AAPA director general to retire

Fleet Census Update Bizjet culture shift in Japan?

Orient. aviati

Vol. 11 No. 1 October 2003

Magazine of the Association of Asia Pacific Airlines

Asia's low-cost challenge

More mainline carriers having to face up to threat from budget operators



CONTENTS

ORIENT AVIATION VOLUME 11, ISSUE

COVER STORY

14 Asia's low-cost challenge

Mainline operators can no longer ignore the potentially serious challenge posed by a wave of new low-cost carriers. How will they react to these new, and not so new, competitors?





BUSINESS AVIATION

34 Culture shift?

Bid to educate Japanese executives to view corporate jets as a business tool

35 Banking on China

New Hong Kong carrier has high hopes that the growth in China's economy will be good for business

EXECUTIVE INTERVIEW

20 AAPA Director General to bow out

Richard Stirland will attend his last Assembly of Presidents this month before retiring next year



27 Fleet Census Update

Orient Aviation's twice-yearly update of Asia-Pacific's fleets

SPECIAL REPORT

TRAINING

22 Home birds

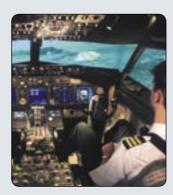
More Mainland Chinese pilots are training at home as airlines become increasingly accountable to shareholders

24 Home away from home

Hong Kong proving popular for China's trainee pilots

26 **Business as usual**

Training courses Down Under bounce back after SARS



NEWS

- Air China teams up with United Airlines
- Dragonair drops Cathay Pacific licence appeal
- Indonesia's Merpati to be privatised 8
- Qantas, AirNZ to appeal after being denied alliance
- 10 Thailand's Angel Air grounded again
- AirNZ back from the brink with a healthy profit
- 12 Government may sell extra THAI shares

REGULAR FEATURES

- **Comment:** Budget carriers up the ante in Asia
- **Business Digest:** SARS drop arrested 40

Association of Asia Pacific Airlines Secretariat

Suite 9.01, 9/F, Kompleks Antarabangsa Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia Tel: (603) 2145 5600, Fax: (603) 2145 7500 E-mail: ushav@aapa.org.my

Director General: Richard Stirland Commercial Director: Carlos Chua Technical Director: Leroy Keith

Orient-

PUBLISHER

WILSON PRESS LTD

GPO Box 11435 Hong Kong Tel: Editorial 852 2893 3676 Fax: Editorial 852 2892 2846 E-mail: orientav@netvigator.com Website: www.orientaviation.com

Chief Executive & Editor-in-Chief

Barry Grindrod E-mail: orientav@netvigator.com

Publisher Christine McGee E-mail: cmcgee@netvigator.com

Chief Correspondent

Tom Ballantyne Tel: 612 9638 6895 Fax: 612 9684 2776 E-mail: tomball@ozemail.com.au

China

Melody Su Tel: 852 2893 3676

Japan and Korea

Daniel Baron Tel: 813 3203 7106 E-mail: dbaron@gol.com

Photographers

Rob Finlayson, Andrew Hunt, Hiro Murai

Design & Production

Patrick Dunne

Colour Separations

Twinstar Graphic Arts Co.

Printing

Hop Sze Printing Company Ltd.

ADVERTISING

South East Asia and Pacific

Shirley Ho Tel: 852 2865 1013 Fax: 852 2865 3966 E-mail: shirley@orientaviation.com

The Americas / Canada

Barnes Media Associates Ray Barnes Tel: 1 434 927 5122 Fax: 1 434 927 5101 E-mail: rvbarnes@cablenet-va.com

Europe

REM International Tel: 33 5 34 27 01 30 Fax: 33 5 34 27 01 31 E-mail: sremusat@aol.com

New Media & Circulation Manager

Leona Wong Wing Lam Tel: 852 2865 1013 E-mail: leonawong@orientaviation.com

© All rights reserved Wilson Press HK Ltd., Hong Kong, 2003

The views expressed in this magazine are not necessarily those of the Association of Asia Pacific Airlines

Budget carriers up the ante in Asia

Orient Aviation

has a new. modern

look to celebrate its

10th anniversary. We

hope you like the re-

October 1993 as a

quarterly publication.

Today Orient Aviation

is published 10 times

a year and is read in

over 100 countries worldwide.

was launched in

design. The magazine

Thile many believed Asia's diversity precluded a repetition in this region of the success budget airlines have achieved in the northern hemisphere, it is becoming increasingly clear the low-cost carrier has, indeed, arrived.

AirAsia is entrenched in Malaysia as is Virgin Blue in

Australia. There are privately owned lowcost operators in Thailand, the Philippines, Indonesia and Japan and there are plans to launch one in Singapore.

In the face of recent crises, damaged finances and this new competitive threat, it is hardly surprising some of Asia's big airlines also are looking outside the square to find new ways of making their businesses more efficient and profitable. Launching a low-cost subsidiary is an obvious opportunity.

Some have already done so. Japan Airlines and All Nippon Airways have lowcost offshoots, as does Garuda Indonesia, Qantas Airways and Air New Zealand. Now, Singapore Airlines and Thai Airways

International are considering following suit. However, if there is a message in our cover story this month, it is that established international operators need to be extremely careful how they involve themselves in the low-cost business.

There are multiple dangers, including the touchy issue of labour relations. Airline management will need to convince staff to accept less advantageous employment conditions for a start. There also is a real possibility a lowcost offshoot of a major carrier will dilute the revenue and service reputation of its established mainline owner. For an

> operator such as Singapore Airlines, with its almost legendary service standards, a budget subsidiary, even with a different name, could damage that aura.

It also is apparent the model used by Europe's Ryanair or EasyJet cannot simply be duplicated in Asia. Conditions are different. Each airline has to find a unique model that works in the markets it intends operating. That's a tall order and if they fail the outcome could be costly for an industry which cannot afford any more losses.

In North America and Europe, efforts by mainline operators to fight off low-cost competition with their own low-cost clones generally have been failures. It will take

some very careful planning and astute management of resources to ensure the same does not happen in Asia.

TOM BALLANTYNE

Chief correspondent

■ The Association of Asia Pacific Airlines Members and Contact List



Air New Zealand

Chief Executive, Mr Ralph Norris VP Public Affairs and Group Communications,



EVA Air

President, Mr Steve Lin Senior Vice President, Mr K. W. Nieh Tel: (8862) 8500 2585 Fax: (8862) 2501 7599



Qantas Airways

Managing Director and CEO, Mr Geoff Dixon Group General Manager Public Affairs, Tel: (612) 9691 3760 Fax: (612) 9691 4187



ANA All Nippon Airways

President and CEO, Mr Yoji Ohashi Senior VP, Public Relations, Mr Koji Ohno Tel: (81 3) 5756 5675 Fax: (81 3) 5756 5679



Garuda Indonesia

President, Mr Indra Setiawan VP Corporate Affairs, Mr Pujobroto Tel: (6221) 380 0592 Fax: (6221) 368 031



Royal Brunei Airlines

Chairman, Dato Paduka Haji Hazair Chief Executive, Mr Peter Foster Tel: (673 2) 229 799 Fax: (673 2) 221 230



Asiana Airlines

President & Chief Executive, Mr Park Chan-bup Managing Director, PR, Mr Hong Lae Kim Tel: (822) 758 8161 Fax: (822) 758 8008



Japan Airlines

President, Mr Isao Kaneko Director, Public Relations, Mr Geoffrey Tudor Tel: (813) 5460 3109 Fax: (813) 5460 5910



Singapore Airlines

Chief Executive Officer. Mr Chew Choon Seng VP Public Affairs, Mr Rick Clements Tel: (65) 6541 5880 Fax: (65) 6545 6083



Cathay Pacific Airways

Chief Executive Officer, Mr David Turnbull Corporate Communications General Manager, Tel: (852) 2747 8868 Fax: (852) 2810 6563



Korean Air

Chairman and CEO, Mr Yang Ho Cho Managing VP, Corporate Communications, Mr Jun Jip Choi Tel: (822) 656 7065 Fax: (822) 656 7288/89



Thai Airways International President, Mr Kanok Abhiradee

Director, PR, Mrs Sunathee Isvarphornchai Tel: (662) 513 3364 Fax: (662) 545 3891



China Airlines

President, Mr Philip Hsing-Hsiung Wei VP, Corp Comms, Mr Roger Han Tel: (8862) 2514 5750 Fax: (8862) 2514 5754



Malaysia Airlines

Chairman, Tan Sri Azizan Zainul Abidin Tel: (603) 2165 5154 Fax: (603) 2163 3178



Vietnam Airlines

President and CEO, Mr Nguyen Xuan Hien Dep Director, Corp Affairs, Mr Nguyen Huy Hieu Tel: (84-4) 873 0928 Fax: (84-4) 827 2291



Dragonair

Chief Executive Officer, Mr Stanley Hui Corporate Communication Manager, Mrs Laura Crampton Tel: (852) 3193 3193 Fax: (852) 3193 3194



Philippine Airlines

President, Mr Avelino Zapanta VP Corporate Communications. Mr Rolando Estabilio Tel: (632) 817 1234 Fax: (632) 817 8689



Air China teams with United Airlines

Beijing-based international carrier, Air China, has signed an extensive bilateral agreement with Chicago-based United Airlines (UAL) that includes code-share services, sharing frequent flyer points and common use of the airport lounges of the airlines.

Under the agreement, which goes into effect on November 1, the two airlines will offer 26 non-stop flights between China and the U.S. each week. Air China will have its designation on 17 major cities in the U.S. while UAL will be able to expand its services from Beijing and Shanghai to include the Chinese carrier's services to Guangzhou, Xian, Shenzhen, Shenyang and Fuzhou.

The new partnership prompted analysts to believe the Chinese airline was moving closer to joining the Star Alliance, of which UAL is a lead member.

Said Air China president, Li Jiaxiang, at the signing ceremony in Beijing: "When Air China joins the alliance and whether it joins it at all is currently under study."

Separately, the carrier is continuing discussions with domestic operator, Shandong Airlines, with a view to buying into the Jinan-based carrier. Shandong is a listed operator with a mixed fleet of Saab, Bombardier and Boeing short-haul airplanes.



Air China: could United Airlines deal lead to Star Alliance membership?

It is believed Air China is being offered a minimum 20% equity in the airline and a possible 25% holding in the airline's parent company, Shandong Aviation Group.

Dragonair drop licence appeal

ong Kong-based Dragonair has abandoned plans for a judicial review of the decision to grant rival Cathay Pacific Airways a five-year licence to fly to Beijing, Shanghai and Xiamen in Mainland China. Hong Kong's highest court granted Dragonair, which is majority owned by China's China National Aviation Corp, the right to have the decision reviewed midyear following Hong Kong Air Transport Licensing Authority's decision in May to allow Cathay Pacific to fly to the three cities after a 13-year hiatus.

Merpati to be privatised

The Indonesian Government has indicated it hoped to privatise its loss-making domestic carrier, Merpati Nusantara, by the first quarter of 2004, after it was revealed the airline needed US\$187 million to improve its financial performance. Merpati's management had previously requested government bailout funds of US\$24 million.

