.

The commercial aerospace business may have been at its lowest ebb, but 900 companies from 37 countries took the trouble to exhibit in Singapore and 22,000 trade visitors from 65 countries filed into the Changi Exhibition Centre.

Perhaps contrary to expectations before the show, there appeared to be a groundswell of opinion that the industry had turned the corner, that better, if not exactly good, times were ahead.

Boeing and **Airbus** were, understandably, missing the customary order announcements, but both manufacturers had plenty to say.

Airbus president and chief executive, **Noel Forgeard**, said while the manufacturer had made significant progress in the Asian market recently, Japan was the exception. A market share of 20% in that country was not good enough, he said.

It was for that reason that Forgeard had made Japan a top priority for Airbus. An Airbus Japan subsidiary has been created with its own commercial team and, for the first time, the company was

developing significant industrial partnerships in Japan, said the Airbus chief.

Boeing, meanwhile, unveiled its new hush-hush B747-400 model, the 747XQLR which stands for Quiet Longer Range. Senior vice-president sales, **Larry Dickenson**, said the plane would be among the quietest and most environmentally friendly in the skies. It also will be a little faster (Mach 0.86 up from Mach 0.855) and have greater range (14,775km) 570kms more than the B747-400ER for which **Qantas Airways** will be the launch customer. Maximum take-off weight at 417,760kgs is 5,000kgs greater than the -400ER.

Dickenson said even at maximum take-off weight the QLR would meet all community noise standards. The launch date for the aircraft could be as early as June and the in-service date is projected to be 2004. A passenger and cargo version of the B747XQLR is planned.

There was no doubting the biggest commercial aviation announcement of Asian Aerospace 2002: **Emirates'** order of 98 **Engine Alliance GP7000s**, valued at US\$1.5 billion, to power its 22 Airbus A380s that will enter service in September 2006.

If the Dubai-based carrier takes up 10 A380 options it will require an additional 40 engines from the **Pratt & Whitney/GE** joint venture. The Rolls-Royce Trent

900 is the other option on the A380.

MRO giant **Lufthansa Technik (LHT)** signed a five-year contract for servicing Korea carrier **Asiana Airlines'** GE CF6-80 engines during the show. LHT also signed a five-year contract for Total Component Maintenance on **Japan Air System's** 36 Airbus A300s and A300-600s. Japanese engine manufacturer and MRO provider, **IHI**, will be sending turbine parts to LHT for repair over a similar period.

Singapore Aircraft Leasing Enterprise (S.A.L.E.) ordered an additional A320 bringing its firm commitments for the Airbus single aisle family to 51 of which 21 have been delivered. Established in 1993, S.A.L.E. has a portfolio of 40 aircraft, with an average age of 4.6 years, and 22 customers in 16 countries.

Hong Kong joint operators, **East Asia Airlines/HeliHongKong**, signed a deposit agreement for an Sikorsky-92 helicopter to use between Macau and Hong Kong. Four S-76C+ helicopters are currently in service on the route.

ATR announced orders for five ATR 72-200s and one ATR 42-320 second-hand aircraft during the show. They included one ATR 72 for **Air Kiribati** and two ATR 72s for an unnamed Malaysian operator, the manufacturer's first contract in Malaysia. ■

BUSINESS ROUND-UP

MAJOR REVERSAL OF FORTUNE FOR CATHAY PACIFIC

What a difference a year makes. This time last year **Cathay Pacific Airways** was basking in the news of a record profit of HK\$5 billion (US\$641 million). Twelve months on, it has announced an 87% fall in net profit to HK\$657 million for 2001.

Although badly battered in the aftermath of the September 11 U.S. terrorist attacks, Cathay had already been suffering from the effects of the world economic slowdown, said chairman **James Hughes-Hallett**. In addition, a drawn out pilots' dispute took its toll on the carrier's bottom line.

It was a year of two very different halves. In the first six months Cathay posted a profit of HK\$1.32 billion. But the impact of September 11 took a high toll on the second half performance when the carrier swung from black to red, losing HK\$662 million.

Turnover for the year fell 11.8% on 2000 to HK\$30.44 billion. Operating profit declined 84.3% to HK\$832 million.

A significant one-off plus to Cathay's bottom line was the HK\$452 million earned from the sale of its stake in data-networking provider, **Equant N.V.**

The airline carried 11.3 million passengers in 2001, 5% down on the previous year. Cathay's first and business class traffic was particularly badly hit.

As well, the fall in demand for air travel prompted intense competition and widespread discounting. Passenger yield was 5.2% below 2000 levels.

Cathay's cargo turnover shrank 15.6% to HK\$7.27 billion. Freight volume declined 8.5% to 704,154 tonnes. Yield was down 10.6%.

The airline's costs per available tonne kilometre (ATK) increased 1.7% to



AIR NZ: TWO YEAR WAIT FOR PROFIT

Air New Zealand (Air NZ), now 82% owned by its national government, felt the financial sting of its disastrous **Ansett Australia** experience when it announced a massive half-year after-tax loss of NZ\$376.5 million (US\$163.7 million) for the six months ended December 31.

The deficit was in line with brokers' estimates and included a \$75.6 million operating loss and unusual losses of NZ\$300.9 million, mostly arising from the Ansett collapse.

Air NZ chairman **John Palmer** said the airline had been through "probably the most challenging period in Air New Zealand's history".

The six-month loss followed a record NZ\$1.4 billion full year deficit for the carrier in the previous year when it wrote off a NZ\$1.3 billion investment in Ansett.

Air NZ's new chief executive, **Ralph Norris**, said management "was of the view that we will return to profitability within the next 24 months, preferably sooner rather than later". ■

HK\$2.36. Without fuel costs, which declined 6.5%, ATK costs rose 3.8%.

As for the future Hughes-Hallett said: "Based on statistics for January, to a great extent load factors have recovered, but a significant number of business and first class seats remain empty and average yields remain depressed."

Asked for a 2002 forecast the airline's chief executive, **David Turnbull** and Hughes-Hallett were "cautiously optimistic".

• Cathay subsidiary, **Hong Kong Aircraft Engineering Company (HAECO)** reported a 22% fall in net profit to HK\$312 million.

QANTAS' DOMESTIC MARKET SOOTHES INTERNATIONAL PAIN

In a topsy-turvy six months, **Qantas Airways** reported a half-year net profit of A\$153.5 million (US\$79.8 million) to December 31, a decline of 42% from the A\$262.9 million earned a year earlier.

The carrier's traditionally strong international business came unstuck after September 11, but Qantas's domestic market benefited from the demise of **Ansett Australia**.

Chief executive, **Geoff Dixon**, said trading in the first six weeks of 2002 indicated the carrier's full-year pre-tax result would be "in line" with last year's profit of A\$550 million.

Qantas's international operations, which represent 75% of the airline's business, posted a loss before interest and tax of A\$15.5 million, compared to a profit of A\$285.9 million a year earlier. However, on the domestic scene, Qantas recorded a 67% profit rise before interest and tax, to A\$180.1 million over A\$118 million 12 months earlier.

Revenue for the six months was up 11.1% to A\$5.7 billion. Passenger revenue rose 11.7% due to growth in revenue passenger kilometres of 5.1% and yield improvement of 6.2%.

Overall capacity increased 5.1% over the same period last year, but after September 11 Qantas switched capacity from international to domestic operations. Domestic capacity increased 28.6% for the six months, after jumping 40.1% in the second quarter as international long-haul aircraft were redeployed on domestic sectors and short-term wet-leased jets were used to cope with increased demand in the domestic market following Ansett's demise.

Qantas chairman **Margaret Jackson** said the six months had been the most tumultuous in the history of aviation because of the events of September 11 and collapse of Ansett. But, she said, Qantas had performed "better than just about any airline in the world". ■



Qantas chairman Margaret Jackson: "outstanding performance"

Insurance premiums for the world's airlines went through the roof after the September 11 U.S. terrorist attacks. But while a "sword of Damocles" hangs over carriers who could be grounded at the whim of insurers, a U.S.

airlines move to launch their own insurance company has angered supporters of an ICAO global initiative to form an insurance pool. ICAO also is meeting opposition from UK and Germany.

SPLITS OVER GLOBAL INSURANCE PLAN

By Tom Ballantyne

Moves to forge a global government industry war risk insurance pool to cover airlines against future terror attacks have been thrown into doubt because U.S. carriers have opted to set up their own insurance company. European governments also look set to scuttle the initiative.

The developments have the potential to split the industry and dilute the ability of airlines from other regions, including the Asia-Pacific, to protect themselves with sufficient cover, according to Association of Asia Pacific Airlines (AAPA) director general Richard Stirland.

He criticised U.S. moves to go it alone and warned a "sword of Damocles" was hanging over airlines as they struggled to solve the insurance crisis while still faced with the constant threat of being grounded if their insurance cover was cancelled.

The AAPA has thrown all its weight behind a proposal from the International Civil Aviation Organisation's (ICAO) Special Group on War Risk Insurance (SGWI) that war risk insurance should become the responsibility of a single non-profit company with governments, airlines and other sectors of the aviation industry as shareholders.

Backed by multi-government guarantees that could amount to US\$15 billion, insurance would be available to all ICAO members. The International Air Transport Association (IATA) has endorsed the ICAO plan and said "terrorists will win if the aviation industry is shut down due to the absence of war risk insurance".

Stirland said if the U.S. carried through its decision to act alone, a move



U.S. Secretary for Transportation, Norman Y. Mineta: supports U.S. airlines plan to launch their own insurance company



AAPA director general Richard Stirland: U.S. move would leave global ICAO initiative "dead in the water"

which would be taken through its industry body, the Air Transport Association of America (ATA), it would "drive a coach and horses through the ICAO scheme and the whole thing would be dead in the water".

However, a further blow for the ICAO initiative has now been dealt by the UK and German governments who have reportedly rejected the concept of a global insurance scheme.

Sources say both nations told an ICAO meeting in Montreal they preferred a commercial solution.

According to senior officials of the UK airline body, the British Air Transportation Association (BATA), the British government is totally opposed to the ICAO scheme, a stand backed by

Germany.

BATA executive officer, Bob Preston, said a preliminary European mutual insurance fund proposal from the Association of European Airlines was unlikely to get the backing of European governments, since it was meant to be an interim step on the way to the global ICAO scheme.

The UK and German governments views are they do not want to be saddled with the risk of bailing out airlines in the event of a large claim that will far exceed the insurance pool.

The insurance dilemma entered a critical period in late March as temporary insurance guarantees granted to airlines by dozens of governments worldwide to keep them flying after



September 11 began to expire.

The guarantees were granted when insurance companies cancelled their war risk insurance for airlines because they feared both huge pay-outs from terrorists' victims and the possibility of more terrorist attacks involving airlines.

Under new insurance arrangements, aircraft leasing companies and banks generally require airlines to carry insurance of \$100 million to \$750 million, depending on where they fly. Before the attacks such coverage had been included in the standard airline liability coverage of \$1.5 billion per aircraft. But such policies allow the insurers to cut back their coverage on seven days notice; a constant threat to carriers in the event of another terrorist attack.

Stirland, who recently visited Europe to discuss insurance issues with the European Commission in Brussels and a number of major airlines and brokers, said a risk management executive at one carrier admitted waking up every morning sweating because his airline is faced with seven day cancellation of current policies.

"In other words, the moment these policies are cancelled the whole airline is grounded. If governments wish to see a continuation of a viable air transport industry they have to find an acceptable solution to this situation," added Stirland.

He told a March meeting of the AAPA executive committee in Singapore it appears most governments in Europe do not appreciate the ramifications of the virtual disappearance of the war risk market, are not particularly interested in it and fear the continuation of government guarantees will obviate the need for airlines to seek commercial cover.

Stirland said although the SWGI has endorsed the global pool plan in principle, there are still serious hurdles to overcome. Some countries still have reservations about some aspects of the scheme.

Contentious issues include the method of setting premiums and the level at which the company begins to assume risk above the provisions of the commercial market.

"In spite of this it does appear that in the absence of a commercial market and the firm intention of individual governments to withdraw guarantees at the first opportunity, the ICAO solution is the only sensible option," he said.

The insurance crisis continued to develop amid news insurance premiums are likely to remain high for at least the next two to three years, which is bad news for airlines that have seen their payouts for cover in some cases climb tenfold.

Speaking at a two-day insurance conference in Singapore in March



Asia-Pacific airlines support ICAO's view that war risk insurance should be the responsibility of a single non-profit company with governments, airlines and other sectors holding shares.

the underwriting director of Faraday Aviation, Christopher Hancock, said levels would remain high as insurers endeavoured to use the current situation to re-coup losses suffered over the past decade.

His prognosis was backed by the managing director of Aon Group, Alan May.

In 1999, airline premiums were \$1.04 billion while claims reached \$1.8 billion, he said. In 2000, claims totalled \$1.8 billion, exceeding premiums by \$600 million. Last year, claims soared to \$5.1 billion while premiums were \$3.6 billion. More than half was from additional premiums charged as a result of the September 11 attacks. Estimates of the total claims from September could exceed \$70 billion, he added.

Hancock said the losses after September 11 have "awakened capital providers to the risk their aviation underwriters are exposing them to".

None of that offers any comfort to airlines, which need adequate insurance cover to stay in business. As they strive to find a permanent solution many carriers have asked their governments to extend guarantees for cover to allow carriers to buy more time to find a manageable financial solution to pay the higher premiums.

An AAPA initiative on pooling insurance was originally announced at the association's Assembly of Presidents in November, but it became apparent any sort of pool within the region was not going to work. Industry officials are convinced the large sums of money needed to provide a viable pool required global and not just regional participation.

By January, a detailed paper prepared by the London Market Brokers Committee (LMBC) in conjunction with IATA and other industry elements was presented to the SGWI. It reported that the commercial insurance market had hardened and would not provide rea-

sonable, affordable third party war risk liability cover in excess of \$50 million.

Under the ICAO scheme a non-profit sharing company would be formed with a board of directors including IATA and ICAO representatives, brokers and others to offer suitable war risk cover. The cover would be available to all airlines and service providers in countries that joined the scheme.

Initial capitalisation would likely be provided through loans backed by participating state guarantees. But airlines would pay premiums – initially US\$0.50 cents per passenger segment – to build a pool of funds that would gradually distance countries from the need to meet claims.

Jonathan Palmer-Brown of the LMBC said the scheme would not require governments to put in new capital. Instead they will, in effect, act as guarantors to enable the new company to borrow capital from banks.

"This would give a long-term solution to the problem and provide the right level of coverage for a reasonable level of premium," he said. The proposal needs the support of countries that account for at least half of the world's passenger traffic to succeed and airlines from any nation not supporting the plan will be excluded. They will then face significantly higher insurance costs.

IATA said the scheme addresses the critical issues in an appropriate manner. "By providing for state guarantees, not up-front governmental funding, the proposed new insurance vehicle would be able to deliver what airlines and the travelling public urgently need, namely accessible, affordable, adequate and non-cancellable third party war risk protection."

"All participants in the air transportation system, including airlines, lessors, airports, airline service providers, even privatised air traffic control services, need war risk insurance. The SWGI



proposal does that too."

With airlines in Europe and Asia lobbying governments to extend temporary guarantees the U.S. airlines' decision to form their own insurance company has raised the spectre of yet another industry failure to find a global solution to crisis. American operators apparently have Washington DC's backing.

"We are in agreement in principle with the airlines. What is being negotiated now is the cost levels and fees," said Chet Lunner, a spokesman for U.S. Transportation Secretary, Norman Y. Mineta.

Hardest hit by the September attacks, U.S. airlines expect to save millions of dollars annually by having their own insurer, which will be known as Equi-time.

Participating airlines will contribute about \$50 million for the initial pool. "We have a lot of incentive to do this. As an industry, we're paying close to \$1 billion more in premiums than before 9/11," said Chris Duncan, an architect of the plan and the executive in charge of insurance at Delta Air Lines.

Not surprisingly, commercial insurers are horrified at the potential loss of business. Maurice R. Greenberg, chairman of the American International Group (AIG), one of the world's largest insurers, urged the U.S. Government to end its insurance programme and argued that by continuing to subsidise airline coverage market forces were being prevented from working. Insurers in other countries make the same complaint.

But Michael Wascom, spokesman for ATA, said buying cover from commercial insurers would increase U.S. airline insurance costs from about the present \$850 million to \$1.4 billion. "Our airlines are very disturbed. It appears that AIG is seeking to profit from terrorism at the expense of airlines and the travelling public," he said.

Stirland said speed is of the essence in implementing a global war risk insurance scheme. "It has become apparent that ultimately it has to pass into the hands of governments. How that is done, who is going to bear the risks and who is going to pay the premiums is still very much a matter of debate," he said.

"How is the relationship to risk going to be established? How are you going to pass the cost on to passengers? What will be the impact on traffic growth of passing on that cost? Will ICAO be able to get the 51% participation it needs to kick off this scheme? If these funds are accumulated and there are no further attacks how is the scheme to be wound up and who gets the huge funds?"

"There are a huge number of issues that have to be resolved, but the fact is there is no alternative." ■

THAI, CAL name new presidents



New THAI president Kanok Abhiradee: outsider



New CAL president Philip Hsing-Hsiung Wei: insider

After a six-month wait, the Thai Airways International (THAI) board has named 53-year-old businessman **Kanok Abhiradee** as its new president.