SHORTTAKES

AIRPORTS >> Beijing Capital International Airport will spend US\$2.01 billion to build a third runway and a 350,000 sq. metre passenger terminal in time for the 2008 Olympic Games in the city. Malaysia's Kuala Lumpur International Airport is the cheapest airport in the region for airlines, followed by Singapore Changi International Airport, according to a September International Air Transport Association (IATA) report. IATA said all airports in the region have offered rebates to carriers in 2003 except Bangkok and Narita. Average charges for a three-hour turnaround of a B747-400 is US\$581.71 at Malaysia's capital city airport. Changi charges US\$1,442.29. Narita, the most expensive airport for airlines, charges US\$9,689.14 for the same service.

CARGO >> Cathay Pacific Airways has launched its once a week dedicated freighter service from Hong Kong to Osaka. The airline's all-cargo company associate, Air Hong Kong, flies twice a week to Osaka and five times weekly to Tokyo. China Southern Airlines (CSA) is operating a twice-daily bonded trucking service from Hong Kong International Airport to its Guangzhou base to capture business beyond the industrial Pearl River Delta. CSA said it planned to launch a similar service from Guangzhou to Hong Kong. Federal Express (FE-DEX) is considering the establishment of a China-based hub when the new airport in Guangzhou is opened next year. Emirates SkyCargo has begun its third service a week between Dubai and Shanghai, Emirates' cargo division also has commenced services from Dubai to Frankfurt and Istanbul and will launch an all-cargo service to New York via Sweden. Shanghai Airlines has started its dedicated freighter services between its home base and the Chinese Special Administrative Region of Macau.

ENGINES >> Engine alliance partners, General Electric and Pratt & Whitney, have won a list price order of US\$800 million to supply engines for up to 14 of the A380s ordered by International Lease Finance Corporation. GE Aircraft Engines also has confirmed a US\$600 million contract to supply China Airlines with its CF-6 engines for the Taiwanese carrier's order of 12 A330-300s, four B747-400 freighters and six B747-400s.

Qantas, AirNZ to appeal ACCC ruling

antas Airways and Air New Zealand (AirNZ) will appeal against a ruling by the Australian Competition and Consumer Commission (ACCC) after it denied them clearance to form a trans-Tasman alliance.

ACCC chairman, Graeme Samuel, said the Qantas proposal to buy 22.5% of AirNZ for an estimated US\$135 million was "highly uncompetitive". A ruling from the New Zealand competition authority was pending at press time.

Qantas chief executive, Geoff Dixon, said the ACCC was "either ignoring or under-estimating the significant structural changes facing airlines around the world". AirNZ CEO, Ralph Norris, said the airline strategic alliance was necessary for his airline's survival. Delivering the annual Sir Reginald Ansett Memorial Lecture, Dixon argued the 49% foreign ownership cap on Qantas prevented it from attracting foreign equity to the carrier "in an era of globalisation"; an argument that has been rejected, at this stage, by the government, writes Tom Ballantyne.

SHORTTAKES

FLEETS >> Cathay Pacific Airways has taken delivery of the first of three new A330-300 aircraft and three B777-300s ordered in 2002 and planned to go into service at the carrier by early 2004. Five of the aircraft will fly regional routes with the sixth airplane, an A330-300 to operate to the Middle East.

INFLIGHT >> Australia's Qantas Airways has launched its new business class, which includes a new "cocoon style" sleeper seat for its fleet of 30 B747-400s and its new A330-300 (to be delivered in 2004), plus new menus and wine lists, a self service bar, mood lighting in the two premium cabins and a dedicated team of flight attendants for the new business class. All Nippon Airways has signed a Letter of Intent with Connexion by Boeing to install its Internet services on its long-haul aircraft fleet from next year. Dragonair is now flying aircraft with lie-flat seats in first class and its first installations of in-seat entertainment systems are on three of its fleet of nine A330s as part of an upgrade that will include all of its A330 airplanes by 2005. Malaysia Airlines intends to offer live television, Internet and e-mail services on its aircraft following its order of the interactive Matsushita Avionics System 3000i.

INFORMATION TECHNOLOGY >>

Sabre Airline Solutions has signed a five-year contract with Philippine Airlines to provide electronic ticketing services for both the international and domestic networks of the airline.

IPOs >> Virgin Blue owners, Australia's Patrick Corp. and the Virgin Group, have reached agreement to launch an IPO for the Australian low-cost carrier, with plans to list the company in early 2004.

LEASING >> Ansett Worldwide has leased an A320 to Armavia. Shandong Airlines has taken delivery of two B737-300s from Boullion Aviation Services. Japan Airline System Corp. in a deal with Mitsubishi Corp, will lease seven B767-300 aircraft, scheduled for delivery from 2007, to replace the carrier's DC-10 airplanes. Expanding Vietnam Airlines is negotiating to lease two B777-200ER aircraft within the next two months and also intends to sign contracts for a long-term lease on an ATR72 and an A321.

OEMS >> Korean Air has taken control of aerospace manufacturer Korean Aerospace Industries after it purchased Dae-



Direct air links open on Korean peninsula

n a breakthrough for carriers on the Korean Peninsula, direct commercial air links between the capitals of the divided countries were set to begin as *Orient* Aviation went to press.

South Korea's Ministry of Construction and Transportation confirmed clearance for Korean Air (KAL) and Asiana Airlines and the North's national flag carrier, Air Koryo (pictured above), to carry South Korean tourists to North Korea on Seoul-Pyongyang direct flights.

The airlines are expected to carry 2,000 South Korean tourists to North Korea on 40 flights operated through to late December.

KAL and Asiana combined have operated 43 flights for non-commercial purposes on the Seoul-Pyongyang direct air route since 2000, while Air Koryo has flown 31 times. However, this is the first time jets will operate on a purely commercial basis. The services follow the recent signing of an aviation agreement between Pyongyang and Seoul aimed at opening regular inter-Korean air

woo Heavy Industry's equity in the manufacturer.

ROUTES >> Thai-based Angel Air has grounded its aircraft and cancelled all services because of funding and operational problems. With the restoration of all its services from September, Cathay Pacific Airways is seeking approval to fly onwards from London to New York, with a daily service, Hong Kong's South China Morning Post has reported. Bahrain-based Gulf Air will launch daily flights to Australia from its home base that would connect with services to other major Middle East and southern European cities. Kenyan Airways has begun a weekly service to Bangkok and Hong Kong from its home city of Nairobi. Malaysia Airlines has started its twice-weekly service from Kuala Lumpur to Manado, Indonesia, via Kota Kinabalu. Mekong Airlines, which ceased services in May after only three months of operations, is planning to fly again from Phnom Penh to Kuala Lum-

pur, Bangkok, Singapore and Hong Kong, under the guidance of new investors and a new management. Singapore Airlines (SIA) and its subsidiary, SilkAir, have announced plans to launch routes to seven Mainland Chinese cities by 2005. SIA will fly to Shenzhen from December and is evaluating services to Nanjing and several other inland cities. SilkAir will launch services to Fuzhou by the year-end. New regional carrier, Australia's Virgin Blue will increase its daily round trip services between Melbourne and Sydney to 22 from 19: between Melbourne and Brisbane to 10 from 9 and from Melbourne to Adelaide to seven from six.

TRAINING >> Jeppesen Academy has signed up with Malaysia Airlines (MAS) to provide the carrier with aviation management and technical training courses at the airline's home base training academy. Jeppesen has given MAS the rights to market the courses in 18 countries in the Asia-Pacific.

THAI counts SARS cost

Thai International Airways (THAI) president, Kanok Abhiradee, said his carrier lost 1.7 billion baht (US\$164.5 million) for the three months to June as the effects of SARS struck at THAI's bottom line. The Bangkok-based carrier said in September that its net profit for the nine months to June 30, this year had declined by 24%, from 9.22 billion baht to 7.02 billion baht compared to the same period in 2002. However, passenger numbers quickly recovered to 72% in July and above 77 % of capacity in August.

Separately, THAI announced in September that it could offer up to 60 million extra shares, held by the nation's finance ministry, when it launches its initial public offering (IPO), tentatively scheduled for late November. The top-up shares offered would be in addition to the 400 million shares THAI plans to sell in the long-awaited IPO. "Up to 60 million shares may be offered as an option if demand exists [at the IPO]," said Abhiradee.

Qantas reports full year profit

espite a second half loss of A\$9 million (US\$5.9 million), Qantas Airways reported full-year profits of A\$343.5 million, a result produced by a strong first six months for the Australian flag carrier. The full year result to June 30 compared with A\$428 million in 2002. Qantas chief executive. Geoff Dixon, said the second half bottom line suffered from the Iraq War and SARS, "when we saw all sections of our business come under severe strain . . . with inbound visitors to Australia falling by between 45% -20%." He added the airline's new leisure carrier, Australian Airlines, which began operations in October last year, also had lapsed into the red because of SARS with losses of A\$14.7 million for the year.

Air New Zealand swings to profit



Air New Zealand took delivery of the first of seven A320s in September, the first Airbus aircraft to join the flag carrier's fleet

AIR NEW ZEALAND (AirNZ), 83% owned by the country's national government, came back from near fiscal death when it reported an annual profit of NZ\$166 million (US\$94.8 million) for the year to June 30, compared to a loss of NZ\$320 million in 2002.

AirNZ chief executive and managing director, Ralph Norris, attributed the encouraging results to the success of the carrier's low-cost domestic operations, an improvement in international operations and an increase in the value of the NZ\$. In a lengthy statement issued with the results, Norris said "the launch of Express Class on our domestic network in November last year successfully moved the profitability of our domestic business to a much more sustainable base. Lower fares meant more people flying, more often".

MAS loss widens for SARS quarter

alaysia Airlines (MAS) reported a first quarter loss, to June 30, of 164.5 million ringgit (US\$43.3 million) compared to a net loss of 80.8 million ringgit in the same period in 2002. The result reflected the dual effects of the Iraq War and SARS on the Malaysian flag carrier and produced a 24% decline in revenue to 1.67 million ringgit compared with 2.2 million ringgit in the same three months of last year.

MAS managing director, Dato Md. Nor Yusuf, said in a MAS statement: "We are pleasantly surprised at the quick return of passenger numbers. Certainly there is good reason to expect a sharp spurt of growth over the next few months, but we must exercise caution as we get back on track with the plan we had at the beginning of the year. After five years of losses, MAS reported profits of 339.1 million ringgit in the fiscal year to March 31, 2003.

CNAC dividend suffers from SARS

China National Aviation Corp (CNAC), which is the majority shareholder in both Air Macau (51%) and Dragonair (43.29%), suffered, like all its SARS effected competitors, from a dramatic first half slump to a loss of HK\$181.3 million (US\$23.2 million), compared to a profit of HK\$137.2 million for the same period in 2002.

BRIEFLY

In September, the International Air Transport Association (IATA) estimated SARS cost Mainland Chinese carriers alone up to eight billion yuan (US\$96.1 million). Shanghaibased China Eastern Airlines reported losses of 1.25 billion

yuan compared with a profit of 25.5 million yuan for the same period in 2002. Listed **Hainan Airlines** also reported a dramatic decline in profits to a loss of 980.63 million for its 2003-04 first half compared to a profit of 56 million yuan for the same period last year.

In Taiwan, flag carrier, China Airlines (CAL) reported a loss of NT\$905 million (US\$26.5 million) for the first six months of its latest fiscal year while EVA Air said it had made losses of NT\$1.61 billion (US\$47.2 million) for the same period. EVA said pre-tax

profit declined by 94% for the period. Both carriers reported their operating aircraft were flying near empty at the height of SARS despite a drastic cut in capacity by both carriers when the outbreak of the atypical pneumonia virus was identified in late March.