Kanok is president of Thailand's Small Industry Corporation and has no previous airline experience. After repeated delays, a short list of three contenders was drawn up; Kanok, THAI executive vice-president resources, Suthep Suebsantiwongse, and the advisor to the transport minister, Nopadol Suan-prasert.

Kanok was chosen "for his experience in running several businesses, marketing expertise, management vision, leadership and positive working attitudes," said THAI vice-chairman Srisook Chandrangsu. "The selection was free of politics." The latter comment was significant. Politics has traditionally played a major role in the workings of THAI. The last president, Bhisit Kuslasayanon, was ousted from the post by Prime Minister, Thaksin Shinawatra, after only a few months in charge.

Kanok has a tough job on his hands to prepare THAI for part-privatisation. This plan was first on the stocks five years ago, but has been repeatedly delayed because of economic conditions in the region and the changes of government in Thailand. Last year the airline chairman, Virabongsa Ramangkura, said THAI was US\$2 billion in debt and would cease to exist in three years unless drastic steps

were taken to restructure the carrier. In recent times THAI has been plagued by internal power plays and disputes, which have muddied the airline's reputation.

A 32-year veteran with China Airlines (CAL), **Philip Hsing-Hsiung Wei**, was named as president by its board in March. He succeeds Christine Tsung, who left CAL after 18 months to become economic affairs minister in the national government.

Sixty-year-old Wei joined the airline in 1970 and has held a wide variety of senior positions, including general manager of cargo sales and services in both North America and Europe, regional director of Europe, and vice-president of both the passenger sales division and the finance division. Before moving to the president's office he was vice-president for the Americas, based in Los Angeles.

Capt. Yung-Ling Lee will continue as CAL chairman.

• *Orient Aviation* has been told that Iberia's chairman and chief executive, Xabier de Irala, is no longer to succeed Pierre Jeannot as director general of the International Air Transport Association (IATA). The new favourite is said to be Giovanni Bisignani, a former head of Alitalia and now CEO of Opodo, a European travel portal. The official comment is that he is on a short list of candidates to be presented to the board of governors for recommendation to the AGM in Shanghai on June 2-4. ■



Having succeeded in turning the airline around, Garuda Indonesia's president, Abdulgani, says the time is right to step aside

MISSION ACCOMPLISHED!

By Tom Ballantyne

Garuda Indonesia president Abdulgani's letter of resignation to the government in January raised a few questions at the time. Did he jump or was he pushed? Or had he, perhaps, been undermined by his political masters?

They were to be expected for the boss of a major government-owned airline anywhere. In Abdulgani's case the answer was simple: none of the above.

For the articulate and always immaculately dressed former banker, it was simply a matter of mission accomplished. After three-and-a-half years in charge of Garuda, the suave 59-year-old Abdulgani has completed the task he was set to do; bringing about a reversal in fortunes at the once failing Indonesian national flag carrier, sorting out its chaotic finances and preparing it to face the future.

The final piece of the recovery jig-

saw came late last year when, after two years of tough negotiations, the carrier finalised the restructure of its massive US\$1.8 billion debt with several creditors. Coupled with management reorganisation and a reshaping of the entire business, Abdulgani has successfully laid the groundwork for the next phase of Garuda's development.

"It was always planned that I should leave once these things were done. Now the time has come. For me, this has been an exciting time, but now I am finished with the airline business," he said.

Speaking exclusively to *Orient Aviation* during his visit to Singapore's Asian Aerospace in February, Abdulgani said he would remain at the helm of the airline until his government announced his replacement.

Garuda's executive vice-president finance, Emirsyah Satar, is the choice of Abdulgani and his board for the post, although several other candidates have emerged. They include Samudera Lak-

samana, who has been with the airline for 20 years and is the brother of the government's Minister for State Enterprises, Laksamana Sukardi. Also in the frame for the job are operations director, Rudy Hardono, and engineering and marketing director, Richard Sukadarmasman. The decision was expected to be made before March 31.

Whoever is chosen, Abdulgani believes it must be someone from Garuda who knows the workings of the airline. "Together we have developed not only the base, but the vision for the company. Someone from inside [the airline] will provide the continuity, someone from outside would have to start from scratch," said Abdulgani.

Fortunately for his successor he will inherit an airline far different from the one that Abdulgani took over in late 1998.

A year earlier, the airline had been fighting for survival. It was wracked by corruption, nepotism and mounting loss-



es. But the fall of the Suharto regime in 1997 cleared the way for radical change at the carrier.

Following a "people protest" by airline staff, the new government brought in respected banker Robby Djohan to begin re-building Garuda. He sacked corrupt staff, began to restructure every department and recruited Lufthansa Consulting to help prepare a long-term business strategy.

But Djohan was pulled out to run a new government bank and although he continued as Garuda's chairman, Abdulgani, his close friend, replaced him.

With 20 years of banking behind him, Abdulgani admitted the airline game was a challenge. "This is a different business from banking. There is more detail and it is very complicated. It drove me to become more involved and see everything. I had to go down to the 'basement'. I spent part of my time learning and studying and doing everything to know the real detail of the business," he said.

"For three years it has been very intense. I had to rebuild from the bottom up."

Abdulgani pushed change through micro-managing the business, trimming the fleet, network and staff, but also driving improvements in yields, load factors and on-time performance.

When the new regime took over in 1997 Garuda's staff numbered around 13,000. In the months that followed this was quickly reduced to below 10,000. Today the workforce stands at 9,478.

By 1999, the red ink on the balance sheet had disappeared and Garuda recorded a profit of US\$38 million. While that dropped to around \$7 million in 2000 as a result of difficult trading conditions, particularly high fuel prices and debilitating exchange rates, it kept the carrier in the black. Abdulgani believes Garuda's financial position will show an improvement for 2001.

Productivity, punctuality and reliability have been significantly improved, but less measurable gains have been just

as important, said Abdulgani. "There is a new pride among those who work at the airline. They believe now.

"They have their eyes open to the new way of operating and are ready to face the future with all the operating necessities in place."

Lufthansa Consulting is still working with Garuda. Initially, it operated across all aspects of Garuda's business, but these days it is concentrating on operations, including crew management and scheduling.

Abdulgani said yields remained the main problem for the airline, although it is a difficulty faced by just about every other carrier in the world today.

In his final months he has been concentrating on improving marketing and reservation systems. In November, consultants Hamilton Booz Allen were hired to develop a new marketing strategy.

Once the airline had taken steps to improve yields, said Abdulgani, Garuda would seek to work closer with other



Garuda executive vice-president finance, Emirsyah Satar: the front runner to succeed Abdulgani who is supporting his nomination

carriers and, possibly, join an alliance.

Taking a wider perspective, Abdulgani, who was chairman of the Association of Asia Pacific Airlines last year, said the global airline industry is now operating in a new environment, and is coming to terms with traffic decline and extra costs in such areas as insurance and security.

"All airlines have to adjust and it is not easy. It hurts because it is easy to lose passengers, but not so easy to win them back. Airlines also have to avoid a downward spiral in air fares.

"It is hard to manage because for some time the industry has been in an environment of tougher competition, but the market is becoming thinner and thinner. Even before September 11, economic conditions had been hurting airlines.

"All airlines have to find ways to adjust. They have to find ways to improve the margins and cost structure. They have to have margins that will support their development," he said.

Garuda had originally hoped to privatise next year, but this has been delayed. "Garuda has to continue to improve and become more attractive [to investors] and also the airline industry environment has to improve. All this will have to come together before any decision is made on the timing of the privatisation. These are things outside everyone's control."

Mr Abdulgani has other words of caution. The crisis in the airline industry has shown that governments are ready to step in and re-take control of troubled privatised airlines, as occurred in New Zealand and Malaysia.

"This shows that in the end governments see airlines not as normal businesses, but as strategically important special businesses, important not only to the economy of the country, but to its image," he said.

"Garuda should be privatised, but we should learn from the mistakes of other airlines and make sure we do not repeat them.

"We have to learn from Malaysia Airlines and Air New Zealand. Maybe it should be a gradual privatisation. Maybe we have to study it more."

Abdulgani believes it could be another two years before the climate is right for privatisation.

Now that he has accomplished his mission Abdulgani insisted the time is ripe for retirement. "No more banking. No more airline," he said with a laugh.

Nevertheless, he will be available if the new Garuda president needs him. "The building blocks have been laid, but the job is not yet finished. Now is the time for someone else to have the opportunity to take Garuda through its next phase," he said. ■

Garuda signs deal with MAS

Garuda Indonesia has signed a joint cooperation agreement with Malaysia Airlines (MAS).

The contract will cover sales and marketing, engineering and maintenance, flight operations, information technology and inflight services.

The two flag carriers already had been cooperating in aircraft maintenance work and the pooling of aircraft spares. They also had a code-share covering domestic travel and a joint freighter arrangement, both of which will be enhanced.

"Considering the continued increase in aviation costs, the joint cooperation will help Malaysia Airlines and Garuda Indonesia be more cost effective. This will be done through joint representation, training and procurement and the pooling of resources," said an MAS statement. ■



By Tom Ballantyne

The chiefs of Indonesia's two major government-owned airlines, Garuda Indonesia and Merpati Nusantara, want the Indonesian Government to tighten entry rules for new domestic carriers to ensure newcomers are serious contenders in the country's booming airline industry. Around 50 operators hold air transport licences.

While most of them are small charter companies or tiny, one and two aircraft start-ups, there are signs the strain of competition is telling among Indonesia's airlines as low air ticket prices make profits elusive. One of the touted newcomers, privately-owned PT Awair International, halted flights on its three domestic routes in March.

"The general trend in the development of the domestic aviation market is not beneficial to our business. The prices offered by other domestic airlines are unbelievably low considering the costs of production," said PT Awair spokesman Arifin Hutabarat.

The company said it planned to resume flights in June, but local industry observers question whether this plan will eventuate.

Wahyu Hidayat, president of Merpati, who is also chairman of the Indonesian National Air Carriers Association (INACA), warned there would be more casualties. "There will be natural selection. The tough will be the winners. Some

Call for tighter domestic controls

carriers will be unable to survive because the tariffs are so low."

He is happy with a system that allows airlines to compete, but said there has to be a level playing field. "You should have regulations that make it tough for people to enter the business. This means they only enter if they are serious."

He is supported by Garuda's president, Abdulgani. Awair's problems should "send a message to those who want to start airlines. It is not an easy business and you might burn your fingers", he said.

Garuda last year launched Citilink, a new low-cost subsidiary that operates five Boeing B737 jets to compete with the rash of new airlines. "We don't want re-regulation, but newcomers have to be committed to the project," said Abdulgani.

The call for tougher rules came as the Indonesian Government gave airlines more freedom to discount fares. It eliminated a minimum rate and set a maximum rate airlines can charge, a move bound to lead to fiercer discounting.

Previously, INACA held exclusive rights to set air fares and did not allow airlines to cut or raise their prices outside a permitted range, a control critics said hindered competition.

There is no debate about the growth potential for Indonesia's air industry. In a country with some 400 million people, only a small percentage of the population fly each year. Domestic passenger numbers grew from 6.4 million in 1999 to more than eight million last year, with growth in 2002 expected to be around 10%.

"People are being encouraged to fly because of the low fares. The potential is enormous although it may take some time to realise it fully. We have to build and improve our infrastructure such as airports and have real commitment for that potential to be realised," said Hidayat.

He believed the successful airlines would be those with the larger fleets. "It will be better that an airline has a substantial number of aircraft in their fleet because per aircraft costs will be lower. For airlines with just one or two aircraft it will be very difficult." ■

Merpati back on track

Indonesia's second government-owned carrier, Merpati Nusantara, has been completely restructured, said its president Wahyu Hidayat, and today has more modest ambitions than the times when it flirted with bankruptcy, writes Tom Ballantyne.

The airline once operated a fleet of 75 aircraft, but by 1999 more than half of them were grounded, mainly because there was no money for their maintenance.

Today, Merpati operates 35 planes, 20 of them Fokker and Boeing B737 jets. With borrowings of US\$170 million, the carrier is reporting an operating profit and is slowly paying off its debt.

"Now, Merpati on the right track. We have implemented new standards and introduced changes right across the board," said Hidayat. "We have restructured management and the company commercially, financially and operationally."

Like Garuda, Merpati is heading eventually towards privatisation. Hidayat would like it to be sooner rather than later, although the decision rests with government.

These days when it comes to growth Hidayat is cautious. "We have to be careful. In the old days we talked about 70 or 80 aircraft in the fleet, but who would buy them for us now? The government? No. We have to grow from our own resources.



Merpati Nusantara: restructured from top to bottom

It has to be natural growth," he said.

Hidayat believed there should be more cooperation between the two government-owned airlines. "It is my opinion we must work together rather than compete with one another. It's like having two sons. You would not want them to fight each other," he said. ■

ANSETT'S FINAL CURTAIN

TOM BALLANTYNE, looks back over the rich history of an Australian aviation

icon and the characters that made it work ... some more efficiently than others

Tears and hugs marked the end of Ansett Australia. It was rather like last September when the airline closed for the first time. But on that occasion there were 16,000 grieving staff.

On March 5, when flight AN152 from Perth touched down in Sydney at 0645 hours on the last revenue flight of the revived – albeit briefly – Ansett, there were only 1,400 workers left to shed tears.

After 66 years, Ansett Australia passed on. All that is left is for the administrators to pick over the bones. Founder Sir Reg Ansett must be turning in his grave.

Ansett's fate had been sealed when prospective saviours, Australian businessmen, Solomon Lew and Lindsay Fox, walked out of talks with administrators on the eve of a settlement deadline set for February 28.

They had been unable to finalise arrangements for the new Ansett's lease of airport terminals at several major cities or complete deals to transfer leased aircraft from the original airline to their company, known as the Tesna Syndicate.

Ansett was more than an airline. It was part of Australia's aviation landscape. Like traditional rival Qantas Airways it was an icon in a nation whose very development depended on pioneer flyers pushing the limits of endurance to span vast distances and link far flung settlements across the world's largest island continent and beyond.

Sir Reg was one of Australia's finest, most colourful and best loved pioneers. He launched Ansett with a single Fokker 4 Universal that took off at 12.30pm on February 17, 1936, from the tiny town of Hamilton, Victoria. Seven passengers paid £2 each for the one-way flight to Melbourne.

Sir Reg was a character, but then again Ansett has had its fair share of characters running it over the years. They included Hungarian-born Sir Peter Abeles, the founder of the TNT transport empire, and media tycoon Rupert Mur-

doch. The two tycoons each took 50% of Ansett when they purchased it in 1979.

The late Sir Peter became a legend if not for all the right reasons. He led Ansett through the bitter pilots' strike of the late eighties.

The strike lasted for months and all but a handful of the nation's 2,000 domestic pilots lost their jobs. The airlines stemmed staff costs by hiring new pilots under new contracts that paid them less money and provided fewer benefits than their predecessors.

All flights were grounded for a period and air force pilots were brought in to fly passengers around until replacements could be hired and imported from overseas. It was a shock for Australian passengers to hear "this is your captain speaking" in a Texas accent.

financial control. A few months later, Gary Toomey, poached from Qantas, where he was deputy managing director and chief financial officer, to head an Air NZ-controlled Ansett, was final witness to the trans-Tasman management disaster that saw the carrier shut-down in September last year.

Ansett built its reputation and market power on innovation and expansion, growing as a domestic carrier through the 1950s and 1960s, as it competed with government-owned Trans Australian Airways (TAA) – later to become Australian Airlines. Ansett was ultimately chased by a privatised Qantas.

When de-



Ansett Australia: administrators pick over the carrier's venerable bones

Many believe the airline's demise was born during Abeles leadership. It was not unknown for him to return from an overseas trip with the surprise news that he had purchased a bagful of new aircraft. The result was a widely varied fleet that became increasingly costly to operate. After reviewing a new livery for the airline, he once spent millions of dollars having a full stop added after the word "Ansett".

Bulldog-like Graeme McMahon, a former Australian Rules footballer, was the chief executive who fought tooth and nail with Qantas for the then domestic giant to add international routes to its network. Eventually he won and a separate Ansett company, Ansett International, began flying Asian routes in 1993.

The arrival of former Cathay Pacific Airways chief, Rod Eddington, at Ansett in late 1996 was seen as a coup for Ansett. He left in 2000 to become British Airways chief executive shortly before Air New Zealand (Air NZ) took

regulation came along in the early 1990s, Ansett threw itself onto international routes, flying to Indonesia, Japan, Korea, Malaysia, Taiwan, Hong Kong and Shanghai, China.

Competing against the likes of Qantas, Cathay Pacific and Japan Airlines, it stretched the limits of inflight service, giving passengers more leg room and flying chefs and earned a service reputation as good as any airline in the world.

Until it entered administration last September, Ansett operated 128 aircraft to 107 destinations, carried more than 14 million passengers annually and employed more than 17,000 staff. It had nearly 50% of the market. When AN 152 touched down in Sydney it was one of just 14 jets operated by Ansett with a staff of around 1,400.

R.I.P. C'est la vie. Will there be an Ansett 3? It now seems most unlikely as the administrators begin to dismantle the airline and sell off its once prized assets. ■



Who will fill the hole?

The disappearance of Ansett Australia has opened a gaping hole in the global network of the United Airlines/Lufthansa German Airlines-led Star Alliance, leaving it with no Australian domestic passenger feed, a factor critical to its passenger flow through the Asia-Pacific region, **writes Tom Ballantyne.**

At a meeting in Bangkok, Star chief executive, Jaan Albrecht, conceded the failure of Ansett would pose a dilemma for the alliance, although it had been coming to terms with a smaller Ansett operation since the airline's collapse last September.

While he would not discuss alternatives in detail he rejected the possibility of a formal alliance involvement with Sir Richard Branson's Virgin Blue, now the only Australian trunk route operator apart from Qantas Airways. Qantas is a member of the rival alliance oneworld.

This is because Virgin is a no-frills, low-cost operator unable to provide the full-service offerings Star expects from its partners on both international and domestic routes.

Privately, Star officials suggested there are two possibilities to fill the gap. The first would be a temporary measure, involving a non-alliance, purely commercial inter-lining arrangement with Virgin Blue.

This could be achieved through bilateral agreements between individual Star carriers flying to Australia and the domestic operator.

Longer term, there would be an opportunity for Star member Air New Zealand - either by itself or in conjunction with Singapore Airlines - to launch its own domestic trunk route operations in Australia, as rival Qantas does in New Zealand.

Under the Australia-New Zealand

single aviation market agreement, Air NZ has the rights to fly domestically in Australia.

Two factors are likely to cause a delay in any decision to do so. Firstly, Air NZ has an image problem in Australia, being blamed by many Australians for the collapse of Ansett, its former wholly-owned subsidiary.

Secondly, Air NZ itself is restructuring after suffering massive losses and will be extremely cautious about launching a new domestic venture in Australia. ■

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“China hand” McLeod heads Airbus’ mainland China division

Leading from the front

By Barry Grindrod

Guy McLeod is a man who enjoys a challenge and there were no shortage of them when he was a British Army captain with the 6th Gurkha Rifles serving in Hong Kong, Brunei and, for a time, in a troubled Northern Ireland.

Today, 34-year-old Sandhurst-educated McLeod is using his leadership skills, honed with the world’s most respected fighting men, in China’s airline market. Just six and a half years after joining Airbus Industrie, McLeod is president of Airbus Industrie China, based in Beijing.

When he joined Airbus in Beijing in 1995, after five years in the army, he was the project manager of the Toulouse manufacturer’s new US\$80 million support and training centre, a joint venture with the Civil Aviation Supplies Corporation in China.

Six months after the opening of the centre, Singapore-born McLeod joined the Airbus sales team and started his fast track to the top.

For the next two years he was based in Hong Kong where he worked closely with Cathay Pacific Airways and Dragon-air. He returned to Beijing in 1998 as vice-president sales for the company.

In mid-2001, Airbus appointed him acting president following the death of his predecessor, Pierre de Montgolfier. He was confirmed in the position later in the year.

Back in 1995 when McLeod joined the team, Airbus had 20 aircraft in service in China, placed with three mainland carriers.

Today, Airbus jets have increased their presence almost six-fold to 115 airplanes, with China’s top six carriers, Air China, China Southern, China Eastern, China Northern, China Northwest and China Southwest Airlines, plus second tier carriers Sichuan Airlines and CNAC Zhejiang Airlines all flying the European aircraft in their fleets. An additional 23 aircraft are on order from Chinese customers.

When Hong Kong and Macau are included in the customer list – they are now part of China – Airbus has 168 jets in operation with 29 on order in greater China.



Airbus Industrie China president, Guy McLeod: improvements in all areas of China’s aviation industry

Looking to the future McLeod has his personal goals: to win 50% of the China market for Airbus and to enhance industrial cooperation between Airbus and China’s aerospace manufacturing industry.

So far Airbus manufacturing partnerships include Chengdu Aerospace (which builds A320 rear passenger doors), Xian Aircraft Company (produces avionics access doors for the A310, A330 and A340 and fin parts for the A320) and Shenyang Aircraft Corporation, the supplier of A320 wing ribs and A319/A320 emergency exit doors.

Currently, Airbus has a 25% share of China’s airline market – 28% when Hong Kong and Macau are included – but it is achieving 50% of sales year-on-year. “I believe a 50% share of the market is achievable and that is our goal,” said the likeable McLeod, who graduated in engineering from Edinburgh University before he joined the army.

Unlike presidents before him, Airbus has opted to put a man on the ground into the top job. McLeod, a Mandarin speaker, has extensive knowledge of the country, its airlines, the people that run them and the agencies under the Civil Aviation Administration of China (CAAC) umbrella.

“When I arrived in the country China’s airline industry was experienc-

ing 25% revenue passenger kilometres growth a year,” said McLeod.

“The Asian economic recession [in 1997 and 1998] calmed things down. China put a brake on aircraft orders and growth has now settled down to around 7%.

“China’s 10th five-year plan has just come into operation and people are starting to order again. Boeing announced an order [for 30 New Generation B737s] at the end of last year and we are talking to a number of airlines.”

McLeod believes the consolidation in the China market of the nine CAAC airlines into three groupings, recently sanctioned by Beijing, is a positive step for the airlines and the manufacturers.

“It will eliminate bureaucracy and that will present an opportunity for higher levels of professional management,” he said.

McLeod said Airbus’ weakness in China had been penetrating the smaller carriers which had fleets of 5-10 B737 types of aircraft. The new groupings will make it easier for the manufacturer to grow, he said. Almost all the airlines involved in the mergers were Airbus customers.

During his time in China, McLeod has witnessed major progress in all areas of the industry. China Southern and China Eastern have listed on stock exchanges at home and abroad, steps which have improved transparency of their operations; inflight service standards have been upgraded significantly as has aviation English and on-time performance. “I cannot remember having had one significant delay in recent times, which is very different to when I first arrived in China,” said McLeod.

“Seven years ago there was an aversion to the perceived technology of our aircraft by China’s pilots. Now they are speaking good English and enjoying the standards set by the A340s and A320 family,” said McLeod.

Meanwhile, the 8,000 sq metre Airbus training centre in Beijing, situated close to the airport, is 40% occupied by air crews from outside China.

These include pilots from as far away as Turkey. The centre has full flight simulators for the A320 and A330/340 families, Computer Based Training (CBT) equipment and A340, A320/321 cabin evacuation and door trainers for cabin crew training. ■

in the Asia Pacific

SAFETY & SECURITY

SPECIAL
REPORT

LOSA gains momentum

By Tom Ballantyne

Flight deck safety initiative, Line Orientated Safety Audit (LOSA), is winning growing support in the Asia-Pacific region.

The system, adopted by Air New Zealand and used on trial by Cathay Pacific Airways and EVA Air, will be tested by Qantas during May and June.

Also, it appears to have won the endorsement of the International Air Transport Association (IATA) as well as international pilot unions.

These responses are key planks in cementing widespread acceptance of a safety tool advocates believe potentially represents the biggest advance in air safety improvement in decades.

Designed by the University of Texas (UT) Human Factors Research Project, LOSA is the first system that gives airlines a real time actual record of what happens on the flight deck during daily operations.

LOSA has the full support of the International Civil Aviation Organisation

(ICAO), which hopes it will be part of standard operating procedures for all airlines within five years.

Development is being partially funded by the US Federal Aviation Administration (FAA).

The system overcomes a major drawback of other cockpit safety audits: the rejection by pilots of anything resembling "spy in the cab" techniques. With LOSA, independent, trained observers sit in the cockpit on a non-jeopardy basis: pilots are not identified and nor are their specific flights.

The observers record precise details of what goes on, including cockpit crew errors, threats to flight safety and how crews deal with them.

In an industry first, LOSA pinpoints errors and highlights the reasons why crashes occur in the first place instead of reacting to accidents using material collected from flight data recorders after the event.

The LOSA data allows airlines to take pre-emptive action to tighten their safety procedures.

Captain Dan Maurino, head of ICAO's



EVA Air: used the LOSA system on a trial basis



safety and human factors programme and one of the driving forces behind the LOSA project, said the events of September 11 had caused a number of airlines to step back from plans to become involved in trials. "Fortunately, that didn't last for long. We are now getting back to full speed."

A former captain with Aerolineas Argentinas, Capt. Maurino said a LOSA Week held in Hong Kong in March last year had proved to be the "turning point" for the programme, moving it from a conceptual idea to a firm operational system.

"Before then we basically had two airlines on board, Air New Zealand and Continental.

"Now we have nine carriers participating in or testing LOSA and four of these – Air NZ, Cathay Pacific, EVA Air and Qantas – are in the Asia-Pacific region," said Maurino.

Cathay's two-month trial was conducted late last year. A preliminary report was scheduled to be handed over to the airline by the University of Texas during March.

Maurino said a number of other Asian carriers, including Malaysia Airlines, Thai Airways International and Singapore Airlines are looking closely at LOSA.



Capt. Dan Maurino, head of ICAO's safety and human factors programme: Hong Kong meeting a turning point for LOSA

Just as important for LOSA's implementation will be the involvement of IATA.

"We are in the initial stages of some kind of agreement with IATA for it to take part in the project as an active participant," said Maurino.

The global airline body could play a

vital role in the area of data management, which is one of the primary challenges of the system. As more airlines adopt LOSA the amount of data increases and the University of Texas will not be able to cope alone with the load.

Maurino also disclosed that the International Federation of Airline Pilots Associations (IFALPA) is working on developing an official policy towards LOSA, which, it is understood, will involve full support of the system by cockpit crew.

Moves to bring in airlines from other regions are gaining momentum. A LOSA week will be held in Dubai later this year and it is expected a number of European carriers will attend.

In another development, Maurino revealed to *Orient Aviation* he had an "informal" approach from Australia's Civil Aviation Safety Authority (CASA) about the possibility of using LOSA as a safety tool in air traffic control.

"They were interested in the transferability of the concept to ATC. I believe it would be as useful a tool in that area, or in maintenance and engineering, as it is on the flight deck," Maurino said.

If that interest develops it could lead to LOSA becoming a standard industry-wide safety tool rather than solely a check on cockpit activity, and a revolutionary step in improving safety. ■

A life-saving vision

When Jonathan Parker demonstrates his life-saving flight deck anti-smoke product to airlines, he carries his cockpit simulator around in something that resembles a small suitcase.

It's an inflatable simulator, inspired by a bouncing inflatable gorilla 11 years ago, but the joy of this piece of equipment is that it could help avoid tragedy.

The patented EVAS (Emergency Vision Assurance Systems) has been Federal Aviation Administration (FAA) tested and certified to ensure pilot vision in dense smoke.

This can be clearly demonstrated within the confines of an office – or an exhibition hall as was the case in February at Asian Aerospace 2002 – by Parker's fold away 'cockpit'.

EVAS works through the deployment of an Inflatable Vision Unit (IVU) which inflates in 15 to 20 seconds. It is filled with cabin air from the EVAS unit that is filtered to remove particles down



EVAS chief operating officer Jonathan Parker with his inflatable simulator

to 0.1 micron.

The clean air inside the IVU provides a clear window that allows the pilots

an unobstructed view of the flight path and critical instruments in a smoke-filled cockpit.

Prospective customers can sit in the mock-up and experience the response as the inflatable unit fills with smoke.

EVAS opened a Singapore office in mid-2001 and, said EVAS chief operating officer Parker, the company is in negotiations with a number of airlines in the region about purchase of the device.

Designed 12 years ago, EVAS systems are in nearly 1,200 corporate, commercial and military aircraft worldwide. The system takes only minutes to install and is about the size of the aircraft's flight manual.

New FAA regulations, introduced since the U.S. terrorist attacks on September 11, have virtually locked pilots in their cockpits.

Airlines and pilots' associations are looking for smoke displacement systems that will work when locked doors prevent operation of more traditional methods of ventilation, said EVAS's Parker. ■



A US\$17 million action plan designed to toughen aviation security worldwide, ensure global standard practice in preventing terrorism and other threats to commercial air traffic could be implemented by the International Civil Aviation Organisation (ICAO) by June, **writes Tom Ballantyne.**

Endorsed at a special ICAO ministerial meeting in Montreal last February the organisation's council is fast-tracking the plan of action to have it ready for adoption at a meeting on June 14, with immediate implementation.

ICAO president, Dr Assad Kotaite, hailed it as "a new dimension of tools, a new dimension of resources and a new dimension of co-operation" among civil aviation authorities and the airline industry. The plan is intended to identify and correct deficiencies in the implementation of ICAO's security-related standards over a three year period.

It includes:

- identification, analysis and development of an effective global response to new and emerging threats, integrating measures to be taken in specific fields, including airports, aircraft and air traffic control systems.
- strengthening of security related provisions in ICAO's rules.
- close co-ordination of coherence with security audit programmes at a regional and sub-regional level.
- a follow-up programme with rectification of identified deficiencies.

Kotaite said the bulk of the cash

ICAO fast tracking security initiative

needed to pay for implementation has yet to be found – US\$2.4 million has been promised for this year – but the consequences of failing to tackle the problem were incalculable.

After sustaining \$10 billion losses in 2001 and with airlines laying off 120,000 staff in the last six months, he warned passenger capacity in 2002 is likely to be up to 8% lower than last year. Even that gloomy outlook is dependent "on prevention of any further critical breaches of security", Kotaite added.

ICAO is not renowned for taking quick decisions, but the speed of its response to security issues reflected the impact increased defence measures are having on both airlines and governments as they move to make air travel safer.

Added security is costing airlines millions of extra dollars and the bill will rise.

Carriers across the Asia-Pacific have had to employ increasing numbers of security staff and in some countries, such as Australia, Japan and Taiwan, they are meeting the cost of carrying sky marshals aboard flights.

China will join that list in July or August after aviation authorities announced some 2,000 police officers are being trained to travel regularly on the country's airlines (see below).

"Aviation security has become very important for the development of international aviation and the stability of the country," said Liu Jianfeng, director of the Civil Aviation Administration of China.

Upgrading cockpit doors to improve flight deck security also will be an expensive business.

U.S. authorities have ordered all of their airlines to fit bullet-proof and bomb-resistant doors by April 1 next year.

Industry officials have no doubt the rule will be applied to all non-American carriers flying to the U.S.

John Bradbury, vice-president technical services for Boeing, who unveiled plans for a Boeing designed cockpit door at Singapore's Asian Aerospace exhibition and conference in February, revealed they would cost up to \$40,000 per aircraft. ■

China takes the high 'moral ground'

China will introduce sky marshals onto its domestic aircraft this summer, according to the China Daily newspaper.

A pool of 2,000 marshals, or an airline "police force" as they are called, is being assembled in response to the September 11 U.S. terrorist attacks last year. The newspaper said the recruits were being selected partly on military experience and also for "good morals." They were being taught English and martial arts.

Two officers will be assigned to each flight. The scheme is expected to be launched in July or August.

A spokesman for the Civil Aviation Administration of China confirmed an airline police unit had been formed. No details were given about the arming of the officers, nor was it confirmed that they would carry weapons in flight.

China's airline security system is already operating under tight surveillance following a spate of hijackings in China in the early and mid-1990s. ■



Top safety awards for China Southern Airlines

CSA tops for safety

China's largest carrier, China Southern Airlines (CSA), has been named the country's safest carrier by the Civil Aviation Administration of China (CAAC) for the second successive year.

CSA completed 364,700 flight hours and carried 19.1 million passengers last year, one fourth of all passengers carried by Chinese airlines combined.

CSA invested 130 million yuan (US\$67.7 million) in its System Operations Control Centre, an ultra high-tech operations centre which handles dispatch and communication to all its aircraft throughout the world. ■

Japan's security challenges

Train fares are comparable to domestic airline tickets and there are no security-related procedures

**By Daniel Baron
in Tokyo**

Japan is undoubtedly one of the safest countries in the world. In Tokyo, a city of 12 million people, even toddlers take commuter trains unaccompanied, and one thinks nothing of walking alone at night.

Yet times are changing and aviation is by no means an exception.

Indeed, even before September 11, two aircraft hijackings during the past decade forced the Japanese Government to address issues such as easy access to gates and the right to carry knives on board. The events of last year have resulted in the need for new security measures, some of which are particularly difficult to implement in a society that has taken passengers' air safety for granted.

Following the U.S. terrorist attacks, the Japanese Government required that all checked-in baggage for both domestic and international departures be x-rayed. It subsequently ordered Japanese carriers to reinforce cockpit door locks, and produced a crisis management manual designed specifically for aviation-related terrorism.

A spokesman for the Japan Civil Aviation Bureau (JCAB) told *Orient Aviation* that its next step is to issue additional security measures for cockpit doors, to be based on an international standard established by ICAO.

Japan's airlines are not presently flying countrywide with air marshals, although the JCAB does not rule out consideration of their use in the future. "In general we do not support the idea of bringing arms into the cabin. Many things could go wrong, such as a bullet piercing the aircraft's skin, or the weapon falling into the hands of the hijacker. We feel that the best approach to security in the air is a thorough security program on the ground," said the spokesman.