MAJORS FACING LOW-COST Challenge

First there was Australia's Virgin Blue and then came Malaysia's AirAsia. Now a wave of new budget airlines is preparing to enter Asia's skies. Mainline operators can no longer ignore the potentially serious challenge posed by these new carriers. How will the region's established carriers react to these new and nimble competitors?

TOM BALLANTYNE reports.



sian airline markets are being turned on their heads by the growing influence of low-cost carriers (LCCs), forcing the region's major airlines to rethink their business strategies. Still recovering from recent crises, including economic woes and SARS, the large carriers face a mounting challenge from existing and emerging value-based newcomers.

But analysts and industry insiders are warning mainline operators they need to tread carefully if they are considering launching their own budget brands to defend their markets from LLCs.

Pointing to the failure of similar attempts by European flag carriers to move into the LCC business, they believe such action could:

- Pose a threat to the parent company's income by cannibalising revenue.
- Damage well established inflight service reputations.

- Lead to serious disagreements as workers try to protect hard won employment standards.
- Cause confusion among passengers over what to expect on board flights.

But analysts are unanimous on one level: the LCC has arrived in Asia and it is here to stay.

However, the industry remains undecided about the longterm success of low-cost subsidiaries. Whatever the risk, they may have to try.

Timothy Ross, airline analyst with UBS Warburg, forecast if Asian markets follow the same trajectory as Australian or even European trends, the low-cost segment will control above 10% of the market before the end of the decade, with growth as high as 34%.

ING Barings regional aviation analyst, Philip Wickham, suggested the way the industry is moving, all flights within Asia on sectors under three hours will eventually become low-cost operations.

If these analysts are correct, mainline carriers ignore the threat of LLCs at their peril. Analysts agreed Asian flag carriers have to react to the emergence of the lowcost airline in the Asia-Pacific, but they said finding a suitable low-cost model may be one of the trickiest exercises the mainline carriers have faced. The business model may be different for each carrier.

Above all, analysts stressed that any new LCC owned by a flag carrier would have to be totally quarantined in management and operational terms from its established parent.

Developments in the Asian LCC sector have undermined predictions that budget airlines could not succeed in Asia because of its diverse market, regulatory hurdles and dominance of flag carriers.

AirAsia in Malaysia and Virgin Blue in Australia are now entrenched and fast growing. Both are set to expand on to international routes. Elsewhere, LCCs include Japan's Skymark Airlines and Skynet Asia Airways, Cebu Pacific in the Philippines, Orient Thai and PB Air in Thailand. A new LCC, Air Deccan, was launched in the southern Indian city of Bangalore

More are on the way. A group led by former Singapore Airlines (SIA) executives and other partners with industry experience plan to launch ValuAir by the middle of next year. Thailand's transport ministry has issued traffic rights to a new airline, Thai Pacific Airlines (TPA). At least two groups are reported to be looking at start-ups in Australasia.

Meanwhile, it was reported in September that Tony Ryan, boss of European low-cost carrier Ryanair, has been in discussions with Air Macau with a view to converting the carrier into a low-cost operator.

China National Aviation Corporation (CNAC) is Air

Macau's majority shareholder, but TAP, Portugal's flag carrier, still has a minority interest in the airline. Major airlines fear this surge in competition will erode their market share, bleeding customers away in an economic climate that encourages travellers – leisure and corporate – to be budget conscious.

Already, some mainline operators have reacted to financial pressure from low-cost rivals by launching their own LCCs.



AirAsia chief executive, Tony Fernandes: a place in the market for everyone

Both Japan Airlines and All Nippon Airways have had lowcost subsidiaries – JAL Express (JEX) and Air Japan - for several years. Garuda Indonesia has City Link, Qantas has Australian Airlines and Air New Zealand operates Freedom Air.

Airways are set to become even more crowded. SIA and Thai Airways International (THAI) are both seriously studying the LCC option and Qantas expects to make a decision by the end of the year on a new domestic LCC (its subsidiary Australian Airlines only operates internationally). Vietnam Airlines has foreshadowed a low-cost subsidiary within three years.

Can big internationals, encumbered by years of entrenched high-cost work practices, succeed in the low-cost stakes? "I think ultimately the consensus will be, as it turned out in Europe and the U.S., that it does not make much sense for an established carrier to try to launch a separate low-cost airline unless it's done in the way that Qantas has done it with Australian, where it is dedicated to specific routes which do not conflict with the operations of the major entity," said Richard Stirland, director general of the Association of Asia Pacific Airlines (AAPA).

UBS Warburg's Ross - he once described LCCs as being like a virus for which there is no antidote - said network carriers in Asia have every right to fear the advent of the budget airline in Asia. "Whilst they have grown markets elsewhere in the world, they have taken market share even faster."

Ignoring the LCC phenomenon, or competing with a net-

COVER STORY

work carrier-style cost structure, are not options, he added. Ross said European and U.S. majors' reactions to the LCC threat were typically "denial and hopes that it would go away if ignored", or unsuccessful attempts to "bolt on" a budget operation to the existing cost structure.

"Asian airlines that adopt any of these approaches in response to the evolving threat risk the same outcome: brand confusion and loss of market share. We believe there is one course of action open. Essentially that is to quarantine a new part of the business within which the airline incubates its own start-up and takes advantage of the simplicity and lower ownership and staff costs on which their low-cost competitors' model is founded.

"This may cannibalise revenues, but if the costs are right, it ought not hurt profits," said Ross.

At ING Barings, Wickham pointed out this may be difficult to achieve. There are a host of dangers in operating a low-cost offshoot, even if it is set up as a completely separate entity. "If you are Singapore Airlines and you start running a Singapore Light around the region, what relationship does it have with the mainline airline? How do you handle passengers moving from one to the other? There is a danger the extremely high service reputation built up over many years by SIA could become di-

luted. However you do it, the whole problem remains one of ownership and however you quarantine it, this is still a part of SIA."

Ratings agency Standard and Poor's also warned in a research report that big Asian airlines should beware of growing LCC operations. "Major national carriers in the region are likely to face the prospect of increased losses as they battle to remain profitable, serving passengers who have become

savvier with their needs and requirements and at the same time fighting against smaller, more cost-effective airlines which are focused specifically on a certain set of customers," said the report.

AirAsia had been able to charge less than a third of the fares national carrier Malaysia Airlines (MAS) charged on all its routes, it said. A study by Booz Allen



Virgin Blue: launching regional services

Hamilton showed low-cost operators spend 7 US cents to 8 US cents per seat mile to complete a 500-600 mile flight. Larger airlines spend about 15 US cents.

Asian LCCs have a common reaction to big rivals introducing budget brands: majors should concentrate on the business they know best, running full-service operations. "I totally agree they should stick to what they do best and improve on that," said Jimmy Lau, spokesman for Singapore's yet-to-fly ValuAir.

Tony Fernandes, chief executive of AirAsia – it carried 1.5 million passengers last year and is targeting 3.2 million in 2003

- said people think removing the orange juice suddenly produces a low-cost airline. "It's not as easy as that. It is very difficult and regular carriers need to understand this is a different business."

AirAsia is growing fast. Two new B737-300s will arrive in October to bring the fleet to nine and that will grow to 18 by the middle of next year, said Fernandes. Nevertheless, he believed there is a place for everyone.

"Every product is market segmented. You have five star hotels and three star hotels. You have luxury cars and compact cars. Only in the airline business do we seem to think we can be all things to all people. I have a view that one day there will be a market in which there are premium airlines and low-fare airlines and they will each be successful in different sectors of the market."

Ray Webster, chief executive of Easy-Jet, one of Europe's most successful LCCs, agreed with that view. In Auckland recently to speak to a New Zealand Commerce Commission hearing on a proposed Qantas-Air New Zealand (AirNZ) alliance, he said AirNZ must prepare itself for a future without traditional full-service airlines. The challenge for full-service airlines is whether they can adapt, he added.

"It is no longer possible to be all things to all people. Consumers, once comfortable that a low-cost airline is safe and reliable, do not want to pay more for air travel than they need to. In time a low-cost airline will win because of its superior cost base and highly specialised business processes," said Webster.

Wickham said Air NZ has already gone a long way towards becoming a low-cost carrier. After flirting with bankruptcy and being rescued by a government buy-out, the Auckland flag carrier not only has a low-cost domestic operation, but it is beginning to do the same internationally with the recently launched budget Tasman Express services to Australia. Since AirNZ started its domestic no-frills service a year ago, passenger numbers have risen 23%, according to the airline.

LCC operators argue they are not stealing passengers from incumbents, but creating new travellers. Big airlines do not believe that. They say people who have never flown before are encouraged into the air, but experience showed they also bleed traffic away from mainline operators. It is this that is encouraging big airlines to act, coupled with pressures to find new and more cost-efficient ways of doing business.



ValuAir's Jimmy Lau: major carriers should stick to what they do best

■ COVER STORY

Earlier this year, before his retirement, SIA's chief executive, Dr Cheong Choong Kong said in response to how SIA would react to low-cost carriers: "SIA has never shied away from a fight. If a threat emerges on its home ground, it should not hesitate to deliver a swift response. Go for the knock-out."

The speed of expansion of low-cost airlines has been a wake-up call for the 'big boys'. Both AirAsia and Virgin Blue started as domestic airlines, but are planning regional international services. In the next six months, Virgin will launch services to New Zealand, Fiji and Vanuatu and has talked about services to Singapore and elsewhere in Asia. AirAsia CEO Fernandes told *Orient Aviation* he would definitely take his charge on to regional routes, though timing and destinations have not been finalised. He has previously talked about Indonesia, Thailand and Singapore.

Planned Singapore entrant ValuAir, which applied for its air operator's certificate in August, does not have a domestic market to attack. Lau said it would start with two to four jets. He would not discuss routes, but said sectors up to 5½ hours are being considered. However, it is understood ValuAir will utilise single-aisle jets – B737 or A320 types – and is looking at services from Singapore to mainly leisure destinations such as Bali, Thailand, Malaysia and Hong Kong.

At this stage, Lau would not comment on whether ValuAir will go head to head with SIA. Considering the routes under review, it appears inevitable.

Indeed, UBS Warburg's Ross believed ValuAir could grab market share from SIA on regional tourist routes. "Based on the experience of other markets where low-cost carriers have started operations, they have taken market share from incumbents, but they have also grown the market in terms of overall demand."

He said the timing was ideal for a low-cost carrier in the region, thanks to falling aircraft and jet fuel prices, as well as lower staff costs. "From a cost and capital perspective, the model is ideally poised for a take-off," he added.

SIA is acutely aware of the potential impact of an LCC out of its home base. Not only is it deeply engrossed in studying a low-cost model, it has embarked on a project to evaluate its internal business processes and review its entire organisational structure.

The project team will report to a steering committee headed by SIA chief executive Chew Choon Seng. "SIA cannot afford to stand still in today's rapidly changing aviation environment. Managing costs alone is not enough. It is timely for us to re-examine what we do, how we organise ourselves to perform business functions and how we go about doing our jobs," he said.

In Malaysia, Fernandes also played

Transport Association (IATA) survey on corporate travel, due to be released in November, will reveal around a third of all business travellers world-wide have flown on a low-cost carrier in the past 12 months, due primarily to the cost of the ticket.