Geoff Tudor, director of international public relations at Japan Airlines (JAL), said his airline agreed with this view. While the carrier is considering a camera system to monitor the area outside the cockpit door, it does not see itself arming crews or flying with air marshals.

JAL has agreed to participate in trials of a biometrics-based identification system at Narita Airport. Personal data

registered during check-in would be verified at the boarding gate. Originally slated to begin in April, the tests have been postponed due to delays in receiving the equipment.

In the meantime, in February the Narita Airport Authority installed new explosive detection machines in both of the airport's terminals. The EGIS-II detectors can identify plastic explosives.

The central government is also exploring a system that would connect airport security cameras to the central police agency. Japanese airports already

the bullet train, Japanese airlines employ an army of electronic kiosks for domestic flight check-in. Within seconds the passenger can be on his or her way to the security checkpoint. There is, however, no attempt to verify that the person buying the ticket is the person boarding the aircraft. At Tokyo's Haneda Airport, security staff conduct a token form of positive identification, inspecting the passenger's boarding pass while merely asking him or her to verify the name on it.

Lack of positive ID checks for do-



Japan Airlines: taking part in biometrics trial

have increased the number of security cameras monitoring terminals.

Enhancing passenger security procedures for international flights is merely a matter of beefing up measures to which the travelling public was already accustomed. With domestic services, however, the reality is somewhat more complex.

On several key domestic routes, aviation has a fierce competitor, namely the Shinkansen, or bullet train. The numbers are daunting: on average, a bullet train with over one thousand seats leaves Tokyo Station every five minutes, from early morning to late evening.

Train fares are comparable to those of airlines, and no time is required for security-related procedures — because there are none. The passenger glides through a gate with a ticket that does not indicate his or her name, with no security check whatsoever. The comparatively cumbersome air travel experience involves a check-in procedure and a pass through a security checkpoint, both of which may require queuing up.

In order to compete effectively with

domestic flights is not merely an issue of competition with rail. The Japanese Government does not issue a national identity card nor require citizens to carry proof of identity.

The JCAB spokesman said: "There is considerable opposition to the idea of a national ID card. In addition, many Japanese do not have a driver's licence or other official identification that includes a photograph. So a conventional identification system for domestic flights is extremely difficult to implement."

Security measures for domestic cargo also have been a challenge. The JCAB was criticised for its handling of domestic freight after the terrorist attacks. It put a 24-hour hold on all shipments and required forwarding companies to submit documentation that the contents of the shipment were not dangerous. The process invariably led to losses for shippers of perishable and other time-sensitive cargo. The government now allows domestic carriers to forego inspection of cargo dispatched by known shippers. ■



By Tom Ballantyne

Qantas Airways will invest US\$5 million in new passenger screening equipment to beef up security checks at Australia's domestic airports and has called on the government to "share the burden" of mounting security costs following last year's September 11 U.S. terrorist attacks.

However, the carrier is opposed to demands by local security industry unions that Canberra follows new U.S. regulations and takes over full responsibility for airport and airline security.

Geoffrey Askew, Qantas group general manager security, has strongly refuted union claims there are huge gaps in security at Australian airports.

The Airport Security Union alleged the current system – airlines contract private security firms to provide screening at airports – has resulted in "a very patchy situation" with a lack of properly trained personnel working for the companies and ad hoc implementation of standards.

The union's national secretary, Jeff Lawrence, said since September 11 which prompted the moves to heighten border security, screeners are being asked to take on heavier workloads and more responsibility for the same pay.

But Askew, who chairs the International Air Transport Association's security committee, argued security at Australian airports is as good as anywhere in the world.

Qantas contracts out the work to the country's three biggest private security firms – Chubb, Group 4 and SNP – and its annual security bill is more than US\$50 million. "We take a very close supervisory and management role of the delivery of

Qantas calls on government to share security burden

the service. At the end of the day we see the passenger screening service as being part of the Qantas product."

Who pays the additional security cost has become a controversial global issue. International and regional airline groups believe it should be a state responsibility, but few governments have shown any inclination to take on the full load. In Australia, airlines have been forced to bear the cost of carrying sky marshals on domestic flights and additional screening at international terminals. They have factored the expense into their budgets.

As well as paying for contractors to do additional work, Qantas has hired more of its own security staff in Australia and around the world.

Askew said security standards globally must be harmonised "because at the moment each government has a different idea and each has introduced some additional measures that are not consistent with other states".

The Government, after talks with Australian airlines, has agreed to review a number of security issues, including funding, throughout the year.

"We believe there is scope for increased assistance by government, particularly when civil aviation is at the

core of national security. But we have a responsibility for the security of our own operation. The government now employs a number of Australian Protective Services (APS) personnel at airports throughout Australia to provide a counter terrorist first response. Qantas's position is they are there in a national security role and therefore should be funded by the government and not by the industry," said Askew.

"However, passenger screening and some other security functions are the responsibility of the airline industry and we are prepared to pay for these services. We have confidence in the effectiveness of the current system and our contractors and we don't believe the passenger screening process should be undertaken by government employees as has been proposed in U.S."

Qantas' US\$5 million outlay on new equipment was planned before the U.S. September 11 attacks. The equipment – 39 X-ray machines, 69 walk-through metal detectors and explosive trace detection systems – will be installed at the 20 Australian domestic and regional passenger terminals where Qantas is the appointed screening authority. The work will be completed by mid-year. ■

Incheon looks for clear signs

Now you see it, now you don't. This is what South Korea's new Incheon International Airport management hopes to achieve with a plan to install a state-of-the-art system to disperse fog from the airport environs.

Located on a small island off Korea's west coast, operations at Incheon, the country's main international airport, are often disrupted by sea fog. If the airport goes ahead with its plan, the fog dispersal system will improve operating safety at a time when South Korea is recovering from a poor international image on the safety front.

The U.S. Federal Aviation Administration (FAA) last year downgraded South Korea's safety standards rating to Category Two after an audit of the nation's air safety regime. It was re-

stored to Category One in December.

Incheon director of operations, Choi Kil-sok, said several systems were under investigation in the UK and Germany. "We have to confirm the efficacy of the devices involved before entering concrete negotiations. If the apparatus proves to be of great use, we will embark on full-scale negotiations with the manufacturer with the intention of installing it before the World Cup soccer finals," he said.

Since opening last March, flights bound for the airport have been forced on several occasions to divert to Seoul's former international hub, Kimpo, which is now used as a domestic facility.

Under existing regulations no aircraft is allowed to land at the new airport when there is visibility of less than 200 metres. ■



It's safety plus at Cebu

By Rene Mallari
in Manila

In February 1998, DC-9 Flight 387, belonging to the then two-year-old domestic carrier Cebu Pacific, slammed into a mountainside in the southern Philippines, killing all 104 people aboard.

The tragedy prompted the company's chief executive, Lance Gokongwei, to push through an intensive, company-wide safety programme, Cebu Pacific director for airline quality and safety, Rose Santos told *Orient Aviation*.

Apart from the considerable human loss of life, the crash took its toll on the company's finances, resulting in millions of dollars in lost revenue. Cebu Pacific's services were grounded for two months, prompted by an injunction from country's aviation watchdog, the Air Transport Office (ATO).

In its efforts to restore passenger confidence and strengthen operations, the Philippines' carrier earned two international safety and quality certifications in November 1999: ISO 9002 and the Aviation Quality and Safety (AQS).

Santos said Cebu Pacific is the only local airline operator to hold both international certifications on a company-wide basis. Every six months auditors from the Geneva-based ISO 9002 inspection team and Malaysian-based AQS check the airline's safety procedures and practices. "Every year we have four external audits, not including the regular ATO inspection and the (in-house) Internal Quality Department's daily audit on us," he said.

The airline's 1600 employees are required to report any lapses in safety procedures, a system which extends to the handling of hazardous materials. "An accident is usually the result of a series of minor errors that have gone unnoticed," said Cebu Pacific safety engineer Bienvenido Oquialda.

Safety training and education is company-wide and includes top executives, flight and cabin crews, office staff



Cebu Airport: home base for Cebu Pacific

and security officers.

A safety committee meets monthly and is composed of representatives from various operations divisions including maintenance, inflight and airport services.

In the event of either an accident or an incident Cebu Pacific has a Board of Inquiry, headed by the chairman and made up of vice-presidents and medical, human resource and legal personnel.

Flag carrier Philippine Airlines (PAL) also has been upgrading its flight operations programmes and safety training in recent years. These programmes gained momentum after an accident in March 1998, when three people on the ground were killed and dozens of people were injured when a PAL A320, with 121 passengers and six crew on board, overshot a runway in Bacolod (southern Philippines) and crashed into a residential neighbourhood.

In an accident like that, 70% of the errors are caused by human factors, according to PAL vice-president for safety and environment, Reuben Sternberg. PAL decided to zero in on Crew Resource Management (CRM).

One safety-related programme introduced at PAL was the now two-year-old Flight Operations Quality Assurance (FOQA) system, which records and monitors flights as well as examining

flight data.

Also used by other carriers in the region, Sternberg pointed out that FOQA can detect trends before they turn into costly incidents. "This programme provides a means for captains and safety officers to measure the performance of their fleets. It enables procedures and safety margins to be evaluated and training to be focused on improvements in operating performance.

In line with its safety improvement efforts, PAL is upgrading its aviation training school. Envisaged as the "PAL Air University," the 41-year-old PAL Aviation School is the only flight training institution in the country that offers a commercial pilot licence programme.

Based in Manila, the flag carrier's facility is the four-storey, 7,000 sq metre PAL Learning Centre, which provides inflight service training, ground technical training and flight and cabin crew training. "It is the company's commitment to the ultimate development of its employees," said Sternberg.

This year, PAL will acquire A340/330 and A320 simulators to add to its B737-300 model.

Sternberg said that safety is embedded in all PAL employee training programmes. "Safety is a condition and not an objective required to deliver a product," he said. While PAL puts safety operations as its top priority, Sternberg told *Orient Aviation* there are certain safety-related issues beyond the company's jurisdiction to be addressed.

Not all airports across the country have complete perimeter fences. This is the responsibility of the ATO. "Due to (ATO) limited funds and peace-and-order instability in the southern Philippines, the ATO is unable to carry out what it is required to do," said Sternberg. ■



PAL vice-president for safety and environment, Reuben Sternberg: safety is a condition and not an objective

ASIA-PACIFIC FLEET CENSUS UPDATE

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
Aboitiz Air (Philippines)				
YS-11-100	RR Dart 543-10K	2	-	-
YS-11-500	RR Dart 543-10/10K	4	-	-
YS-11-600R	RR Dart 543-10/10K	1	-	-
Air Asia (Malaysia)				
B737-300	CFM56-3	2	-	-
<i>Leased in: GECAS</i>				
Air Caledonie (New Caledonia)				
ATR42-320	PWC PW121	4	-	-
Do 228-212	Gar. TPE331-SA 2520	1	-	-
Aircalin (Air Caledonie International, New Caledonia)				
A310-325	PWC PW4156A	1	-	-
<i>Leased in: AIFS</i>				
A330		-	2	-
B737-300	GE	1	-	-
<i>Leased in:</i>				
DHC6 Twin Otter		1	-	-
Air China				
B747-400C	P&W PW4056	8	-	-
B747-400	P&W PW4056	4	-	-
B747-200F/5F	P&W JT9D-7R4G2	4	-	-
B767-300	P&W PW4056	4	-	-
<i>Leased in: 1 Mitsui & Co</i>				
B767-200ER	P&W 4052/JT9D-7R4	6	-	-
B777-200	P&W PW4090	10	-	-
B737-800	CFM56-4C4	7	-	-
B737-300	CFM56-5C4	19	-	-
A340-300	CFM56-5C4	3	-	-
<i>Leased out: 3 Cathay Pacific</i>				
A318		-	8	-
BAe 146-100	Lyc ALF502R-5	4	-	-



Air Do (Hokkaido International Airlines, Japan)

B767-300ER		2	-	-
<i>Leased in: 2 (AWAS)</i>				

Air Fiji

DHC-6-300 Twin Otter	PWC PT6A-27	1	-	-
DHC-6-200	PWC PT6A-20	1	-	-
<i>Leased in Air Vanuatu</i>				
Beech Baron 95-C55	Cont IO-540	1	-	-

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
Y-12 Mk-II	PWC PT6A-27	3	-	-
EMB 110-P1	PWC PT6A-34	2	-	-
BN2A-20 Islander	Lyc O-540-K1B5	3	-	-
Air HongKong				
B747-200F	GE CF6 50-E2	3	-	-
<i>Leased in: 3 from Cathay Pacific</i>				
Air-India				
B747-400	P&W PW4056	6	-	1
B747-300 Combi	GE CF6-80C2B1	2	-	-
<i>Leased in: 1 from Citicorp Leasing Inc</i>				
B747-200	P&W JT9D-7J -7Q	4	-	-
A300B4-100/-200	GE CF6-50C2	3	-	-
A310-300	GE CF6-80C2A2	13	-	-
<i>Leased in: 5</i>				
Air Japan (ANA subsidiary)				
B767-300	GE CF6-80C2B2F	8	-	-
<i>All ANA aircraft</i>				
Air Kiribati				
Y12 Harbin	PT6A-27	1	-	-
ATR 72-200		1	-	-
Air Macau				
A320-200	IAE V2527-A5	3	-	-
<i>Leased in: ILFC</i>				
A321-100	IAE V2530-A5	5	-	-
<i>Leased in: ILFC</i>				
Air Maldives				
A310-200	P&W PW-JT9D	2	-	-
<i>Leased in: A. I. Leasing Inc</i>				
Do 228-212	Gar. TPE 331-5A-252D	2	-	-
DHC-8-200	PWC PW123D	1	-	-
Air Mandalay				
ATR 72-212QC	P&W PW 127	2	-	-
Air Marshall Islands				
HS 748-2B	RR Dart 536	1	-	-
Do 228-212	Gar. TPE331-5A-252D	2	-	-
Air Moorea (French Polynesia)				
Do 228-212	Garrett TPE331-252D	1	-	-
<i>Leased in: 1</i>				
BN-2A/2B	Lyc O-540-E4B5	3	-	-
<i>Leased in: 1</i>				
DHC-6-300	PWC PT6A-27	2	-	-
Air Nauru				
B737-400	CFM56-3C1	1	-	-
Air Nelson (New Zealand)				
Fairchild Metros	Garrett TPE331-11U-611	4	-	-
<i>Leased in: 4 Air New Zealand</i>				
Saab 340A	GE CT7-5A2	4	-	-
<i>Leased in: 4 Air New Zealand</i>				
Air New Zealand				
B747-400	RR RB211-524E	3	-	-
<i>Leased in: 3 Leased out: 3</i>				
B747-400	GE CF6-80C2B1F	5	-	-
<i>Leased in: 1 Leased out: 4</i>				

Airline/Aircraft **Engines** **In Service**
Feb 28, 02 **On Order** **Options**



B767-200	GE CF6-80A2	4	-	-
<i>Leased in: 4</i>				
B767-300	GE CF6-80C2B6F	4	-	-
<i>Leased in: 2 Leased out: 2</i>				
B767-300	GE CF6-80C2B6	6	-	-
<i>Leased in: 3 Leased out: 3</i>				
B737-200	P&W JT8D-15A	4	-	-
<i>Leased in: 3 Leased out: 1</i>				
B737-300	CFM56-3C1	17	-	-
<i>Leased in: 5 Leased out: 12</i>				
B737-300	CFM56-3B2	1	-	-
<i>Leased in: 1</i>				
ATR-72-500	P&W PW127F	8	-	-
<i>Leased in: 8</i>				
Saab 340A	GE CT7-5A2	15	-	-
<i>Leased in: 11 Leased out: 4</i>				
BAe146-300	ALF502-R5	1	-	-
<i>Leased in: 1</i>				
Raytheon Beech 1900D		7	9	-
<i>Leased in: 7</i>				
Fairchild Metros	Garrett TPE331-11U-611	9	-	-
<i>Leased in: 5 Leased out: 4</i>				
Embraer 110	PW PT6A-34	9	-	-
<i>Leased in: 9</i>				
Air Nippon				
B737-500	CFM56-3C1	22	-	-
B737-400	CFM56-3C1	2	-	-
A320-200	CFM56-5A1	8	-	-
<i>Leased in: 8 (ANA)</i>				
DHC-8-Q300		2	-	-
YS-11A-500	RR Dart 543-10/10K	6	-	-
<i>Leased in: 6 ANA</i>				
Air Niugini (Papua New Guinea)				
A310-300	P&W PW4152	2	-	-
<i>Leased in: 1 Gatex Leased out: 1</i>				
F28-4000	RR RB183-15H	3	-	-
F28-1000	RR RB183-15	3	-	-
DHC-8-200B	P&W PW123D	1	-	-
Airnorth (Australia)				
Emb 120ERJ		4	-	-
Fairchild Metro 23		4	-	-
Cessna 400 Series		11	-	-
Cessna 208B		1	-	-

Airline/Aircraft **Engines** **In Service**
Feb 28, 02 **On Order** **Options**

Air Pacific (Fiji)

B747-200	RR RB211-524D	1	-	-
<i>Leased in: Qantas</i>				
B767-300ER	GE CF-6-80C2B6	1	-	-
<i>Leased in: Mukai Kosan Company</i>				
B737-700	CFM56-7B24	1	-	-
B737-800	CFM56-7B24	2	-	-

Air Philippines

B737-200	P&W JT8D-7B/-9A/-17	10	-	-
<i>Leased in: 4</i>				

Air Rarotonga (Cook Islands)

EMB110	PWC PT6A-34	3	-	-
<i>Leased in: 2</i>				

Air Tahiti Nui (French Polynesia)

A340		2	-	-
<i>Leased in: 1</i>				
ATR72-202	PWC PW124B	4	1	-
ATR42-500	PWC PW127E	4	-	-
Do 228-212	Gar. TPE331-5A-2521	2	-	-

Air Vanuatu

B737-300	CFM56-3B1	1	-	-
<i>Leased in: Qantas</i>				
Saab 2000		1	-	-
<i>Leased in: Saab</i>				

Airlink (Qantas Airlink)

B717-200		8	-	-
BAe 146-300/200/100	ALF502R-5	17	-	-
DHC-8-100	PW120A	18	-	-
DHC-8-200	PW123	4	-	-
DHC-8-300		3	-	-
Shorts SD 360	PW PT6A-65R	4	-	-
Raytheon Beech 1900D		13	-	-

All Nippon Airways

B747-400	GE CF6-80C2B1F	23	-	-
B747-200LR	GE CF6-50E2	3	-	-
<i>Leased in: 2 Orix Aircraft Corp</i>				
B747SR	GE CF6-45A2	10	-	-
<i>Leased in: 6 Nissho Iwai Leasing (3), Showa Leasing (3)</i>				
B747-400F	GE CF6	-	1 (2002)	-
B777-200/ER	P&W PW4090/4074	16	-	-
<i>Leased in: 15</i>				
B777-300	P&W PW4090	5	6 (2004-2005)	-
<i>Leased in: 4</i>				
B767-300	GE CF6-80C2B2F	42	9 (2002-2003)	-
<i>Leased in: 15</i>				
B767-200	CF6-80A	10	-	-
A321-100	V2530-A5	7	-	-
<i>Leased in: 1</i>				
A320-200	CFM56-5A1	25	3	-
<i>Leased out: 8 Air Nippon</i>				
A340		-	5	-

Alliance Air (India)

B737-200	P&W JT8D-17A	7	-	-
<i>Leased in: 7 from Air India</i>				

Archana Airways (India)

LET L-410 UVP-E	Walter M601E-21	4	1	-
Fairchild Dornier 328-100		-	2	-

Asiana Airlines

B747-400	GE CF6-80C2B1F	2	-	-
B747-400 Combis	GE CF6-80C2B1F	6	-	-
B747-400F	GE CF6-80C2B1F	4	2	-
B767-300/ER	GE CF6-80C2B2F	13	-	-
B767-300F	GE CF6-80C2B6F	1	-	-

Airline/Aircraft	Engines	In Service		
		Feb 28, 02	On Order	Options
B777-200		2	-	-
B737-400	CFM56-3C1	20	-	-
B737-500	CFM56-3C1	5	-	-
A321	IAE V2530-A5	7	8	-
Asian Spirit (Philippines)				
B737		3	-	-
YS-11A	RR Dart 543-10	4	-	-
LET 410	Walter M601E-21	2	-	1
CASA CN235		2	-	-
Bangkok Airways (Thailand)				
ATR72-200	PWC PW124B	8	-	-
<i>Leased in: 8</i>				
ATR72-500	PWC PW121	1	-	-
<i>Leased in: 1 GIE</i>				
B717-200		2	-	-
Berjaya Air (Malaysia)				
BN-2 Islander	Lyc IO-540 K1B5	1	-	-
Y-12	PWC PT6A-27	1	-	-
Challenger 601-3R	GE CF34-3A1	1	-	-
DHC-7	PWC PT6A-50	2	-	-
Biman Bangladesh Airlines				
DC 10-30	GE CF6-50C2	4	-	-
A310-300	P&W PW4156A	4	-	-
<i>Leased in: 2</i>				
F28-4000	RR Spey 555-15P	1	-	-
BAe ATP	PWC PW126	2	-	-
Bouraq Indonesia Airlines				
B737-200	P&W JT8D-15	6	-	-
<i>Leased in:</i>				
HS 748-2A	RR Dart 534-2	3	-	-
HS 748-2B	RR Dart 536-2	1	-	-
IPTN 212-100		3	-	-
IPTN N250		-	5	-
Cathay Pacific Airways				
B747-400	RR RB211-524G/H	19	-	-
<i>Leased in: 17</i>				
B747-400F	RR RB211-524G2	5	-	-
<i>Leased in: 1 Leased out: 3 (Air Hong Kong)</i>				
B747-200F	RR RB211-524D4	4	-	-
<i>Leased in: 1 Leased out: 3 (Air Hong Kong)</i>				
B777-200	RR Trent 800	5	-	-
<i>Leased in: 4</i>				
B777-300	RR Trent800	7	-	3 (any B777 model)
<i>Leased in: 7</i>				
A340-600	RR Trent 500	-	3 (2002-03)	-
A340-300	CFM56-5C4	15	1	-
<i>Leased in: 15</i>				
A330-300	RR Trent 772	20	-	-
<i>Leased in: 18</i>				
Cebu Pacific Air (Philippines)				
DC-9-41	P&W JT8D-9A/7B	10	-	-
<i>Leased in: 10</i>				
China Airlines (Taiwan)				
B747-400	P&W PW4056	13	-	2
<i>Leased in: 9</i>				
B747-400F	GE CF6-80C2B1F/5F	11	4	4
<i>Leased in: 2</i>				
B747-200F	P&W JT9D-7A/7Q/7R4G2/	4	-	-
<i>Leased in: 1</i>				
B747-200B	P&W JT9D-7A	1	-	-
B737-800	CFM56-7B26	9	-	-
<i>Leased in: 5</i>				
MD-11	P&W PW4460	1	-	-

Airline/Aircraft	Engines	In Service		
		Feb 28, 02	On Order	Options
<i>Leased in: 1</i>				
A300-600R	P&W PW4158	12	-	-
<i>Leased in: 5</i>				
A340-300	CFM56-5C4	5	2	1
China Eastern Airlines (Shanghai)				
A340-300	CFM56-5C4	5	5	-
A300-600R	GE CF6-80C2A5	10	-	-
<i>Leased in: 3</i>				
A320-200	CFM 56-5B4	14	-	-
<i>Leased in: 4</i>				
A319		8	-	-
B737-300		7	-	-
<i>Leased in: 1 SALE</i>				
B737-200		3	-	-
MD-82	P&W JT8D-217A	3	-	-
MD-11	P&W PW4460	3	-	-
MD-11F	P&W PW4460	3	-	-
MD-90		9	-	-
China Northern Airlines (Shenyang)				
MD-90	IAE V-2525-D5	13	-	-
MD-82	P&W JT8D-217A/C	24	-	-
A300-600R	P&W PW4158	6	-	-
<i>Leased in: 2 AWAS Leased out 2</i>				
A321		2	8	-
China Northwest Airlines (Xian)				
A300-600R	GE CF6-80C2A5	3	-	-
<i>Leased in: 1 GECAS</i>				
A310-200	P&W JT9D-7R4E1	3	-	-
<i>Leased in: 3</i>				
A320	CFM56-5B4	13	-	-
<i>Leased in: 2</i>				
BAe 146-100	Lyc ALF 502R-5	3	-	-
<i>Leased in: 1</i>				
BAe 146-300	Lyc LF507-1H	7	-	-
China Southern Airlines (Guangzhou)				
B747-400F		1	-	-
B777-200A/B	GE90-76BG01	9	-	-
<i>Leased in: 8</i>				
B757-200	RR RB211-535E4	18	-	-
<i>Leased in: 15</i>				



B737-300	CFM56-3C	27	-	-
<i>Leased in: 13</i>				
B737-500	CFM56-3C	12	-	-
<i>Leased in: 7</i>				
A320-200	IAE V2527-A5	20	-	-
<i>Leased in: 10 Leased out: 2</i>				

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
China Southwest Airlines (Chengdu)				
B757-200	RR RB211-535E4	13	-	-
<i>Leased in: 5 GECAS (3) Leased out: 2</i>				
B737-300	CFM56-3B1/B2	14	-	-
<i>Leased in: 5</i>				
B737-600	CFM56	3	-	-
B737-800	CFM56-7	4	-	-
A340-300		6	-	-
<i>Leased in: 3</i>				
China United Airlines (Beijing)				
B737-300	CFM56-3B1	8	-	-
B767-300		1	-	-
Tu-154M	Sol D-30KU-154	16	-	-
Il-76M		14	-	-
Canadair CRJ200	GE CF34-A-1A/3A	5	-	-
China Xinhua Airlines (Beijing)				
B737-300	CFM56-3B1/2	6	-	-
<i>Leased in: 1 Boulliouin</i>				
B737-400	CFM56-3	3	-	-
<i>Leased in: 3 Boulliouin</i>				
China Xinjiang Airlines (Urumqi)				
B737-300	CFM56-3	2	-	-
B737-700	CFM-56	4	-	-
B757-200	RB211-535-E4	8	1	-
<i>Leased in: 3</i>				
IL-86	Hk-86	3	-	-
ATR-72		5	-	-
China Yunnan Airlines (Kunming)				
B737-300	CFM56-3B1/3C1	13	-	-
<i>Leased in: 4 AWAS (3), GECAS (1)</i>				
B737-700	CFM 56	4	-	-
B767-300ER	RR RB524-211	3	-	-
Canadair CRJ200		3	3 (2002)	-
Dragonair (Hong Kong)				
A320-200	IAE V2500-A1	8	3 (2002-05)	-
<i>Leased in: 5 ILFC</i>				
A321	IAE V2500	3	3	-
<i>Leased in: 3</i>				
A330-300	RR Trent 772	7	2	-
<i>Leased in: 4 ILFC</i>				
B747-300F	PW JT9D-7R4G2	2	-	-
Druk-Air (Bhutan)				
BAe 146-100	Lyc ALF502R-5	2	-	-
Eagle Airlines (New Zealand)				
EMB-110P1	PWC PT6A-34	9	-	-
<i>Leased in: 9 Air New Zealand</i>				
Fairchild Metro III	Garrett TPE331-11	6	-	-
<i>Leased in: 6 Air New Zealand</i>				
Eastern Australia Airlines (QantasLink carrier)				
DHC-8-100/200	PWC PW120A/123	16	-	-
Elbee Airlines (India)				
F27-200	RR Dart 552-7R	2	-	-
EVA Air (Taiwan)				
B747-400	GE CF6-80C2B1F	5	-	-
B747-400 Combi	GE CF6-80C2B1F	10	-	-
<i>Leased in: 12 of the 15 B747s</i>				
B747-400F	GE CF6-80C2B1F	2	1 (2002)	-
B767-300ER	GE CF6-80C2B6F	4	-	-
<i>Leased in: 4</i>				
B767-200	GE CF6-80C2B2F	4	-	-
MD-11	GE CF6-80C2D1F	3	-	-
<i>Leased in: 1</i>				
MD-11F	GE CF6-80C2D1F	9	-	-

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
<i>Leased in: 2</i>				
B777-200X		-	3 (2005-08)	-
B777-300X		-	4 (2005-08)	8 (-200/-300)
A330-200		-	8 (2003-05)	-
Everest Air (Nepal)				
Fairchild Dornier 228-100	Gar TPE331-5-252D	3	-	-
<i>Leased in: 1 Danish, 2 Adler Leasing</i>				
Far Eastern Air Transport (Taiwan)				
B757-200	P&W PW2037	7	1	-
<i>Leased in: 1 ILFC</i>				
MD-82/83	P&W JT8D-217/219	9	-	-
<i>Leased in: 4</i>				
Freedom Air International (New Zealand)				
B737-300	CFM56-3C1	2	-	-
<i>Leased in: 2 Air New Zealand</i>				
Garuda Indonesia				
B747-400	GE CF680-C2B1F	3	-	-
<i>Leased in: 1 ILFC (To Mar 2005)</i>				
B747-200	P&W JT7D-7Q	4	-	-
B737-300/400/500	CFM56-3C1	25	-	-
<i>Leased in: 7</i>				
B737 NG		-	18	-
B777		-	6	-
DC10-30	GE CF6-50C	5	-	-
A330-300	RR Trent 700	6	-	3
<i>Leased in: 6</i>				
Hainan Airlines (Haikou, China)				
B737-300	CFM56-3C1	5	-	-
<i>Leased in: 3 ILFC, 2 Communication Bank of China</i>				
B737-400	CFM56-3C1	7	-	-
<i>Leased in: ILFC</i>				
B737-800	CFM56-7	10	-	-
<i>Leased in:</i>				
Fairchild 328JETS	P&W	19	20	-
Leerjet 60	P&W PW305A	1	-	-
Beechjet 400		1	-	-
Raytheon Hawker 800XP		5	-	-
Gulfstream 200		-	3 (2002-2003)	-
Hazelton Airlines (Australia)				
Saab 340A/B	GE CT7-9B	9	-	-
Fairchild Metro 23	Gar. TPE331-12 VAR	2	-	-



Indian Airlines

A300B4/B2	GE CF6-50C2/C	11	-	-
A320-200	IAE V2500-AI	34	-	-
B737-200	P&W JT8D-17A	11	-	-
Dornier 228-200		3	-	-

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
Islands Nationair (Papua New Guinea)				
DHC-6-300 Twin Otter	PWC PT6A-27	3	-	-
EMB-110	PWC PT6A-34	3	-	-
J-AIR (Japan)				
BAe Jetstream Super 31	Gar. TPE331-12UHR	3	-	-
<i>Leased in:</i>				
Canadair RJ 200		2	4 (2002-2003)	-
Jagson Airlines (India)				
Fairchild Dornier 228-201	Gar. TPE331-5-252D	3	-	-
JALways (Formerly Japan Air Charter, JAZ)				
B747		1	-	-
<i>Leased in: 1, Japan Airlines</i>				
DC10-40	P&W JT9D-59A	4	-	-
<i>Leased in: 4 Japan Airlines</i>				
Japan Air Commuter				
YS-11A-500	RR Dart 542-10J/K	12	-	-
<i>Leased in: JAS</i>				
Saab 340B	GE CT7-9B	11	-	-
Japan Air System				
B777-200	P&W PW4074	7	-	-
<i>Leased in: 3</i>				
A300B4-2C	GE CF6-50C2R	8	-	-
<i>Leased in: 3</i>				
A300B2K-3C	GE CF6-50C2R	9	-	-
<i>Leased in: 2</i>				
A300-600R	P&W PW4158	19	-	-
<i>Leased in: 7</i>				
MD-90-30	IAE V2525-D5	16	-	-
<i>Leased in: 3</i>				
MD-81	P&W JT8D-217A/C	18	-	-
<i>Leased in: 11</i>				
MD-87	P&W JT8D-217A/C	8	-	-
<i>Leased in: 2</i>				
YS-11	RR Dart Mk542-10J/K	12	-	-
<i>Leased out: 12</i>				
Japan Airlines				
B747-400	GE CF6-80C2B1F	42	5 (2002-2003)	-
<i>Leased in: 15</i>				
B747 Classics	P&W JT9D	26	-	-
B747 Freighters	P&W JT9D	10	-	-
B767-300	P&W JT9D-7R4D	12	-	-
<i>Leased in: 5 Leased out: 1 JAA</i>				
B767-300	GE CF6-80C2B4F	7	-	-
<i>Leased in: 4 Leased out: 2 JAA</i>				
B767-300ER	CF6-80C2B7F	-	8 (2002-2004)	-
B767-200	P&W JT9D-7R4D	3	-	-
B777-200	P&W PW4077	5	5	-
<i>Leased in: 3</i>				
B777-200ER	GE90-94B	-	11 (2002-2006)	-
B777-300	P&W PW4090	5	-	-
B777-300ER		-	8 (2004-2008)	-
MD-11	P&W PW4460	10	-	-
DC 10-40	P&W JT9D-59A	15	-	-
CRJ-200		-	4 (2002-2003)	-
Japan Asia Airways				
B747-300	P&W JT9D-7R4G2	3	-	-
<i>Leased in: Japan Airlines</i>				
B747-200	P&W JT9D-7A/7Q	1	-	-
<i>Leased in: Japan Airlines</i>				
B767-300	P&W JT9D-59A	2	-	-
<i>Leased in: 2, Japan Airlines</i>				
B767-300	CF6-80C2B4F	1	-	-
<i>Leased in: 1, Japan Airlines</i>				