All this has set alarm bells ringing at big airlines like SIA and THAI. Neither will talk specifics yet on their potential LCCs, although sources at both said they



Thai Airways International: studying a low-cost airline model

down the potential for competition with MAS. He said the two carriers target different market segments. MAS passenger figures have been consistent for several years, showing AirAsia has created a new market by encouraging locals to travel more in their own country at an affordable price.

Unofficially, MAS insiders say that sounds fine, but AirAsia will certainly also steal potential growth from its big rival. The Malaysian Government has been desperately trying to formulate a system that will allow local airlines to complement rather than compete with one another.

Thai Pacific Airlines plans four destinations from Bangkok: Sydney, Seoul, Osaka and Honolulu. In August, a Hong Kong company, Strategic Investments, launched United Myanmar Airlines (UMA) in a joint venture with state-owned domestic carrier, Myanmar Airways. It flies from Yangon to Bangkok, Singapore and Kuala Lumpur and expected to expand services to Hong Kong, Shanghai and Penang within a year, offering up to 30 flights a week on two leased Boeing B737-400s.

Just as significant, an International Air

are leaving no stone unturned in studies of various models. One alternative, according to an insider, is not to set up an LCC at all, but to look at what travellers really want and make adjustments to existing service on some routes.

THAI is clearly attempting to separate any new operation from its existing brand. THAI chairman, Thanong Bidaya, said if a low-cost brand is launched, the Bangkok flag would hold a 25% to 49% stake in it. Discussions are underway with several potential partners. But THAI mainline will continue to position itself as an international airline. Domestically, THAI will concentrate on foreign travellers who want full and flexible service. The lowcost operation would serve only domestic routes and aimed to encourage more local business people to travel by plane rather than train or bus, said Thanong. One airline undaunted by these concerns is Qantas. After launching its low-cost international, Australian Airlines, last year, chief executive Geoff Dixon has now disclosed a study on a domestic equivalent has been quietly underway for six months.

"We believe there is probably a position for a low-cost leisure carrier emerging in Australia and we think we would probably be a very, very good group to do it," he said.

Dixon was coy about details and denied the move was aimed at Virgin Blue. As Virgin now has a third of the Australian domestic market and Qantas' new low-cost airline will have between 15 and 40 aircraft, it is nevertheless difficult to believe it is being created for any other reason.

AAPA director general Stirland said there are many potential problems for a network carrier setting up an LCC, including difficulty in hiring suitable staff. "In a market where there is a labour shortage in certain areas, why would you fly for a lowcost carrier under the aegis of a major airline when you could apply for a job with the main airline itself at a higher salary?"

He has another interesting alternative for incumbents: a virtual LCC. "Given the capacity you have on B777-300s, B747s or A340-600s, the real thing airlines in this part of the world should be trying to establish, which is much easier for them than it is for carriers in the U.S. and Europe who operate regional services with narrowbody aircraft, is having an aircraft within the aircraft," said Stirland.

"In other words, you dedicate a hundred seats per frequency at the back end of the aircraft and say we'll sell them at the same price the low-cast carriers are offering. You would have a low-cost carrier inside existing aircraft."

However the low-cost arena develops, Asia's major carriers know they are in for a fight. They also know they are hardly alone in being confronted with the threat. IATA director general, Giovanni Bisignani, said the LCC is a challenge to the entire system of network carriers. "They have an advantage big airlines do not have. They use the Internet and have no distribution costs. They have a cheap structure because they start from scratch," said the IATA chief.

He said it is more difficult for a mainline carrier, with its entrenched cost structure, to achieve the cost levels of the small airlines. However, Bisignani said he believed LCCs would take longer to develop in Asia.

"Unlike Europe, in this region there are few secondary airports, which is a big factor in the success of LCCs. There is also the question of distance and achieving quick turnarounds which is also difficult in this region," he said.

Stirland to bow out

The 47th Assembly of Presidents of the Association of Asia Pacific Airlines, to be held on the Korean island of Jeju in late October, will be the last for the organisation's director general, Richard Stirland. He will step down next year after a decade at the helm. He talked to **TOM BALLANTYNE** about the past, present and future.

o sooner had Richard Stirland established himself in the Manila Secretariat of the Association of Asia Pacific Airlines (AAPA) - then the Orient Airlines Association (OAA) - in 1994, than he stepped straight into an ongoing scrap with the U.S. as it pushed to gain unlimited access to Asia's lucrative skies for its major carriers.

For the tough-talking former Cathay Pacific Airways executive it was the first round in a series of battles defending the position of Asia-Pacific airlines as they tussled with major challenges, from airport

user charges to environmental issues, air safety to economic downturns and terrorism to SARS.

Stirland, a man with an encyclopaedic knowledge of the industry, has always relished a fight. In those early days, he left Washington D.C. in no doubt about what the region's carriers thought of U.S. open skies pressure; in short and to put it politely, not much.

Ultimately, the U.S. did forge deals for open skies with more than a dozen countries, but the issue turned out to be a

"damp squid", according to Stirland. Why? "Firstly, the economic strength of the U.S. carriers to exploit these rights diminished because they were struggling with their own demons on their home ground. Secondly, a lot of the things they wanted to achieve with open skies, essentially fifth freedoms within the region, were achieved anyway in a much more cost-effective way by code-sharing with alliance partners."

Today, according to Stirland, the biggest challenge confronting Asia's airlines is very different. "It is envisaging the possibility of moving beyond alliances to global brands and airline takeovers in a different environment, including liberalisation of the rules concerning ownership and control."

Even in a supposed global environment, there is tremendous nationalistic feeling against foreign companies coming in and taking over indigenous companies, he said.

now based in Kuala Lumpur, is the first to agree the last 10 years have been the most traumatic in the industry's history.

"Any period that includes the events of September 11 in the U.S. and SARS has got to be unprecedented. The remarkable thing is these episodes have demonstrated the incredible resilience of the airlines in this part of the world and the underlying dynamic of growth in Asia, which makes these things, even though they are dramatic and traumatic at the time, blips on the long-



Richard Stirland

Born: September 22, 1942, Nottingham, England

Education: Graduated from St Peters College, Oxford University.

Career path: Joined Cathay Pacific Airways' parent company, John Swire and Sons in 1964. He had been hoping to join the shipping industry and was disappointed when he was assigned to what was then a very small Cathay Pacific with only a limited regional network. With hindsight he said it was the best thing that could possibly have happened. His senior positions at the airline included commercial director and director for corporate development.

Quoteworthy: When asked in 1994 why he joined the OAA [now AAPA] he said: "It is a challenge. The OAA is full of potential which has never been exploited. It is an organisation which has been taken for granted by the airlines since its inception [in 1967].

"The indefinite future lies with globalisation in the airline industry and countries are going to have to accept the fact that their airlines might become a subsidiary of a big organisation."

Stirland, who spent 30 years with Cathay Pacific and its parent, John Swire & Sons, before joining the AAPA, which is

term graph of the growth of Asia-Pacific carriers."

The way regional carriers have coped with ongoing crisis "is the classic metaphor of the Asian bamboo bending with the wind, rather than snapping", he said.

For years, he added, the fundamentals of the airline industry in Europe and the

U.S. have been flawed.

"It's like a human being. When these crises hit, if the constitution is weakened by years of debilitation, they are much less able to resist the onset of the disease. In the case of Asian carriers, they have years of success and growth and profitability and therefore they are able to shrug these things off," he said.

There have been two primary lessons learned from recent crises, said Stirland. "It has demonstrated the value of the incremental system of ordering aircraft used by Asian carriers.

"For a long time, we have not seen anyone going out and placing massive orders for new aircraft. By doing it on an incremental basis, when crises hit such as September 11 and SARS the airlines have not felt the need to make massive cancellations or renegotiate orders as carriers in the U.S. and Europe did.

"Secondly, rather than panicking and firing huge numbers of staff, there has been

Search on for new DG

AAPA director general Richard Stirland will not step down officially until June next year, but a search is underway for his replacement. Orient Aviation understands an announcement of his successor is expected in the first guarter of 2004.

a general consensus between management and staff at the region's carriers that everybody from senior executives down to the lowest levels should take salary cuts, so very few have been laid off.

"This means when times get better salaries can be readjusted and you are not sacrificing all the built-up experience and the sense of community you have in the airlines. Everybody is making a sacrifice and when times get better, everybody benefits."

Stirland said there are always regrets about aims that may not have been achieved. "But given the success of the

Asian carriers and their modernisation of fleets, innovative products and reputation for in-flight service, it's hard to see what more they could have done," he said.

"The one area in which there is always room for improvement, and where in many ways the Asian carriers have lagged behind, is perhaps the issue of safety."

Stirland has no plans to be idle in his retirement. He plans a two-year course to study Southeast Asian art at the British Museum in London. A keen walker, he also wants to "explore the Himalayas in much greater detail than I have in the past".

SPECIAL REPORT | Training in the Asia-Pacific

Home grown

In the old days, China's pilots put strong pressure on their stateowned airlines to be trained overseas. Today, that is changing as listed airlines become accountable to shareholders in a new highly competitive environment. **Charles Anderson reports**

new sense of fiscal responsibility among China's rapidly expanding airlines is being reflected in attitudes to flight training, with more emphasis on training within the country as an alternative to expensive overseas trips.

"It's more economic, more efficient and there's less down time," said John Marino, chief representative for Alteon Training in Beijing. "Airlines are being forced to focus on economics. They are getting away from the SOE (state-owned enterprise) mentality to becoming a stand-alone business. That has also prompted staying in the country for training."

Activities at major overseas training companies with interests in China reflect this trend as well as the general increase in demand from a growing industry. At Airbus Industrie's training and support centre, a joint venture with China Aviation Supplies Import and Export Corporation (CASC) near Beijing Capital Airport, there is concentration on training local, Chinese language instructors for the major airlines as well as their pilots. This development has seen the wet lease of its two fully-booked Airbus A320 and A330-340 simulators decrease from 80% to 65% in five years with dry lease increasing correspondingly as the carriers' own Chinese trainers come on stream.

CAE, the dominant simulator manufacturer now moving into civil aviation training as sales of its main product slows globally, expects to add more simulators and related services to its current six-bay joint venture with China Southern Airlines at Zhuhai, in Guangdong province, which already can train some 3,000 pilots a year. A recent co-operation agreement between Airbus and the Canadian company will allow Airbus use of facilities there.

China's big three airlines, China Southern, China Eastern Airlines and Air China, have also invested in training on home turf. One billion yuan (US\$120 million) has been invested in China

Southern's Zhuhai centre so far. It also attracts a number of smaller, independent airline customers. It complements China Southern's flying college opened near Perth, Western Australia, 10 years ago.

China Eastern owns A320, A300-600 and MD-83 simulators at its Shanghai training centre. Air China operates five Boeing simulators (B737-300, B737-800, B747, B757/767 and B777) at its Beijing facility.

And if training is not to be done in Mainland China, Hong Kong can be an attraction. GE Capital Aviation Training's (GECAT) Asian centre is housed in Cathay Pacific Airways' Hong Kong facility near the airport. It's a draw for Mainland airlines that may want to find an overseas perspec-

tive without having to pay high travel and accommodation costs (see separate story). It also runs a B737-300 simulator at Shandong Airlines' Qingdao training base alongside Bombardier's CRJ-200 simulator.

Many pilots are still keen to train outside and pressure continues on managements to allow their employees to see other parts of the world as well as benefit from the professional experience to be accessed there. There is also an argument that training overseas increases the use and

understanding of English for personnel who need to grasp aviation's universal language. New realities, however, are lessening their chances.

"The big three [airline companies] want to go public [China Southern and China Eastern are already listed]," said Roel Ganzarski, Alteon's vice-president, sales and business development, Asia-Pacific. "Shareholders will not agree to the company spending money because the

pilot wants to visit Las Vegas. The market will not stand for it. Shareholders in places like Hong Kong scrutinise every detail of an operation and if they see that a pilot is travelling overseas, they will bring that up in a shareholders' meeting."

Alteon, the 100% Boeing-owned subsidiary formerly known as FlightSafety



Alteon Training's John Marino

Training in brief

AIR NEW ZEALAND officially opened its new training centre at Mangere which will house the majority of at-work training and development for the carrier's pilots, cabin crew, engineers and airport staff as well as pre-employment and degree programmes for aviation students. Classrooms, workshops and hangar space for Air New Zealand Engineering Services were the first to be completed. Specific training areas for pilots and crew followed in September. Full operations start in December when 400 students a day can be accommodated.

CAE, which has built 50% of full-flight simulators operating in Asia-Pacific, said it is planning to expand sales and training services in China and the Asia-Pacific as it targets the region for growth. A new training centre run jointly with Emirates has been officially opened at Dubai airport after starting operations in 2002. Emirates-CAE

Flight Training will move into the new Emirates Aviation College being built nearby. CAE also is providing training technology. It already operates an A320 simulator at Singapore Airlines' training facility in the island state.

ALTEON TRAINING'S new centre in Brisbane, Australia, began operations in a temporary building while a permanent facility is being constructed. Three simulators are in operation, two Boeing B737 new generation and one B717 units. The anchor customer is low-cost carrier Virgin Blue, which will expand to trans-Tasman operations in October

THALES TRAINING AND SIMULATION has completed the installation of the third of three new simulators for Qantas ahead of schedule. The B767-300 joined a B737 and an Airbus A330 already delivered to the airline.

Boeing Training International, uses its international network to accommodate Chinese clients who decide to travel. Its regional operations centre in Seoul, which counts Korean Air and Asiana Airlines among its clients, a joint venture in Singapore for maintenance training and another centre soon to be opened in Brisbane are available for those who don't want to go too far. Entitlement training for new Boeing purchases is offered in Seattle, but can be moved elsewhere.

In China, at Alteon's Kunming training centre, with one classic B737 simulator, one next generation B737, a combination B757/767, one B747-200 and one MD-90 simulator, domestic and regional airlines such as Shandong and Shenzhen airlines are the primary customers for both pilot training and a full range of training in other areas. Overflow from the 'Big Three' carriers and outside clients, especially from Japan and Korea, make up the remainder.

"We are very happy with our operation there," said Ganzarski. "There are two sides to it. First the growth of the aviation market in China. Then, with that growth comes the increased understanding of the importance of quality training. Not from all airlines, but in general."

SARS did not hit Alteon as seriously as expected. Other companies operating in China also report a short, sharp effect, fol-



lowed by a quicker-than-expected return to normal. "A lot of things have affected us - the war, the economy, increased security requirements for visas for the U.S.," said Marino. "Some have helped our business. For instance, in Kunming, the difficulty in getting visas to the U.S. actually helped create business."

Alteon remains unaffiliated with any airline and looks likely to stay that way.

"The biggest question for us is do we remain neutral or do we look for a partner," said Marino. "We have seen our competitors take partners and they didn't achieve the potential they had hoped."

At Airbus, training is one part of a full support centre first set up in 1994 with a US\$80 million investment from the manufacturer that now has 128 aircraft flying in China. Trainees on its A320 and A330/340 simulators come from 15 different airlines and branches of the 'Big Three'. This year 655 Chinese pilots will train there with 380 of them being from clients outside the country.

"We have been nearly fully booked from the beginning," said Christian Sie, general manager, flight operations and support. Downtime for work on the A330/340 simulator this autumn will eat a little into capacity, but Airbus sees continuous upgrading as a necessity. "All simulators must reflect the latest versions of the airplanes," said Sie.

Customers who need training on fastselling Airbuses can be distributed inside the company network if there is insufficient capacity in China. The company's Toulouse facility is a favoured option at present, as opposed to one in further-flung Miami. Links with Zhuhai will become more important as more planes arrive.

CAE counts Air China, China Eastern, China Southern, the CAAC Flying College and Shandong Airlines among its simulator clients. "China continues to be one of our highest priorities," said Gary Scott, group president, civil simulation and train-

ing. "We also have a very good relationship with the 'Big Three' as they are already CAE customers. We can help them maintain a very safe environment during a time of fast expansion."

Some Chinese customers use CAE training centres outside Asia, notably in Amsterdam and Dubai where a joint venture with Emirates began operations in June 2002. But a great deal of focus remains inside China.

The company is to install its new training products at Zhuhai as it continues its push into wet-lease training. A recent sale of a B737 simulator to China Eastern was also accompanied by SimFinity desktop trainers and simulation-based courseware.

"We intend to introduce [in Zhuhai] CAE's latest aviation training technologies, visualisation products and collateral training materials to be developed and adapted for optimal use in the Chinese and Asian markets. We are leveraging our worldwide network to expand this JV, increasing our investment in it," said Scott.

Home away from home

By Charles Anderson

Chinese airlines wanting to cut costs for pilot training incurred travelling abroad do not have to look far to secure independent training facilities away from the mainland itself.

Just over the border in the Hong Kong Special Administrative Region (SAR), GE Capital Aviation Training (GECAT) operates in a portion of the Cathay Pacific Airways training facility near Hong Kong International Airport, using its own simulators and marketing downtime on Cathay's equipment.

There is plenty on offer. The three-year-old company has its own Airbus A320, an A330/340 and a new generation Boeing B737 model recently transferred from London.

A fourth simulator, another new generation B737, is due to arrive around the end of the year. Cathay has seven B777, B747, B737 and A330/340 simulators.

These are topped off in China itself with GECAT's own B737 simulator housed at Shandong Airlines' Qingdao training facility and a two-way marketing agreement with China Eastern, which has A320, A300-600 and MD-83 facilities at its Shanghai centre.

GECAT's managing director Asia, John Bent, is a man who knows his business, thanks to 37 years flying experience and a career with Cathay as its manager flight training and later flight services.

He says a forecast he made after a study for the airline four years ago – that about 1,700 airliners would be added to the mainland fleet over 20 years – still holds good, leading to the kind of demand that will drive increased activity at companies such as his.

"The arithmetic is very interesting when you compare it to other parts of the world," he said.

"At the moment, China has just under 600 airliners. Stacked against that, the U.S.

airliner fleet is up to 7,000 for 280 million people."

Bent believes the wholesale reorganisation of China's main airlines into three groups will lead to between three and six major training centres in China, all fully equipped. "That's the negative against having an independent training supplier on the south coast of China [Hong Kong]," he said. The positives, however, far outweigh that, especially when you are talking about 1,700 new planes.

Each long-haul airliner needs between 10 and 12 crews, shorthaul aircraft require six and then there is recurrent training to be taken into account. The major centres will not be able to fully support such a volume, Bent believes, leading to overspill business, especially when the main carriers add large numbers of planes at short notice.

Smaller airlines, sometimes start-ups likely to appear in provinces as growth continues, will also shy away from buying a US\$15 million simulator for use with a small fleet. Increased cost-



Dragonair's fleet expansion programme means third party training will take a lower priority

consciousness means all carriers, big or small, are watching the bottom line, to the advantage of a company providing training facilities a short flight away.

GECAT, with extensive operations in London, the U.S., Canada and Switzerland and a new ab initio arrangement with Aero Madrid, can tap into its global resources in any way that suits a client. Nevertheless, Bent sees his Hong Kong facility as the major draw for Chinese airlines.

"Hong Kong of course is a part of China, but it is recognised as very much an international city with an international history and a lot of aviation expertise, which is different from China's expertise," he said.

"We see that as a very significant strength in our position, because we are in Hong Kong, next to Cathay Pacific with all its experience and resources, because Hong Kong is within five hours' flying time of half the world's population and is an excellent hub from the point of view of connectivity.

"One of the reasons they [mainland carriers | send pilots abroad for training is that they want them to be exposed to other processes elsewhere in the world. Although Hong Kong is not elsewhere in the world geographically, it is elsewhere in the world in terms of background and experience in aviation.

"The realisation is slowly occurring that Hong Kong is a place they can go with great ease. Because of its proximity to China, they don't have to send crews a long way across meridians."

At one stage GECAT was serving seven mainland airlines, many using the new generation B737 simulator, although it was another narrowbody, the A320, that first attracted a Chinese carrier to the company's Hong Kong base. "The balance between the two types [Boeing and Airbus] is pretty even.

"It will probably be a bit more 737 new generation as we bring the second new generation 737 in," said Bent, underlining the growth of narrowbody aircraft operating in China.

Twenty-three customers from across the region were on GECAT's books at the end of last year. Carriers from all parts of Asia, and notably Australia in the new generation B737 category, have made use of its simulators at one time or another. SARS, inevitably, took a heavy toll, but Bent says pick-up has been quicker than expected



GECAT managing director Asia, John Bent: Hong Kong training centre a major draw for Chinese airlines

with his current client total sitting at about the 16 mark with full recovery likely by the end of the year. The effects, however, will linger.

"SARS probably also has a residual impact to some extent because people reviewed what they do and maybe can get away with doing less than they were doing before, in general terms," he said.

GECAT's arrangement with China Eastern, under which time can be offered on each other's differing simulators, is yet to reach its full potential. "It has had very limited results so far," said Bent, "but we have got a very warm and good working relationship with China Eastern and we hope it will develop further in the future."

The company is looking at other simi-

"The realisation [in China] is slowly occurring that Hong Kong is a place they can go with great

- John Bent, GECAT managing director Asia lar relationships in Asia, Bent said. He declined to elaborate.

Meanwhile, the fourth Hong Kong simulator completes GECAT's business plan. "We have no plans for any more ourselves. But taking into account that we also market seven Cathay Pacific simulators, we are in a situation where technically GECAT is able to market 11 simulators in this building," said Bent.

Ninety percent of GECAT's Hong Kong customers want dry training, with airlines bringing their own instructors and examiners. That is its core business, but instructors can be sourced elsewhere too, as in the case of new generation 737 training for Australian airlines – understood to be Qantas Airways and Virgin Blue - when personnel were brought from Europe. Cathay's proximity is the major driver in this category, however.

"The great advantage sitting here is that when we are asked to do wet training on aircraft types which Cathay Pacific operates, they have their own instructor force. We have agreements with Cathay to source those instructors for the customers. It's a very interesting mix of capabilities," said Bent.

Nearby, at Dragonair's flight training centre, expansion of the carrier's Airbus fleet means staff there will be busy meeting the airline's needs with only 10% of A320 and A330/340 simulator usage taken up by outside clients.

"Due to the expansion programme, and to a lesser extent the recruitment freeze earlier this year due to SARS, we [Dragonair] will be taking on more pilots next year; perhaps as many as 70, which is about 40% more than in any of the last few years," said Pieter Boel, the centre's manager.

"The end result will be even greater utilisation of the flight training centre and its staff and less time available for thirdparty users than in the past ... while we still welcome third-party use, our ability to provide such a service will decrease in the coming years."

Zhejiang Airlines starts training with Dragonair later this year, joining Trans-Asia of Taiwan, SriLankan Airlines and Air Macau, the latter for cabin emergency training.