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
Japan Express (JEX)				
B737-400	CFM 56-3C1	8	-	-
<i>Leased in: 8, Japan Airlines</i>				
Japan TransOcean Air				
B737-400	CFM56-3C1	15	-	-
<i>Leased in: Japan Airlines</i>				
Jet Airways (India)				
B737-400	CFM56-3C1/3B1	10	-	-
<i>Leased in: 4</i>				
B737-700	CFM56-7B22	10	-	-
B737-800	CFM56-7B24	10	6 (2002-03)	-
ATR 72-500	PWC PW127F	8	-	-
Kendell Airlines (Australia)				
Saab 340A	GE CT7-5A2	8	-	-
Saab 340B	GE CT7-9A2	8	-	-
Fairchild Metro 23	Gar. TPE331-12 UAR	7	-	-
Canadair RJ-200	GE CF34-381s	12	-	-
<i>(At the time of going to press the CRJs were grounded)</i>				
Korean Air				
B747-400	P&W PW4056	27	-	-
B747-400F	P&W PW4056	8	6 (2002-2004)	-
B747-300F	P&W JT9D-7R4	1	-	-
B747-200F	P&W JT9D-7A/Q/7R4G2	7	-	-
B747-300	P&W JT9D-7R4G2	1	-	-
B777-200	P&W PW4090	6	2 (2002)	3
B777-300	P&W PW4090	4	-	-
B737-800	CFM56-7B24	14	-	2
B737-900	CFM56-7B24	2	14 (2002-2004)	2
A330-300	P&W PW4168/A	13	3 (2002-2003)	3
A330-200	P&W PW4168	3	-	-
A300-600	P&W PW4158	16	-	-
<i>Leased in: 3</i>				
MD-11F	P&W PW4460	4	-	-
MD-82/83	P&W JT8D-217A/C/219	4	-	-
Fokker 100	RR Tay 650-15	10	-	-
<i>Leased in: 2</i>				
Lao Aviation				
An 24RV	Ivchenko AI-24	1	-	-
ATR72-200	P&W PW127	2	-	-
Y-7-100C3	WJ5A-1	3	-	-
<i>Leased in: XAC</i>				
Malaysia Airlines				
B747-400	P&W PW4056/GE CF6-80C2	18	3	-
<i>Leased in: 1</i>				



Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
B747-300 (Parked long term)	P&W JT9D-7R4G2	1	-	-
B747-200F	RR RB211-524D4	2	-	-
B777-200 Leased in: 11	RR Trent 890B	13	4	-
B737-400 Leased in: 4	CFM56-3C1	39	-	-
B737-700BBJ	CFM56-7B26	1	-	-
A330-300	P&W PW4168	9	-	-
DC10-30 (Parked long-term)	CF6-50C2	1	-	-
Fokker 50	PWC PW125B	10	-	-
DHC Leased in: 1	PT6A-27	6	-	-



Mandala Airlines (Indonesia)

B737-200	P&W JT8D-15/17	7	-	-
Leased in: 7. GECAS (3), PT. Pann (2), Sub lease from Transmile (2)				

Mandarin Airlines

B737-800	CFM56-7B26	3	-	-
Saab 340	GE CT7-9B	4	-	-
Fokker 50	P&W PW125B	7	-	-
Fokker 100	RR Tay 65-15	2	-	-
Fairchild Dornier 228-212	Gar TPE331-5A-252D	2	-	-

Merpati Nusantara Airlines (Indonesia)

B737-200	P&W JT8D-15	7	-	-
Fokker 100	RR Tay 650-15	3	-	-
F28-4000	RR Spey 555-15H	9	-	-
F27-500	RR Dart 532/6-7	6	-	-
CASA 212	Gar. TPE 331-10-511	4	-	-
Twin Otters		6	-	-

Mount Cook Airline (New Zealand)

ATR 72-500	PWC PW127	7	1	-
Leased in: 7, Air New Zealand				

MIAT Mongolian Airlines

B727-200	P&W JT8D-9A/17	2	-	-
A310		1	-	-
Y-12	PWC PT6-27	5	-	-
An-24	Ivchenko AI-24	11	-	-
An-26	Ivchenko AI-24BT	3	-	-
An-30	Ivchenko AI-24BT	1	-	-
Mi-8	TVD-117A	3	-	-

Myanmar Airways

F28-4000	RR Spey 555-15P	2	-	-
F28-1000	RR Spey 555-15	1	-	-
F27-600	RR Dart 532-7	3	-	-
F27-400	RR Dart 532-7	1	-	-

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
F27-100	RR Dart 514-7	1	-	-
Myanmar Airways International				
B737-400 Leased in: MAS	CFM56-3C1	2	-	-
Necon Air (Nepal)				
HS748	RR Dart 533/6-2	3	-	-
ATR-42		1	-	-
National Jet (Australia)				
BAe RJ70		2	-	-
DHC 8 100/200/300		5	-	-
BAe Jetstream J32		1	-	-
NEPC Airlines (India)				
F27-500 Leased in: 2	RR Dart 552-7R	8	-	4
Nippon Cargo Airlines (Japan)				
B747-200F Leased in: 2	GE CF6-50E2	7	-	-
B747-100SRF	GE CF6-50E2	1	-	-
Pacific Airlines (Vietnam)				
A310		1	-	-
A321		2	-	-
Pakistan International Airlines				
B747-200	P&W JT9D-7A	6	-	-
B747-200 Combi	GE CF6-50E2	2	-	-
B747-300 Leased in: 5 Cathay Pacific	RR RB211-524C2	5	-	-
B737-300	CFM56-3B1	7	-	-
A300-B4 Leased in: 2	GE CF6-50C2	9	-	-
A310-300	GE CF6-80C2A8	6	-	-
F27-200/400	RR Dart 532-7	12	-	-
DHC-6-300	PWC PT6A-27	2	-	-
Pelangi Air (Malaysia)				
Fokker 50	PWC PW125B	2	-	-
Fairchild Dornier 228-202	Gar. TPE331-5-252	3	-	-
Pelita Air Service (Indonesia)				
Fokker 100 Leased in: GECAS	RR Tay 650-15	1	-	-
Fokker 70	RR Tay 620-15	1	-	-
F28-4000 Leased in: 1 GECAS	RR Spey 555-15P	4	-	-
DHC-7-103	PWC PT6A-50	6	-	-
CASA C212-100	Garrett TPE331-511C	4	-	-
BAe 146-200	Lyc ALF502-R5	1	-	-
CASA 212-200		8	-	-
Philippine Airlines				
B747-400 Leased in: 4	GE CF6-80C2B1F	4	-	-
B737-300 Leased in: 7	CFM56-3B1/3B2/3C1	7	-	-
B737-400 Leased in: 3	CFM56-3B1/3B2/3C1	3	-	-
A340-300 Leased in: 4	CFM56-5C	4	-	-
A330-300 Leased in: 8	CF6-80E1A2	8	-	-
A320-200 Leased in: 3	CFM56-5B4/P	3	-	-
Polynesian Airlines (Western Samoa)				
B737-300	CFM56-3C1	1	-	-
B737-800	CFM56-7B	1	1	-
DHC-6-300	PWC PT6A-27	2	-	-
BN-2A Islander	Lyc O-540-E4C5	1	-	-

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
Qantas Airways				
B747-400	RR RB211-524G/CF6-80C2B1F	25	-	-
<i>Leased in: 1 (British Airways)</i>				
B747-400ER	CF6-80C2B5F	-	6 (2003-2006)	-
B747-300	RR RB211-524D4U	6	-	-
B747-200B/SCD	RR RB211-524D4U	5	-	-
<i>Leased out: 1 (Air Pacific)</i>				
B767-300ER	RR211-524H/GE CF6-80C2B6	29	-	-
<i>Leased in: 3</i>				
B767-200ER	P&W JT9D-7R4E	7	-	-
B737-300	CFM56-3C1	16	-	-
B737-400	CFM56-3C1	22	-	-
<i>Leased in:</i>				
B737-800		5	10 (2002)	-
A380	RR Trent 900	-	12 (2006-2011)	-
A330-200	CF6-80E1	-	7 (2002-2005)	-
A330-300	CF6-80E1	-	6 (2002-2005)	-
QantasLink Regionals				
B717-200		8	-	-
BAe146-100	ALF502R-5	6	-	-
BAe146-200	ALF502R-5	9	-	-
BAe146-300	ALF507R-5	2	-	-
DHC-8-100	PW120A	18	-	-
DHC-8-200	PW123	4	-	-
DHC-8-300	PW	3	-	-
Raytheon Beech 1900D		13	-	-
Shorts SD 360	PW PT6A-65R	4	-	-
Qantas New Zealand				
BAe 146-300	Lyc ALF502R-5	9	-	-
<i>Leased in: 9</i>				
BAe 146-200F	Lyc ALF502R-5	1	-	-
<i>Leased in: AWAS</i>				
DHC-8-100	PWC PW120A	4	-	-
<i>Leased in: 3 DHC (5 years)</i>				
BAe Jetstream 32EP		-	3	-
Royal Brunei Airlines				
B757-200ER	RR RB211-535-E4	2	-	-
<i>Leased out: 1 Qatar Airways</i>				
B767-300ER	P&W PW4056	6	-	-
<i>Leased out: 1 Region Air</i>				
B767-300ER	GE CF6-80C2	2	-	-
Dornier 228-212	TPE331-SA-252D	1	-	-
<i>Leased out</i>				
Royal Nepal Airlines				
B757-200/C	RR RB211-535E4	2	-	-
DHC-6-300	PWC PT6A-27	8	-	-
Pilatus PC6-B2H4	PWC PT6A-27	1	-	-
Ryukyu Air Commuter (Japan)				
DHC-8-100		2	2	-
DHC-6-300	PWC PT6A-27	4	-	-
<i>Leased in: 4 Japan TransOcean</i>				
Sabang Merauke Raya Air Charter (Indonesia)				
C-212-100	Garrett TPE331-5-251C	2	-	-
F-27-200	RR Dart-7 MK532-7	1	-	-
<i>Leased in: 1</i>				
Piper PA31-350	Lyc TIO-540-J2BD	1	-	-
Sahara India Airlines				
B737-200	P&W JT8D-15	4	1	-
<i>Leased in: 2 PLM Int'l</i>				
B737-400	CFM56-3C-1	2	2	-
<i>Leased in: ILFC</i>				
Shaheen Air (Pakistan)				
B737-400		1	-	-

Airline/Aircraft	Engines	In Service Feb 28, 02	On Order	Options
<i>Leased in:</i>				
Shandong Airlines (China)				
B737-300	CFM56-3B1/3B2	7	-	-
<i>Leased in: 2</i>				
Saab 340A		6	-	-
<i>Leased in:</i>				
Canadair RJ200		9	-	-
Canadair RJ700		-	10	-
Cessna Caravan		5	-	40
Bombardier Challenger 604		1	3 (2002-03)	-
Shanghai Airlines (China)				
B757-200	P&W PW2037	7	-	-
B767-300	P&W PW4056	4	-	-
B737-700	CFM56-381	6	-	-
<i>Leased in: 3</i>				
B737-800		1	-	-
Canadair RJ200		3	-	-
Hawker 800		1	-	-
Shenzhen Airlines (Chengdu)				
B737-300	CFM56-3B1/2/C1	6	-	-
<i>Leased in: 6 China Xinjiang (2), Fluggesellschaft (2), AWAS (1), Metlife Capital Corp (1)</i>				
B737-700		6	-	-
Sichuan Airlines (China)				
A320-200	IAE V2527-A5	5	-	-
<i>Leased in:</i>				
A321	IAE V2500	2	-	-
EMB 145		5	-	-
Y-7-100	WJ5A-1	5	-	-
SilkAir (Singapore)				
A320-200	V2527-A5	5	1	9
<i>(A320/A319)</i>				
A319-100	V2524-A5	3	1 (2002)	-
Singapore Airlines				
B747-400	P&W PW4056	39	-	9
B747-400F	P&W PW4056	11	6	-
B777-200	RR Trent 884	18	9	13
B777-200	RR Trent 892	-	10	10
B777-200ER	RR Trent 892	6	7	23
B777-300	RR Trent 892	7	1	-
A380-100	RR Trent 900	-	10	15
A340-300E	CFM56-5C4	9	2	-
A340-500	RR Trent 553	-	5	5
A310-300	P&W PW4152	13	-	-



Skippers Aviation (Australia)

DHC-8-100		2	-	-
Emb 120ERJ		1	-	-
Fairchild Metro 23		7	-	-
Cessna 400 Series		8	-	-

Airline/Aircraft	Engines	In Service		
		Feb 28, 02	On Order	Options
Skymark Airlines (Japan)				
B767-300ER		2	1	-
Skyline NEPC Airlines (India)				
B737-200	P&W JT8D-17/17A	1	-	-
Skywest Airlines (Australia)				
Fokker 50	PWC PW125B	5	-	-
Solomon Airlines				
DHC-6-310	PWC PT6A-27/34	2	-	-
DHC-5-310	PWC PT6A-27	1	-	-
BN-2A-8/9 Islander	Lyc O-540-E4C5	2	-	-
Southern Australian Airlines (Qantas Airlink)				
DHC-8-102	PWC PW120A	3	-	-
BAe 146-200	Lyc. ALF 502R	3	-	-
Srilankan Airlines				
A340-300	CFM56-5C2	3	-	-
<i>Leased in: 1</i>				
A330		4	3	-
A320-231	IAE V2500-A1	1	-	-
Sun Air (Fiji)				
DHC-6-210	PWC PT6A-20	2	-	-
DHC-6-310	PWC PT6A-27	1	-	1
BN-2A Islander	Lyc O-540-E4C5	4	-	-
BE 65	Lyc 10-720	1	-	-
Sunstate Airlines (Queensland, Australia)				
Shorts 360	PWC PT6A-65R	3	-	-
DHC-8-100/200/300	PWC PW120A	7	1	-
Thai Airways International				
B747-400	GE CF6-80C2B1F	15	-	-
<i>Leased in: 2</i>				
B747-300	GE CF6-80C2B1	2	-	-
B777-200	RR Trent 870	8	-	-
<i>Leased in: 4</i>				
B777-300	RR Trent	6	-	-
B727-400		1	-	-
B737-400	CFM56-3C1	10	-	-
<i>Leased in: 4</i>				
MD-11	GE CF6-80C2D1F	4	-	-
A330-300	P&W PW4164/4167/4168A	12	-	-
<i>Leased in: 3</i>				
A300-600	GE CF6/P&W4158	21	-	-
<i>Leased in: 5</i>				
ATR72	PWC PW124	2	-	-
TransAsia Airways (Taiwan)				
A320	IAE V2500-A1	3	-	-
A321-131	IAE V2500-A5	6	-	-
ATR 72	PWC PW124B	10	-	-
Transmile Air Services (Malaysia)				
B737-200	P&W JT8D-9A	2	-	-
<i>Leased in: Leased out: 2</i>				
B737-200F	P&W JT8D-9A	5	-	-
<i>Leased in: 1 Leased out:</i>				
B727-200	P&W JT8D-15	1	-	-
Cessna Grand Caravan I	PWC PT6A-114	2	-	-
Uni Air				
MD-90-30	IAE V2525-D5	14	-	-
<i>Leased in: 7</i>				
DHC8-100		4	-	-
DHC8-200		1	-	-
DHC8-311	PW 123	14	1	-
Fairchild Dornier 228-212	Garrett TPE 331-5A	2	-	-
BN-2A-26	AVCO Lyc O-540	3	-	-
U-Land Airlines				
MD-82	P&W JT8D-217C	3	-	-

Airline/Aircraft	Engines	In Service		
		Feb 28, 02	On Order	Options



Leased out: 1 Vietnam's Pacific Airlines

Vanair (Vanuatu)				
DHC-6-310	PWC PT6A-27	5	-	-
BN-2A Islander	Lyc O-540-4C5	2	-	-
Vietnam Airlines				
B777-200ER		-	4 (2003-2005)	-
B767-300ER	CF 6	5	-	-
<i>Leased in: 4</i>				
A320-200	CFM56-5B4	10	2	-
<i>Leased in: 10</i>				
A321		2	-	-
Fokker 70	Tay MK 620-15	2	-	-
ATR 72-202	PWC PW124	7	-	-
<i>Leased in: 2</i>				
Virgin Blue (Australia)				
B737-300		1	-	-
B737-400		4	-	-
B737-700		6	-	-
B737-800		5	2	-
Wuhan Airlines (China)				
B737-300	CFM56	6	-	-
B737-800		2	-	-
<i>Leased in: 3 ILFC</i>				
Y-7-100	WJ5A-1	4	-	-
Y-5	HS 5	2	-	-
Xiamen Airlines (China)				
B757-200	RR RB211-535E4	6	-	-
B737-200	P&W JT8D-17A	2	-	-
<i>Leased in: 2 GECAS</i>				
B737-300		4	-	-
B737-500	CFM56-3C1	6	-	-
<i>Leased in: 4 ILFC (2), Braathens (2)</i>				
B737-700	P&W JT8D	6	4	-
Zhejiang Airlines (China)				
A320-200	CFM 56-5B4-2	5	-	-
<i>Leased in: 2</i>				
A321		1	-	-
DHC Dash-8-300	PWC PW127	3	-	-
<i>Leased in: 1 AGES</i>				

December 2001, quarterly and annual statistics

LAST QUARTER NOSEDIVE

Compiled and presented by Kris Lim of the Research and Statistics Department of the Association of Asia Pacific Airlines Secretariat

PASSENGERS

In December the consolidated revenue passenger kilometres (RPKs) of Association of Asia Pacific Airlines (AAPA) member carriers recorded a negative growth rate of 11.3%. The number of passengers carried in the month fell by 5.2%. Capacity was down 5.9% in response to market conditions. In spite of that, passenger load factor (PLF) fell by 4.2 percentage points to 69.1%.