The centre's popular former general manager, Captain Felix Hart, who joined the carrier at its launch in 1985, retired in August.

Business as usual (almost)

By Charles Anderson

Ask Keith Morgan how his year has been so far and you get a blunt answer.

"We have gone from the highs of the flight training industry to the depths of despair to bouncing back again," said the business development manager at British Aerospace Flight Training - Adelaide, South Australia. "We are at the tail of the industry in Australia. When the dog barks, we shake."

The SARS outbreak saw most of Morgan's customers review their expenditure and suspend training, with a major impact on his order book. But the industry's resilience showed through. "Clearly, the rapid onset of SARS has been matched by the industry's rapid recovery," he said.

Much of his current industry base, which includes Cathay Pacific Airways, Dragonair, Korean Air, Emirates, China Airlines and Air China, is committed to quality training. "All airlines which have good reason to do this welcome the opportunity to reinstate training," said Morgan who sees it as a long-term investment in the long-term health of a carrier.

With business getting back to normal, staff at BAE's Parafield Airport facility, which can handle up to 190 trainees, are now preparing for their latest customers, 15 cadets from Zhejiang Airlines who arrive at

The rapid onset of SARS has been matched by the industry's rapid recovery

Keith Morgan,
 British Aerospace
 Flight Training

the end of October. Six student Air China pilots successfully completed a course there earlier this year and another batch arrived in September.

"Cadets from the mainland, once they are comfortable in the learning environment, really do perform well," said Morgan. But language is always an issue at an establishment that conducts all training in English. BAE counters this by deploying two staff members in China for pre-departure English training and employing a further two at Parafield for formal and informal language lessons.

"In the back half of the course you see the learning rate accelerate as they come to terms with English as it is learned and spoken in an airborne environment." Reading and writing rarely presents a problem in the classroom.

"Start the propeller and it is how they hear and interpret, how they deal with the unexpected. It does present a challenge for someone learning in another language," said Morgan.

Fleet Census Aug. 31, 2003

Asian carriers back in the aircraft market

s the SARS threat eased from June, several airlines brought a smile back to the manufacturers' faces with significant orders for new aircraft.

Japan's All Nippon Airways committed to a US\$1.67 billion order for 45 Boeing B737-700s for delivery in 2005. Rival Japan Airlines announced the lease of seven more

> B767-300ERs in the first half of 2006. Korean Airlines joined the mega-transport

> > club with an order for eight Airbus A380s (five firm and three options) and ordered seven Boeing B777s and two B747-400 long-range freighters.

> > > Thai Airways International also

firmed a US\$1.4 billion fleet upgrade plan after it was given government approval to purchase seven second hand B747-400 jets from United Airlines and order three Airbus A340-500s and five A340-600s, due for delivery in 2005-06.

China Aviation Supplies Import and Export Co. also confirmed an order for 30 Airbus aircraft, a mix of A319s, A320s and A330s, worth \$1.7 billion. These will go to Air China, China Eastern Airlines, China Southern Airlines, Sichuan Airlines and Hainan Airlines.

The region's low-cost operators continued to show strong signs of expansion. Malaysia's AirAsia announced in June it would lease seven more B737-800s to take its fleet to 18 by mid-2004. In August, Australia's Virgin Blue began taking delivery of 10 new B737-800s. It has options on another 40.

In September, Shanghai Airlines announced an order for five B757s and five ARJ 21s (regional jets being produced in China by AVIC 1).

Words: Tom Ballantyne Photographs: Graham Uden

Aircraft Engines						
ABOITIZ AIR (Philippines)					
YS-11-200	RR Dart 543-10/10K	3				
YS-11-300	RR Dart 543-10/10K	1				
YS-11-600R	RR Dart 543-10/10K	2				
AERO ASIA IN	ITERNATIONAL (Pakista	n)				
B737-200/Adv		4				
BAe 111 560		4				
AIR ANDAMA	N (Thailand)					
Fokker 50		2				
BAe Jetstream 31	/32	2				
AIR ASIA (Mal	aysia)					
B737-300	CFM56-3	7				
Leased in: GEC	AS					
On Order: 11 B7	737-300s					
AIR CALEDON	IIE (New Caledonia)					
ATR42-320	PWC PW121	4				
Do 228-212	Gar. TPE331-SA 2520	1				
AIRCALIN (Air C	Caledonie International, New Caledo	nia)				
A330	GE CF6-80E1A4	2				
B737-300	CFM56-3B2	1				
Leased in:						
DHC6 Twin Otter	P&W PT6A-27	1				
On Option: 1 A32	20-200					
AIR CHINA						
B747-400C	P&W PW4056	8				
B747-400	P&W PW4056	4				
B747-200F/SF	P&W JT9D-7R4G2	4				
B767-300	P&W PW4056	6				
Leased in: 1 Mits	sui & Co					
B767-200ER	P&W 4052/JT9D-7R4	5				
B777-200ER	P&W PW4090	10				
B737-800	CFM56-4C4	11				

B737-700	CFM56	3
B737-300	CFM56-5C4	21
A340-300	CFM56-5C4	3
Leased out: Catha	y Pacific 3	
BAe 146-100	Lyc ALF502R-5	4
On Order: 8 A319	s (2003-04) ; 3 B737-700	s
(2003-04)		
AIR DO (Hokkaido Ir	starnational Airlinea Janan	
B767-300ER	nemational Amines, Japan)	2
Leased in: 2 (AWA	.5)	_
Ecuseu III. 2 (7107)	10)	
AIR FIJI		
DHC-6-300 Twin O	tter PWC PT6A-27	1
DHC-6-200	PWC PT6A-20	1
Leased in Air Vanua	tu	
Beech Baron 95-C5		1
Y-12 Mk-II	PWC PT6A-27	3
EMB 110-P1	PWC PT6A-34	5
BN2A-20 Islander	Lyc O-540-K1B5	3
EMB 120ER		1
AIRFAST INDO	NESIA	
B737-200 QC/Adv		3
2707 200 0077101		Ū
AIR HONG KON	G	
B747-200F	GE CF6 50-E2	1
On Order: 6 A300-	·600s	
AIR INDIA		
B747-400	P&W PW4056	7
B747-300 Combi		2
Leased in: 1 from (_
B747-200	P&W JT9D-7J -7Q	4
A300B4-100/-200		3
A310-300	GE CF6-80C2A2	17
Leased in: 5		
AIR JAPAN (AN		
B767-300	GE CF6-80C2B2F	8
All ANA aircraft		

AIR KI	RIBATI		
Y12 Harl	bin	PT6A-27	1
ATR 72-2	200		1
CASA 2	12-200		2
AIR M	ACAU		
A320-20	0	IAE V2527-A5	3
Leased			
A321-10	0/200	IAE V2530-A5	4
Leased	in: ILFC		
A319		IAE V2530	5
B727-20	0F		2
	ALDIVES		
A310-20		P&W PW-JT9D	2
	in: A. I. Le		
Do 228-		Gar. TPE 331-5A-252D	2
DHC-8-2	200	PWC PW123D	1
AID M	ANDALAS	,	
	ANDALA	P&W PW 127	1
ATR42	21200	P&W 120	2
AIR42		F&VV 120	2
AIRM	ARK INDO	ONESIA AVIATION	
Leased	In:		
B737-20	0/Adv		1
AIR M	ARSHALI	LISLANDS	
HS 748-	2B	RR Dart 536	1
Do 228-	212	Gar. TPE331-5A-252D	2
Dash 8 \	Q100		1
	•	French Polynesia)	
DHC-6-3		PWC PT6A-27	3
Leased	in: 1 Leas	sed out: 1	
AIR N	ΔURU		
B737-40		CFM56-3C1	1
3,0,40	-	330 001	•

Fleet Census

Aircraft	Engines	No.	B737-200/Adv
AIR NELSON	(New Zealand)		Leased in: 4
Saab 340A	GE CT7-5A2	16	B737-300
415 11514/ 554			AIR RAROTO
AIR NEW ZEA			EMB110
	iaries Freedom Air, Eagle	Air-	Leased in: 2
	k Airlines and Air Nelson)		
B747-400	RR RB211-524E	3	AIR SAHARA
Leased in: 4			B737-800
B747-400	GE CF6-80C2B1F	5	B737-700
Leased in: 4			B737-400
B767-200	GE CF6-80A2	3	B737-300
Leased in: 4			Canadair CRJ-2
B767-300	GE CF6-80C2B6F	4	
Leased in: 2			AIR TAHITI N
B767-300	GE CF6-80C2B6	5	A340-300
Leased in: 2			Leased in: 2
B737-300	CFM56-3C1	19	ATR72-202
Leased in: 12			ATR42-500
B737-300	CFM56-3B2	1	Do 228-212
Leased in: 1 On	Order: 15 A320s		On Order: 2 AT
On Option: 10 A	\320s		
ATR-72-500	P&W PW127F	10	AIR VANUAT
Leased in: 8			B737-300
Saab 340A	GE CT7-5A2	16	Leased in: Qar
Raytheon Beech	1900D	16	Saab 2000
Leased in: 1			Leased in: Sa
AIR NIPPON			AIRWORK (I
B737-500	CFM56-3C1	25	B747-200 QC/
B737-400	CFM56-3C1	2	
A320-200	CFM56-5A1	3	ALL NIPPON
Leased in: 9 (AN	NA)		B747-400
DHC-8-Q300		5	B747-200LR
YS-11-500	RR Dart 543-10/10K	2	B747-100SR
Leased in: 6 AN	A		B777-200/ER
On Order: 4 DH	C-8-Q300s		B777-300/ER
			B767-300/ER
AIR NIUGINI	(Papua New Guinea)		B767-300F
B767-300		1	B767-200
Leased in: 1 AW	-		B737-500
F28-4000	RR RB183-15H	5	
F28-1000	RR RB183-15	4	
DHC-8-200B	P&W PW123D	1	
AIRMAR			
AIRNORTH (A	ustralia)		
Emb 120ERJ	_	4	
Fairchild Metro 23		4	
Cessna 400 Seri	es	11	
Cessna 208B		1	
AID DAOIEIO	' - ···\		
AIR PACIFIC (•		
B747-400	RR RB211-524D	2	
B767-300ER	GE CF-6-80C2B6	1	
	ii Kosan Company		
B737-700	CFM56-7B24	1	VIVI III
B737-800	CFM56-7B24	2	trensment al-
AID DADABIO	-		Married -
AIR PARADIS	C		
A310	10	1	A Comment
On Order: 1 A31	10		
AID DHILIDDI	NEC		-
AIR PHILIPPI	NLO	3	
B747-200		3	

Lacardin 4	1 477 51 65 7 57 67 67 17	Ŭ
Leased in: 4	D0\A/ ITOD 7D / OA/ 47	_
B737-300	P&W JT8D-7B/-9A/-17	2
AIR RAROTONG	A (Cook Islands)	
EMB110	PWC PT6A-34	3
Leased in: 2		
AIR SAHARA (In	dia)	
B737-800	CFM56	2
B737-700	CFM56	5
B737-400	CFM56-3C-1	3
3737-300	CFM56	2
Canadair CRJ-200		7
AIR TAHITI NUI	(French Polynesia)	
A340-300	-	4
Leased in: 2		
ATR72-202	PWC PW124B	5
ATR42-500	PWC PW127E	4
Oo 228-212	Gar. TPE331-5A-2521	2
On Order: 2 ATR4:	2-500s	
AIR VANUATU		
B737-300	CFM56-3B1	1
Leased in: Qantas		
Saab 2000		1
Leased in: Saab		
AIRWORK (Indo	nesia)	
B747-200 QC/Adv		1
ALL NIPPON AI	RWAYS	
B747-400	GECF6-80C2B1F	23
B747-200LR	GE CF6-50E2	2
B747-100SR	GE CF6-45A2	7
B777-200/ER	P&W PW4090/4074	16
B777-300/ER	P&W PW4090	7
B767-300/ER	GE CF6-80C2B2F 5	52
B767-300F	GE CF6-80C2	1
B767-200	CF6-80A	4
B737-500		18
	100	Ī