The carriers posted "better" traffic results in December. Only four airlines suffered double-digit falls in traffic compared to seven in November, although Japan Airlines (JL) and

All Nippon Airways (NH) reported improved RPKs after two straight months of unprecedented decline. Garuda Indonesia (GA) and Qantas Airways (QF) also registered double-digit falls in RPKs. Eight other carriers experienced an RPK decline which ranged from Asiana Airline's (OZ) marginal fall to Philippine Airlines' (PR) 8.7% drop. Vietnam Airlines (VN) and Royal Brunei Airlines (BI) were the only carriers to post positive growth, 9.7% and 7.6% respectively.

Load factors improved because of the combined effect of holiday travel and capacity reduction. Ten AAPA member carriers posted declines in PLF, but none suffered more than a 15 percentage points fall. On the other hand, four airlines recorded improved PLF. Seven carriers filled more than 70% of their seats, with Qantas Airways emerging with the best payload (75.1%). Garuda Indonesia was the only member airline to record a load factor below 60%.



Qantas Airways: highest passenger load factor among AAPA carriers in December

CARGO

Consolidated freight tonne kilometres (FTKs) of AAPA airline members posted a 6.6% decline year-on-year in December. Capacity shrank by 4.8%, which resulted in a freight load factor (FLF) of 66.4%, down by 1.3 percentage points.

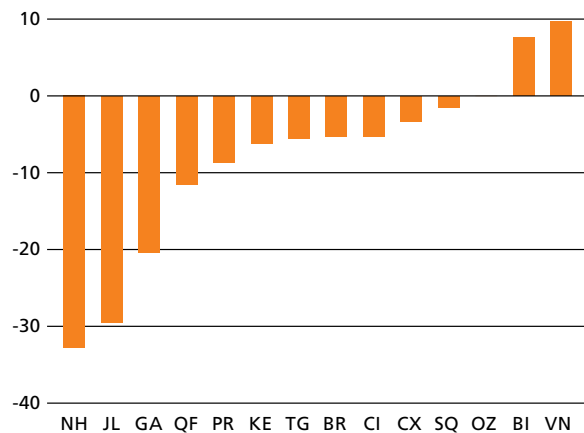
Five carriers recorded double digit contractions in traffic, which ranged from Garuda Indonesia's 12.8% to All Nippon Airways' 26.1%. Five other carriers, however, managed to post an increase in FTK – China Airlines (CI) with 0.5%, Singapore Airlines (SQ) 1.5%, Cathay Pacific Airways (CX) 2.2%, Royal Brunei Airlines 3.4% and Vietnam Airlines 7.3%.

Ten carriers recorded a drop in FLF while four showed improvements: Vietnam Airlines (1.0 percentage point), Qantas Airways (1.5 percentage points), Royal Brunei Airlines (4.1 percentage points) and Asiana Airlines (5.4 percentage points).

Asiana came out on top again with the highest FLF (80.4%) followed by China Airlines (73.3%), EVA Air (BR) 72.6% and

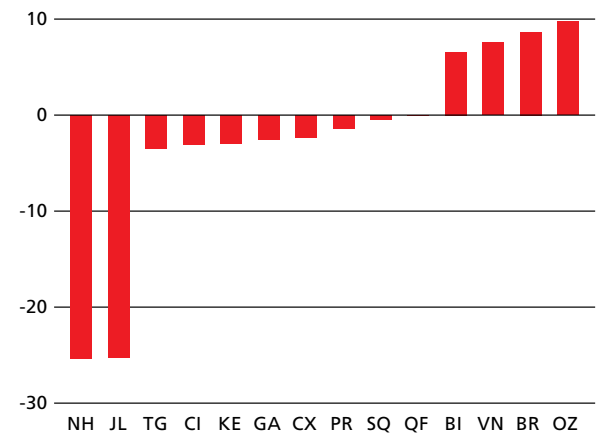
RPK GROWTH BY CARRIER

Percentage (Dec 01 vs Dec 00)



PAX GROWTH BY CARRIER

Percentage (Dec 01 vs Dec 00)





Korean Air (KE) 72.3%. Philippine Airlines had the lowest load factor for December (27.7%).

RESULTS OF THE FOURTH QUARTER (OCTOBER TO DECEMBER 2001)

PASSENGERS

Consolidated revenue passenger kilometres fell a huge 18.1% in the last quarter of 2001. The number of passengers carried dropped 12.1%, which was 3.2 million fewer passengers than in the same period in 2000. Capacity, down 6%, was drastically reduced following the events of September 11, but the load factor still nose-dived to 64.3% – a decline of 9.5 percentage points compared to the same period in 2000.

Large traffic losses for the quarter were recorded by All Nippon Airways (-42.9%) and Japan Airlines (-38.5%). Only Vietnam Airlines (14.7%) and Royal Brunei Airlines (10.6%) bucked the trend and registered positive growth.

The reduction in capacity allowed most carriers to maintain a load factor in the 60% range, with Qantas Airways topping the list at 73.1% PLF, followed by EVA Air (69.9%) and Cathay Pacific Airways (69.3%).

CARGO

Consolidated freight tonne kilometres fell 7.0% compared to the same quarter last year. Capacity was down 4.9%, which resulted in a decline of a 1.5 percentage point in FLF to 68.0%.

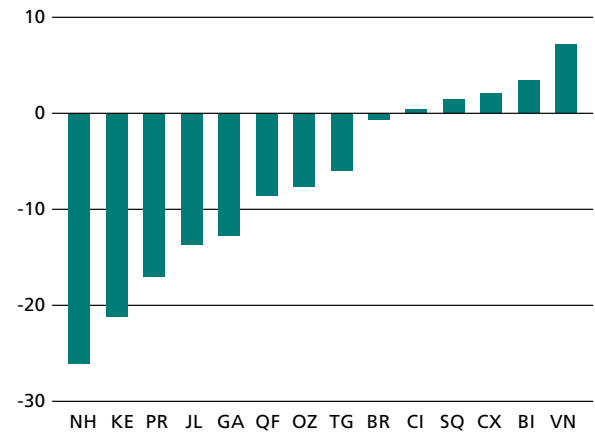
With the exception of Royal Brunei Airlines, Vietnam Airlines and Garuda Indonesia, all carriers registered negative FTK growth during this quarter. The best load factors were posted by Asiana Airlines (78.8%), China Airlines (75.5%), Korean Air (74.3%), EVA Air (73.9%) and Cathay Pacific Airways (72.3%).



Asiana Airlines: highest freight load factor in 2001

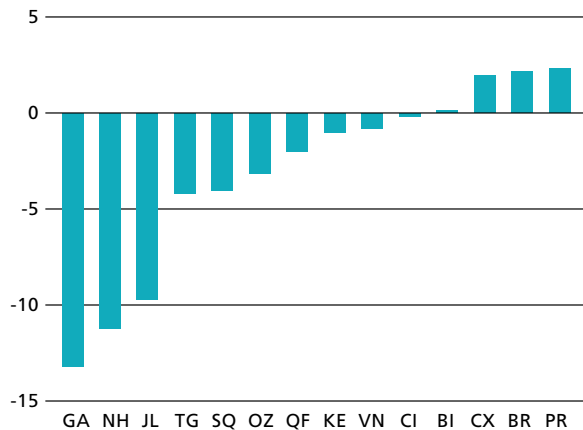
FTK GROWTH BY CARRIER

Percentage (Dec 01 vs Dec 00)



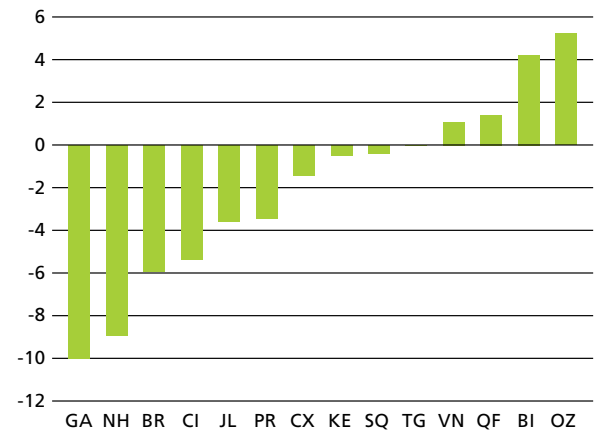
PASSENGER LOAD FACTOR GROWTH BY CARRIER

Percentage Points Change (Dec 01 vs Dec 00)



FREIGHT LOAD FACTOR GROWTH BY CARRIER

Percentage Points Change (Dec 01 vs Dec 00)



ROLLS-ROYCE NEWS DIGEST

“Continental Airlines has awarded Rolls-Royce a \$360 million Total Care agreement for maintenance of its RB211 engine fleet.”



Rolls-Royce



All Nippon Airways: experienced largest contraction of passengers of all AAPA airlines in 2001

RESULTS OF THE 12 MONTHS TO DECEMBER 31, 2001

PASSENGERS

AAPA member airlines posted a 3.5% decline in RPKs for 2001. The drastic drop in traffic for the last four months of the year wiped out the growth of the first eight months. Member airlines carried 102.8 million passengers in 2001, 0.7% down on the previous year and transported 750,000 fewer passengers than 2000's record-breaking 103.5 million. Capacity increased by 1.5%, which produced a load factor of 71.2% for the year, down 3.7 percentage points.

Seven carriers emerged with positive RPK growth in the year under review – Vietnam Airlines (30.1%), Royal Brunei Airlines (22.1%), Philippine Airlines (6.6%), Thai Airways International (5.0%), Qantas Airways (4.2%), Garuda Indonesia (3.0%) and Asiana Airlines (1.0%).

Conversely, All Nippon Airways (-20.5%) experienced the greatest contraction of member airlines in 2001, a result which could be attributed to the carrier's route network restructuring exercise and the effect of the events of September 11. Japan

Airlines and EVA Air suffered the second and third largest traffic downturns, 9.8% and 7.0% respectively.

However, EVA Air (75.0%) emerged with the highest load factor in 2001, followed by Qantas Airways (74.4%), China Airlines (74.0%), Asiana Airlines (73.7%), Thai Airways International (73.2%), Singapore Airlines (73.1%), Vietnam Airlines (72.8%) and Cathay Pacific Airways (71.4%). The remaining six carriers had load factors of between 60 -70%.

CARGO

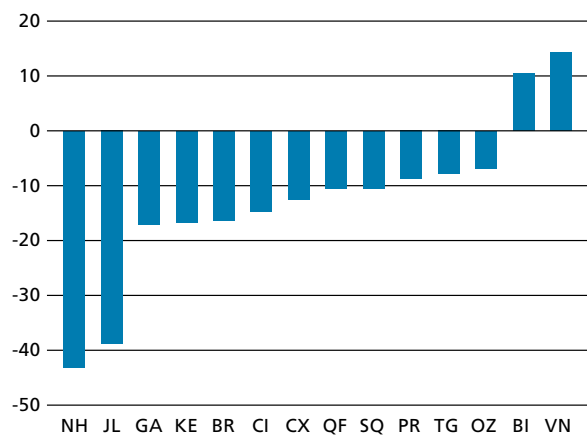
AAPA consolidated freight traffic, as measured in FTKs, contracted 8.1% in 2001 and surpassed the negative performance recorded during the Asia financial crisis of 1997-98. Capacity was down 0.9% which produced a decline in load factor of 5.0 percentage points to 64.3% for the year.

In a year of depressed freight markets, caused by a global economic downturn, only Vietnam Airlines ended the year with positive growth – 13.7%.

Carriers from Korea and Taiwan reported load factors of over 70% – Asiana Airlines (74.5%), China Airlines (73.7%), Korean Air (73.5%) and EVA Air (70.4%) – while the remain-

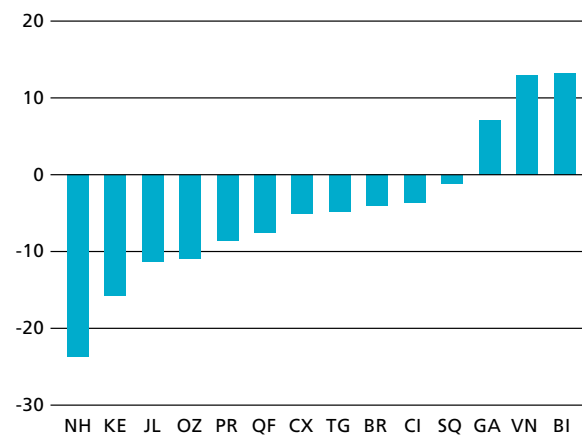
RPK GROWTH BY CARRIER

Percentage (Oct 01 - Dec 01 vs Oct 00 - Dec 00)



FTK GROWTH BY CARRIER

Percentage (Oct 01 - Dec 01 vs Oct 00 - Dec 00)





ing airline membership managed FLFs that were as low as 25.0% for Philippine Airlines and as high as 67.2% for Cathay Pacific Airways.

SUMMARY

Passenger and freight sectors contracted in 2001 after two years of robust growth. The AAPA results are consistent with results from the Association of European Airlines (AEA) and the Air Transport Association of America (ATA), and reflect the global nature of the economic downturn and the fallout of the September 11 terrorist attacks in the U.S. AAPA passenger traffic plunged by 11.3% in December 2001 and slumped 3.5% for the whole of 2001. Cargo traffic declined 6.6% in December 2001 and 8.1% for the year.

The first six months of 2002 remain challenging. In addition to individual member airline initiatives, the TRAVEL MOVES PEOPLE campaign, designed to restore passenger confidence in air travel, and jointly organised by Abacus, Airbus, Pacific Asia Travel Association (PATA) and the AAPA as well as other campaigns organised by various tourism boards in the region, could be crucial in reviving the travel industry. The co-hosting of World Soccer Cup by Japan and Korea in June should also boost leisure and business travel during a year filled with uncertainty. The outcome for the freight sector remains tied to the U.S. economy. ■

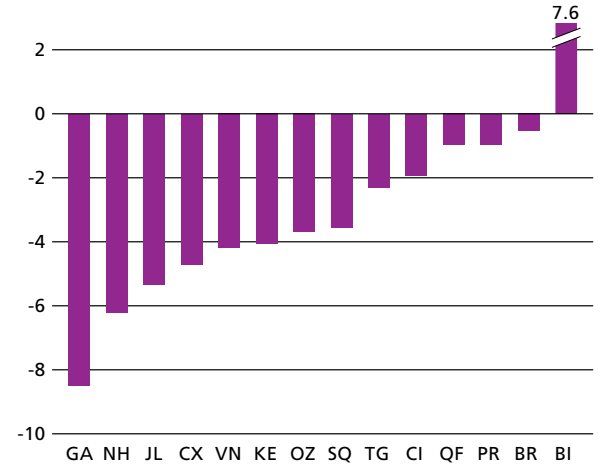
E-mail: krislim@aapa.org.my



Vietnam Airlines: only AAPA carrier to record positive freight growth in 2001

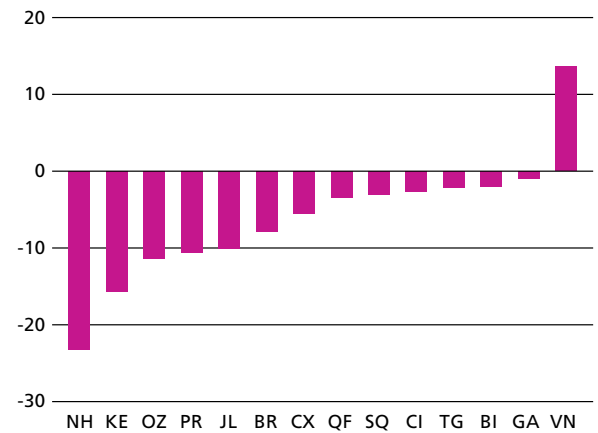
PASSENGER LOAD FACTOR GROWTH BY CARRIER

Percentage Points Change (Jan 01 - Dec 01 vs Jan 00 - Dec 00)



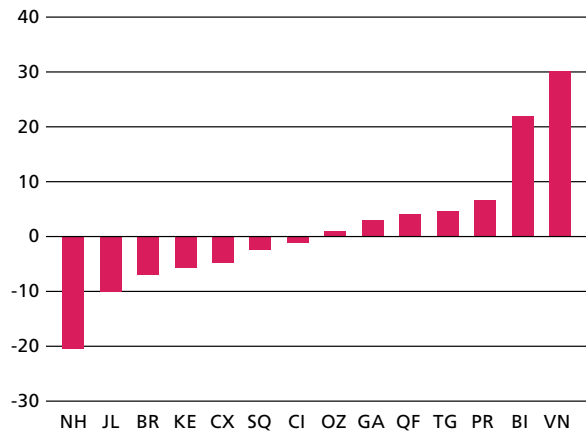
FTK GROWTH BY CARRIER

Percentage (Jan 01 - Dec 01 vs Jan 00 - Dec 00)



RPK GROWTH BY CARRIER

Percentage (Jan 01 - Dec 01 vs Jan 00 - Dec 00)