P&W JT8D-7B/-9A/-17 8

B737-400
A320-200 CFM56-5A1 27 DHC-8 Q400 PW 150A 1 Leased out: 9 Air Nippon On Order: 8 B777-200/ERs; 11 B777-300/ER (2004-2006); 9 B767-300ER; 45 B737-700s; 2 A320-200s; 5 A340s; 3 DHC-8Q400S ALLIANCE AIRLINES (Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
DHC-8 Q400 PW 150A 1 Leased out: 9 Air Nippon On Order: 8 B777-200/ERs; 11 B777-300/ER (2004-2006); 9 B767-300ER; 45 B737-700s; 2 A320-200s; 5 A340s; 3 DHC-8Q400S ALLIANCE AIRLINES (Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
Leased out: 9 Air Nippon On Order: 8 B777-200/ERs; 11 B777-300/ER (2004-2006); 9 B767-300ER; 45 B737-700s; 2 A320-200s; 5 A340s; 3 DHC-8Q400S ALLIANCE AIRLINES (Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
On Order: 8 B777-200/ERs; 11 B777-300/ER (2004-2006); 9 B767-300ER; 45 B737-700s; 2 A320-200s; 5 A340s; 3 DHC-8Q400S ALLIANCE AIRLINES (Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
(2004-2006); 9 B767-300ER; 45 B737-700s; 2 A320-200s; 5 A340s; 3 DHC-8Q400S ALLIANCE AIRLINES (Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
A320-200s; 5 A340s; 3 DHC-8Q400S ALLIANCE AIRLINES (Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
ALLIANCE AIRLINES (Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
(Australia, formerly Flight West Airlines) Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
Fokker 100 RR Tay 560/15 2 On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
On Order: 4 Fokker 100s ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 2 2 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
ARCHANA AIRWAYS (INDIA) LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
LET L-410 UVP-E Walter M601E-21 4 On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
On Order: 1 LET L-410 UVP-E; 2 Fairchild Dornier 328-100s ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s A330-300s
ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
ARIANA AFGHAN AIRLINES (Afghanistan) B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B747-200 2 B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B727-200 6 A300B4 3 ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
ASIANA AIRLINES B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B747-400 GE CF6-80C2B1F 2 B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B747-400 Combis GE CF6-80C2B1F 6 B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B747-400F GE CF6-80C2B1F 5 B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B767-300/ER GE CF6-80C2B2F 12 B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B767F 1 B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B777-200/ER PW 4090 4 B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B737-400 CFM56-3C1 22 B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
B737-500 CFM56-3C1 3 A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
A321-100/200 IAE V2530-A5 10 On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
On Order: 2 B747-400Fs; 6 B777-200/ERs; 8 A321-100/200s; 3 A330-200s; 3 A330-300s
A321-100/200s; 3 A330-200s; 3 A330-300s
ACIAN CRIRIT (DI III :)
ASIAN SPIRIT (Philippines)
YS-11A-500 RR Dart 543-10 5
LET 410 Walter M601E-21 2

2



CASA CN235

DASH 7

Aircraft	Engines	No.
AUSTRALIAN A	IRLINES	
B767-300ER	CF6-80C2B6	6
BALI AIR		
B737-200/Adv		3
BANGKOK AIR	WAYS (Thailand)	
	10 PWC PW124B/127/	F 8
Leased in: 9		
B717-200 Leased in: 2		4
On Order: 4 ATR7	2-500s	
BATAVIA AIR (Ir	ndonesia)	
F-28 4000	ιασποσια,	1
B737-200/Adv		4
B737-400		3
BAYU INDONES	SIAN AIR	
B737-200/Adv		1
BERJAYA AIR (Malaysia)	
BN-2 Islander	Lyc IO-540 KIB5	1
Y-12	PWC PT6A-27	1
Challenger 601-3R	R GE CF34-3A1	1
DHC-7	PWC PT6A-50	4
BIMAN BANGL	ADESH AIRLINES	
B737-300		2
DC 10-30	GE CF6-50C2	6
A310-300 Leased in: 2	P&W PW4156A	4
F28-4000	RR Spey 555-15P	3
BAe ATP	PWC PW126	2
ROUPAO INDO	NESIA AIRLINES	
B737-200/Adv	P&W JT8D-15	6
Leased in:		
F28-4000		2
HS 748-2A	RR Dart 534-2	3
HS 748-2B	RR Dart 536-2	1
IPTN 212-100		3
MD 82		3
CATHAY PACIF		
B747-400	RR RB211-524G/H	19
Leased in: 17 B747-400F	RR RB211-524G2	5
B747-400F Leased in: 1	NR RD211-024G2	0
B747-200F	RR RB211-524D4	6
Leased in: 1		•
B777-200	RR Trent 800	5
Leased in: 4		
B777-300	RR Trent800	7
Leased in: 7	DD Tropt 500	_
A340-600 A340-300	RR Trent 500 CFM56-5C4	3 15
Leased in: 15	O1 19130-304	10
A330-300	RR Trent 772	21
Leased in: 18		
On Order: 3 B777 300s (2003-04)	-300s (2003-04); 2 A330)-



D737 200		J
DC-9-41	P&W JT8D-9A/7B	16
Leased in: 10		
CHINA AIRLINI	ES (Taiwan)	
B747-400	P&W PW4056	13
Leased in: 9		
B747-400F	GE CF6-80C2B1F/5F	14
Leased in: 2		
B747-200F	P&W JT9D-7A/7Q/7R4	G2/
Leased in: 1		
B737-800	CFM56-7B26	11
Leased in: 5		
A300-600R	P&W PW4158	12
Leased in: 5		
A340-300	CFM56-5C4	6
A330-200	PW4168	2
Leased in: 2		
On Order: 4 B747	7-400s; 7 B747-400Fs; 2	
B747-200Fs; 2 B7	37-800s; 12 A330-300s	
On Option: 6 A330	0-300s	

CEBU PACIFIC AIR (Philippines)

B757-200

CHINA EAST	ERN AIRLINES (Shangh	nai)
A340-600		2
A340-300	CFM56-5C4	5
A300-600R	GE CF6-80C2A5	10
Leased in: 3		
A320-200	CFM 56-5B4	25
Leased in: 4		
A319		10
B737-700		11
B737-300		6
Leased in: 1 SA	NLE	
B737-200/Adv		3
MD-82	P&W JT8D-217A	3
MD-11	P&W PW4460	3
MD-11F	P&W PW4460	3
MD-90		9
On Order: 3 A3	40-600s; 5 A340-300s;	19

A320-200s

	CHINA CARO	GO AIRLINES	
3	MD 11S		3
16			
		THERN AIRLINES (Sheny	_
	MD-90	IAE V-2525-D5	13
	MD-82	P&W JT8D-217A/C	23
13	A300-600R		6
		WAS Leased out: 2	
14	A321		6
	On Order: 4 A3	321s	
i2/	CHINA NOD	FUWERT AIDLINES (View	.\
		THWEST AIRLINES (Xian	
11	A300-600R	GE CF6-80C2A5	3
		ECAS Leased out: 1	_
12	A310-200	P&W JT9D-7R4E1	3
	Leased in: 3	051450 554	
6	A320-200	CFM56-5B4	15
2	Leased in: 2	. ALE 500D 5	_
	BAe 146-100	Lyc ALF 502R-5	3
	Leased in: 1	1 15505 411	_
	BAe 146-300	Lyc LF507-1H	7
	CHINA SOU	THERN AIRLINES (Guang	77hou)
	B747-400F	ITIERN AIREINES (Guariç	3
_	B777-200/ER	GE90-76BG01	9
2 5	Leased in: 8	GL90 70DG01	3
5 10	B757-200	RR RB211-535E4	18
10	Leased in: 15	NIN ND211 000L4	10
0E	B737-300	CFM56-3C	27
25	Leased in: 13	01 14100 00	21
10	B737-500	CFM56-3C	12
11	Leased in: 7	01 14100 00	12
6	B737-800	CFM56	8
О	A320-200	IAE V2527-A5	20
2		Leased out: 2	20
3	A319-100	=04304 0411 2	4
3		777-200/ER; 8 B757-700s;	•
3	14 B737-800s	, , , , 200/ER, 0 D/0/ /003,	
3	1.107070003		