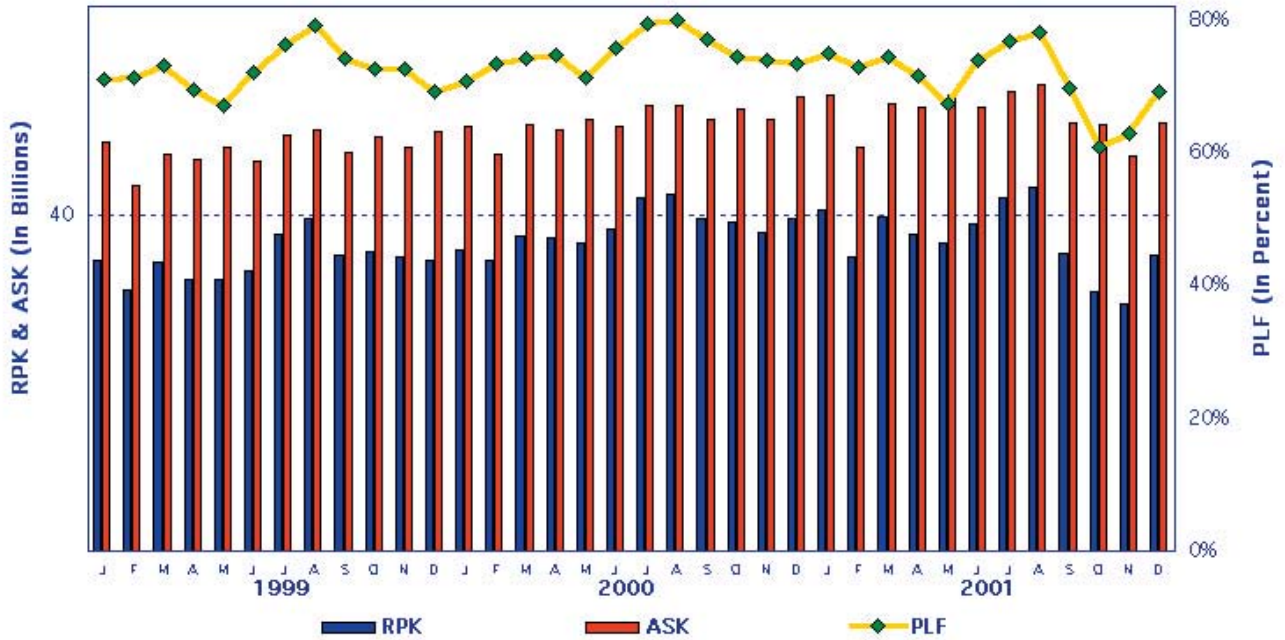
FREIGHT LOAD FACTOR GROWTH BY CARRIER

Percentage Points Change (Jan 01 - Dec 01 vs Jan 00 - Dec 00)

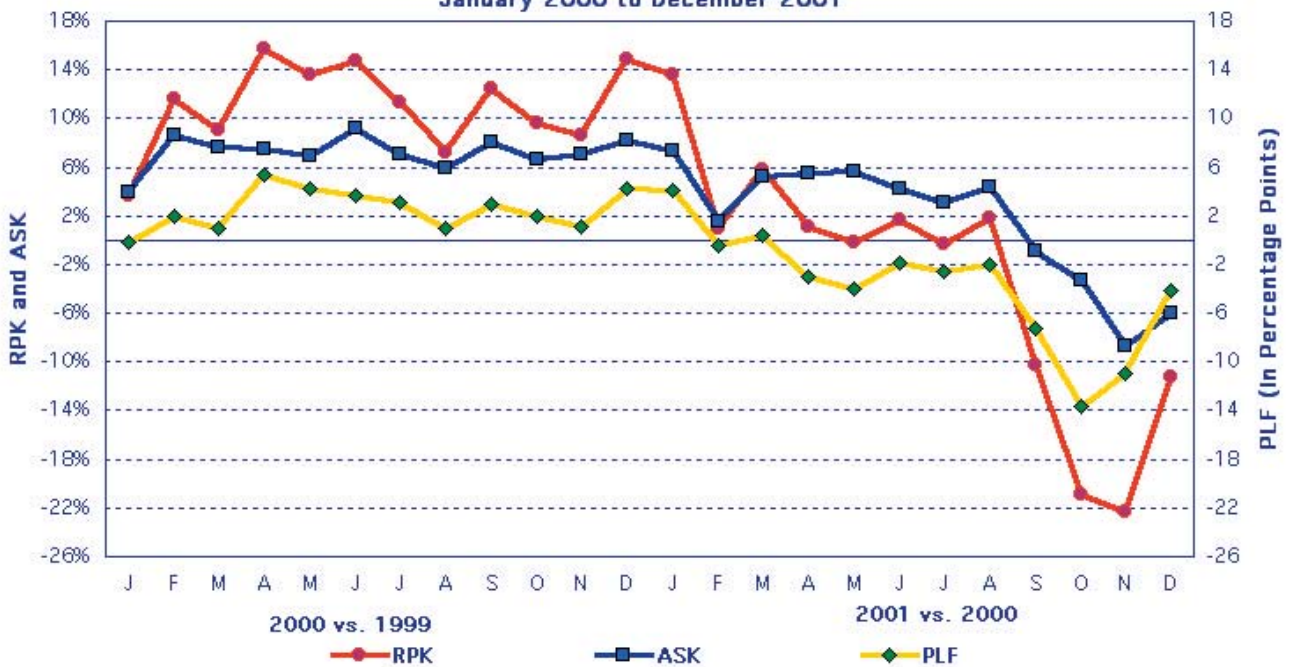


MONTHLY INTERNATIONAL PAX STATISTICS OF AAPA MEMBERS

RPK, ASK, AND PASSENGER LOAD FACTOR
January 1999 to December 2001



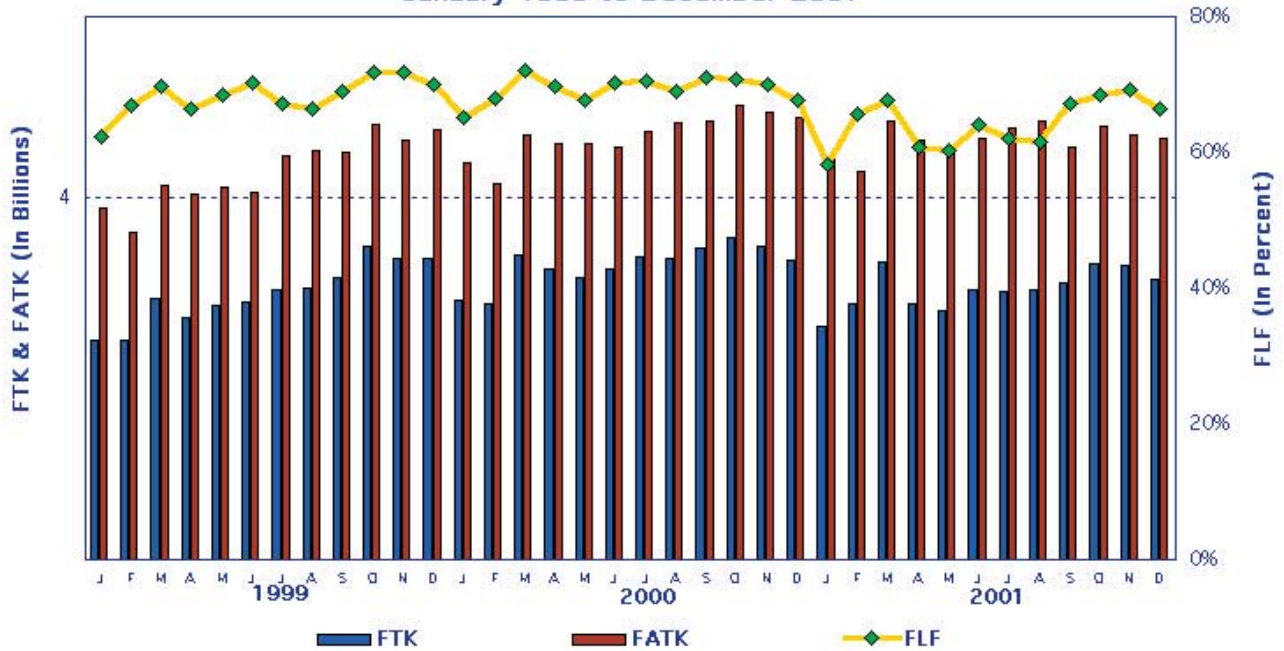
RPK, ASK, and PLF Growth Rates
January 2000 to December 2001



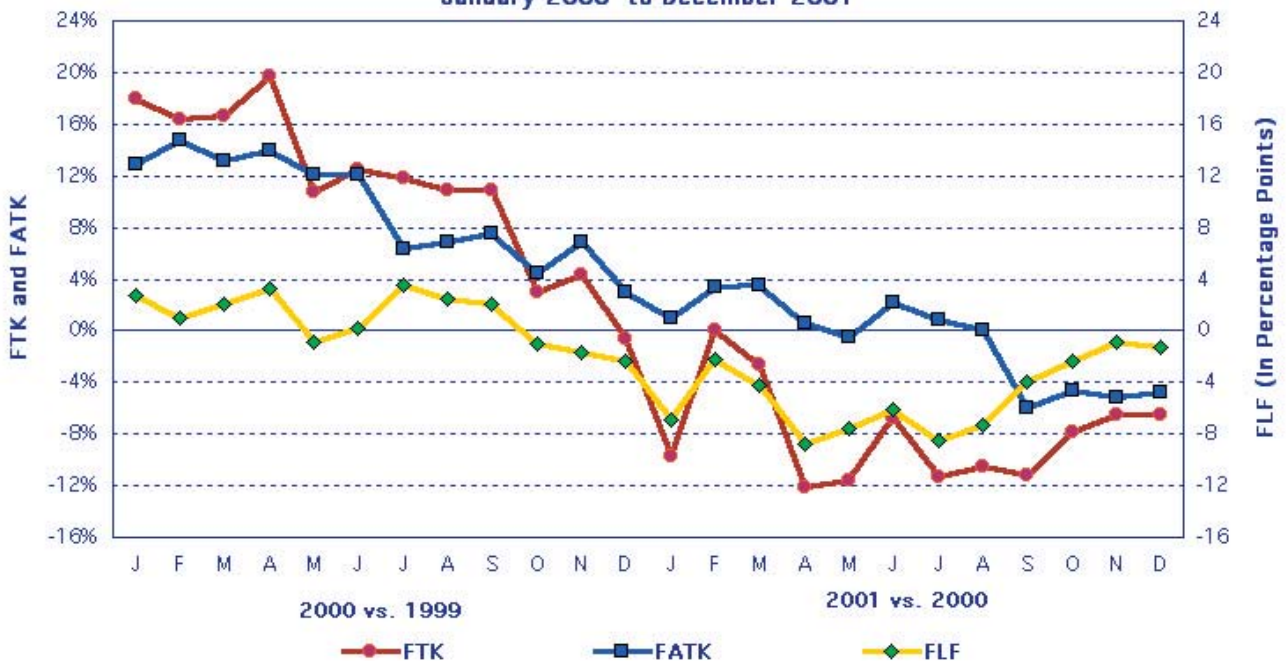
3,006.67	30.77	▲	0.1%
2,619.21	33.29	▲	0.9%
807.90	2.91	▲	0.0%
10,711.54	96.03	▲	0.0%
1,367.10	13.26	▲	0.0%
676.42	1.70	▲	0.1%
1.11	0.00	▼	0.7%

MONTHLY INTERNATIONAL CARGO STATISTICS OF AAPA MEMBERS

FTK, FATK, AND FREIGHT LOAD FACTOR January 1999 to December 2001



FTK, FATK, and FLF Growth Rates January 2000 to December 2001



AAPA MONTHLY INTERNATIONAL STATISTICS (MIS) *IN THOUSANDS

2001

	RPK (000)	ASK (000)	PLF %	FTK (000)	FATK (000)	FLF %	RTK (000)	ATK (000)	PAX (000)
DEC-01	35,267,317	51,023,617	69.12	3,090,062	4,655,223	66.38	6,346,707	9,307,797	8,384
NOV-01	29,565,610	47,049,593	62.84	3,243,992	4,685,510	69.23	5,978,041	8,974,938	7,211
OCT-01	31,006,991	50,974,094	60.83	3,277,370	4,793,876	68.37	6,151,064	9,438,030	7,475
SEP-01	35,601,847	51,038,190	69.76	3,061,243	4,555,532	67.20	6,406,828	9,210,564	8,229
AUG-01	43,315,945	55,559,023	77.96	2,978,443	4,838,280	61.56	7,031,073	9,907,159	9,825
JUL-01	42,107,236	54,907,670	76.69	2,962,142	4,774,183	62.05	6,909,752	9,789,903	9,474
JUN-01	39,107,036	52,868,597	73.97	2,989,124	4,654,401	64.22	6,665,796	9,480,574	8,843
MAY-01	36,703,397	54,498,592	67.35	2,756,713	4,580,406	60.18	6,219,547	9,545,663	8,482
APR-01	37,878,632	52,884,118	71.63	2,819,538	4,633,547	60.85	6,378,563	9,456,088	8,713
MAR-01	39,816,317	53,462,196	74.48	3,280,160	4,848,967	67.65	7,024,088	9,725,854	9,078
FEB-01	35,142,724	48,196,685	72.92	2,818,661	4,293,850	65.64	6,123,623	8,700,352	8,011
JAN-01	40,748,991	54,419,033	74.88	2,581,148	4,428,308	58.29	6,403,464	9,425,297	9,053
TOTAL	446,262,043	626,881,408	71.19	35,858,596	55,742,084	64.33	77,638,545	112,962,219	102,778

2001

	RPK %	ASK %	PLF %	FTK %	FATK %	FLF %	RTK %	ATK %	PAX %
DEC-01	-11.27	-5.92	-4.16	-6.55	-4.75	-1.28	-9.93	-5.61	-5.22
NOV-01	-22.28	-8.73	-10.95	-6.44	-5.21	-0.91	-15.13	-7.22	-16.44
OCT-01	-20.93	-3.26	-13.59	-7.84	-4.61	-2.40	-15.20	-4.28	-14.88
SEP-01	-10.31	-0.89	-7.33	-11.22	-6.00	-3.95	-10.86	-3.83	-5.63
AUG-01	1.77	4.40	-2.01	-10.53	0.06	-7.29	-4.07	1.80	4.40
JUL-01	-0.24	3.17	-2.62	-11.30	0.89	-8.53	-5.43	3.01	1.24
JUN-01	1.68	4.23	-1.86	-6.74	2.20	-6.15	-2.34	2.82	3.56
MAY-01	-0.22	5.69	-3.99	-11.56	-0.49	-7.54	-5.59	2.21	2.40
APR-01	1.13	5.44	-3.05	-12.07	0.60	-8.77	-5.21	2.65	2.12
MAR-01	5.79	5.17	0.43	-2.63	3.54	-4.28	1.66	4.03	6.96
FEB-01	1.03	1.60	-0.41	0.02	3.36	-2.20	0.59	2.24	-0.59
JAN-01	13.59	7.42	4.07	-9.69	0.96	-6.87	2.85	4.29	14.85

CALENDAR YEAR⁵

	RPK (000)	ASK (000)	PLF %	FTK (000)	FATK (000)	FLF %	RTK (000)	ATK (000)	PAX (000)
1995	326,071,184	471,535,677	69.15	23,838,488	36,487,508	65.33	54,250,542	79,121,583	76,378
1996	374,365,998	529,442,583	70.71	27,783,667	43,091,640	64.48	62,557,622	90,816,037	86,703
1997	387,763,016	561,392,742	69.07	31,741,381	45,688,853	69.47	67,739,088	96,736,079	88,696
1998	382,106,292	557,130,177	68.58	30,958,021	46,204,321	67.00	66,141,448	97,199,731	86,198
1999	416,820,106	576,253,703	72.33	35,277,459	51,519,550	68.47	74,179,615	104,437,440	94,242
2000	462,466,095	617,787,854	74.86	39,020,611	56,255,588	69.36	82,533,153	112,874,721	103,527
2001 ⁶	446,262,043	626,881,408	71.19	35,858,596	55,742,084	64.33	77,638,545	112,962,219	102,778

CALENDAR YEAR⁵

	RPK %	ASK %	PLF %	FTK %	FATK %	FLF %	RTK %	ATK %	PAX %
1996	14.81	12.28	1.56	16.55	18.10	-0.86	15.31	14.78	13.52
1997	3.58	6.03	-1.64	14.24	6.03	5.00	8.28	6.52	2.30
1998	-1.46	-0.76	-0.49	-2.47	1.13	-2.47	-2.36	0.48	-2.82
1999	9.08	3.43	3.75	13.95	11.50	1.47	12.15	7.45	9.33
2000	10.95	7.21	2.53	10.61	9.19	0.89	11.26	8.08	9.85
2001 ⁶	-3.50	1.47	-3.67	-8.10	-0.91	-5.03	-5.93	0.08	-0.73

Note:

- The consolidation above includes 16 participating airlines up to Jun 2001, but reduces to 15 participating member airlines from Jul 2001 onwards.
- KA and NZ do not participate in this report.
- AN data from Jul 1998 to Jun 2001 only. VN data from Jan 1998 onwards.
- CY denotes Calendar Year (January - December).
- YTD comparison: Calendar Year 2001 v 2000.