Leased in: 5 GECAS (3) Leased out: 2

CHINA SOUTHWEST AIRLINES (Chengdu) B757-200 RR RB211-535E4

Fleet Census

				_				
Aircraft	Engines	No.	Leased in: 1			INDONESIA A	IRLINES	
	g		MD-11F	GE CF6-80C2D1F	9	B747-100B/SR		1
B737-300	CFM56-3B1/B2	14	Leased in: 2	0.2 0.1 11 11 11 11	_	B727-200F/Adv		2
Leased in: 5			MD-90	V2500-D5	1			
B737-600	CFM56	6	A330-200		2	1	IR TRANSPORT	
B737-800	CFM56-7	6	On Order: 3 B77	7-200LRs (2005-08); 4 I	3777-	Fokker 50		2
CHINA IINITER	AIRLINES (Beijing)		300LRs (2005-08	s); 8 A330-200s		Fokker 27		3
B737-300	CFM56-3B1	8	On Option: 8 B7	77-300LRs (-200/-300)		BAE 111 400		1
Tu-154M	Sol D-30KU-154	16				BAE 111 475		1
II-76M	OOI D OOKO 104	14	EVEREST AIR			ISLANDS NAT	IONAIR (Papua New G	iuinea)
	GE CF34-A-1A/3A	5	Fairchild Dornier 2	28-100 Gar TPE331-5-25	2D 2	DHC-6-300 Twin	Otter PWC PT6A-27	3
Canadan Crig200	GE OF OTTAL TABLE	Ŭ	FAID INC /I	\		EMB-110	PWC PT6A-34	3
CHINA XINHU	A AIRLINES (Beijing)		FAIR INC (Japa Bombardier CRJ 1	•	2	J-AIR (Japan)		
B737-300	CFM56-3B1/2	6	Bombardier CRJ 1		2		Gar. TPE331-12UHF	₹ 1
Leased in: 1 Bou	llioun		Bombardier City	OOLIX	2	Leased in:	. Gai. 11 L331-120111	\ 1
B737-400	CFM56-3	3	FAR EASTERN	AIR TRANSPORT (Tai	wan)	Canadair RJ 200E	-R	6
Leased in: 3 Bou	illioun		B757-200	P&W PW2037	7			
			Leased in: 2 Lea	sed out: 2		JAGSON AIRL	, ,	
	NG AIRLINES (Urumqi)	_	MD-82	P&W JT8D-217C/219	4	Fairchild Dornier 22	8-201 Gar. TPE331-5-252	D 3
B737-300	CFM56-3	2	Leased in: 4			JALWAYS		
B737-700	CFM-56	4	MD-83	P&W JT8D-219	5	B747-300	JT9D-7R4G2	2
B757-200	RB211-535-E4	9	MD-90	P&W PW2037	2	Leased in: 1, JAL		_
Leased in: 3	HK-86	3				DC10-40	P&W JT9D-59A	2
ATR-72-500	ПК-00	5		R INTERNATIONAL (NZ	,	Leased in: 4 Japa	an Airlines	
A110-72-300		3	B737-300	CFM56-3C1	4	· ·		
CHINA YUNNA	N AIRLINES (Kunming)		Leased in: 4			JAPAN AIR CO	MMUTER	
B737-300	CFM56-3B1/3C1	13	GARUDA INDO	ONESIA		YS-11A-500	RR Dart 542-10J/K	11
Leased in: 4 AW/	AS (3), GECAS (1)		B747-400	GE CF6-80-C2B1F	3	Leased in:		
B737-700	CFM 56	4	B747-200	P&W JT7D-7Q	4	Saab 340B	GE CT7-9B	10
B767-300ER	RR RB524-211	3	B737-300/400/50		36	Dash 8-Q400		4
Canadair CRJ200		6	DC10-30	GE CF6-50C	5	On Order: 1 Das	h 8-Q400	
			A330-300	RR Trent 700	6	JAPAN AIRLIN	ES GDOUD	
DRAGONAIR (H	O O		Fokker F28	RR Spey 555-15	5	B747-400	GE CF6-80C2B1F	42
A320-200	IAE V2500-A1	8	Leased in (total fl			Leased in: 15	GE 010 0002B11	
Leased in: 6 ILFC		4	On Order: 18 B7	37-700NGs; 6 B777s		B747 Classics	P&W JT9D	22
A321 Leased in: 4	IAE V2500	4	On Option: 3 A3	30-300s		Leased out: 6 JA	A, JALways	
A330-300	RR Trent 772	9	ΗΛΙΝΛΝ ΛΙΦΙΙ	NES (Haikou, China)		B747 Freighters	P&W JT9D	7
Leased in: 4 ILFO		3	B737-300	CFM56-3C1	7	B767-300	P&W JT9D-7R4D/GE	E CF6-
B747-300F	PW JT9D-7R4G2	3	i i i i i i i i i i i i i i i i i i i	C, 2 Communication Ban	-	80C2B4F	19	
	0-200s (2004-05); 2 A32	_	China	o, 2 Communication Ban	01	Leased in: 9 Le	ased out: 3 JAA	
(2003); 1 A330-3	` ,,		B737-400	CFM56-3C1	7	B767-300ER	CF6-80C2B7F	5
(====,, =========	(,		Leased in: ILFC			B767-200	P&W JT9D-7R4D	3
DRUK-AIR (Bhu	utan)		B737-700		3	B777-200/ER	P&W PW4077/PW40	90 18
BAe 146-100	Lyc ALF502R-5	2	B737-800	CFM56-7	13	Leased in:		
			Leased in:			B777-300	P&W PW4090	5
	ES (New Zealand)		B767-300		3	B777-300ER	GE90-115B	-
	P & W PT6A-67D	16	Fairchild Dornier 3	28JETS P&W	19	B737	CFM56-3C-1	23
Leased in: 16			Learjet 60	P&W PW305A	1	MD-11	P&W PW4460	5
ELBEE AIRLIN	EC (In dia)		Beechjet 400		1	MD-90	V2525-D5	16
F27-200	RR Dart 552-7R	2	Raytheon Hawker	800XP	6	MD-81	JT8D-217A/C	18
F27-200	RR Dail 552-7R	2	Gulfstream 200		2	MD-87	JT8D-217A/C	8
EVA AIR (Taiwa	n)		On Order: 1 Gulf	stream 200		A300-600R	PW4158	22
B747-400	GE CF6-80C2B1F	5	INDIAN AIRLIN	NES		A300B2/B4 DC 10-40	CF6-50C2R P&W JT9D-59A	12 12
B747-400 Combi	GE CF6-80C281F	10	A300B4/B2	GE CF6-50C2/C	4	YS-11	RR Dart MK542-10J	
Leased in: 12 of t	the 15 B747s		Leased in: 2			SAAB 340B	GE CT7-9B	14
B747-400F	GE CF6-80C2B1F	4	A320-200	IAE V2500-AI	30	Dash 8-Q400	PW150A	2
B767-300ER	GE CF6-80C2B6F	4	Leased in: 8			CRJ-200	CF34-3B1	5
Leased in: 4			B737-200	P&W JT8D-17A	10	JS-31	TPE331-10	1
B767-200	GE CF6-80C2B2F	4	Dornier 228-200	TPE331	2	1	7-400s; 10 B767-300E	-
B757	PW2037	2	Indian Airlines Boa	ard has recommended the	e pur-	i	77-300ERs (2004-08);	
MD-11	GE CF6-80C2D1F	3	chase of 43 Airbu	s aircraft, A321; A320; A	319s	1	A Trainers; 2 Bonanza 36	
							-	

Aircraft	Engines	No.	A330-300	P&W PW4168/A	15	MANDARIN A	IRLINE
JAPAN ASIA	AIDWAYS		A330-200	P&W PW4168	3	B737-800	CFN
B747-300	P&W JT9D-7R4G2	1	A300-600/R	P&W PW4158	11	Saab 340	GE
Leased in: Japa			Leased in: 3			Fokker 50	P&V
B747-200	P&W JT9D-7A/7Q	4	MD-11F	P&W PW4460	4	Fokker 100	RR
Leased in: 3, Ja		-	Fokker 100	RR Tay 650-15	7	Fairchild Dornier	
B767-300	P&W JT9D-59A	1	Leased in: 2			Gar TPE331-5A-	252D
Leased in: Japa			i	7-400Fs (2003-04); 4 E			
B767-300	CF6-80C2B4F	3	·	00 (2003); 6 B737-900s	3	MEKONG AIR	RLINES
Leased in: 2, Ja		3	(2003-04); 1 A33	30-300 (2003)		B737-500	
Leaseu III. 2, Ja	pan Allilles					Leased in: ILFC	
JAPAN EXPR	FSS (IFX)		LAO AIRLINES	5		MEDDATINUC	ANTAR
B737-400	CFM 56-3C1	6	A320-200		1	MERPATI NUS	
Leased in: 6, Ja		J	ATR72-200	P&W PW127	2	B737-200/Adv	P&V
LCuscu III. 0, se	parraininos		Y-7-100C3	WJ5A-1	3	B737-400	
JAPAN TRAN	SOCEAN AIR		Leased in: XAC			Fokker 100	RR T
B737-400	CFM56-3C1	15				F28-4000	RR S
Leased in:			LION AIRLINE	S (Indonesia)		F27-500	RRI
			MD-11 82		12	CASA 212	Gar.
JET AIRWAYS	(India)		MD-11 83		1	Twin Otters	
B737-400	CFM56-3C1/3B1	5	MALAYSIA AII	DUNEC		MOUNT COO	K AIDI
Leased in: 2 Le	ased out: 2			_	CO 17	MOUNT COOL	N AIRL
B737-700	CFM56-7B22	12		W PW4056/GE CF6-80	C2 17	ATR 72-500	PVV
Leased in: 4			Leased in: 7	DD DD044 504D4	•	Leased in: 10	FD 50 5
B737-800	CFM56-7B24	13	B747-200F	RR RB211-524D4	2	On Option: 1 AT	IR 72-5
Leased in: 2			B777-200	RR Trent 890B	15	MIAT MONGO	NIAN /
B737-900	CFM56-7B24	2	Leased in: 13	051450.004		B727-200	P&V
ATR 72-500	PW127F	8	B737-400	CFM56-3C1	39	A310-300	1 00 V
Leased in: 8			Leased in: 4	05115155		Y-12	PW
			B737-700BBJ	CFM56-7B26	1	1-12 An-24	lvch
KOREAN AIR			A330-300	P&W PW4168	9	An-26	lvch
B747-400	P&W PW4056	26	A330-200		3	An-30	lvche
B747-400F	P&W PW4056	11	Fokker 50	PWC PW125B	10	Mi-8	TVD
B747-300	P&W JT9D-7R4G2	1	DHC	PT6A-27	6	IVII-8	טעו
B747-300F	P&W JT9D-7R4	1	On Order: 2 B74	7-400s; 2 B777-200s		MYANMAR AI	DWAY
B747-200F	P&W JT9D-7A/Q/7R4	1G2 -	BAANDALA AII	NINEC (L. L)		F28-4000	RR
B777-200	P&W PW4090	8		RLINES (Indonesia)	10	F28-4000 F28-1000	RR
B777-300	P&W PW4090	4	B737-200/Adv	P&W JT8D-15/17	13	F27-600/RF	RRI
B737-800	CFM56-7B24	14	B737-400		1	F27-600/RF	RRI
			Leased in:			F27-400	KK I



MANDARIN AI		
B737-800	CFM56-7B26	3
Saab 340	GE CT7-9B	2
Fokker 50	P&W PW125B	7
Fokker 100	RR Tay 65-15	2
Fairchild Dornier 2		
Gar TPE331-5A-2	252D	4
	LINES (Cambodia)	
B737-500		1
Leased in: ILFC		
MEDDATI NUC	ANTARA AIRLINES (Indone	
	P&W JT8D-15	
B737-200/Adv	Pavv JIOD-10	7
B737-400	DD T 050 45	3
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)	
	PWC PW127F	10
	PVVC PVV 12/F	10
Leased in: 10	70 500	
On Option: 1 ATI	₹ 72-500	
MIAT MONGO	I IAN AIRI INES	
B727-200	P&W JT8D-9A/17	2
A310-300	TOD SATT	1
Y-12	PWC PT6-27	5
An-24	lvchenko Al-24	9
An-26	lychenko Al-24BT	3
An-30	lvchenko Al-24BT	1
Mi-8	TVD-117A	3
IVII-O	IVD-II/A	3
MYANMAR AII	RWAYS	
F28-4000	RR Spey 555-15P	3
F28-1000	RR Spey 555-15	1
F27-600/RF	RR Dart 532-7	6
F27-400	RR Dart 532-7	1
F27-100	RR Dart 514-7	1
127 100	THE BUILT OF T	•
NECON AIR (N	epal)	
HS748	RR Dart 533/6-2	3
ATR-42	Systems	2
	•	
NATIONAL JET	SYSTEMS (Australia)	
BAe RJ70		2
DHC 8 100/200/	300	3
BAe Jetstream J32	2	1
	O AIRLINES (Japan)	
B747-200F	GE CF6-50E2	7
Leased in: 2		
B747-100SRF	GE CF6-50E2	1
ORIENT THAI		
B747-200		3
B747-100		1
Lockheed L1011		2
ODIGIN DACIE	C (Now Zoolond)	
ORIGIN PACIF	(New Zealand)	0
ATR 72-210		2

DHC8 100 Fairchild Metro

Fleet Census

Aircraft	Engines	No.
Jetstream Jetstream 41	31/32EP	6 5
PACIFIC AIRLI	NES (Vietnam)	
A310-300 A321-100		1
B737		1
MD83		1
PAKISTAN INTI	ERNATIONAL AIRLINE	S
B747-200	P&W JT9D-7A	6
B747-200 Combi		2
B747-300	RR RB211-524C2	6
Leased in: 5 Cath B737-300	CFM56-3B1	7
A300-B4	GE CF6-50C2	8
Leased in: 2	GE 0. 0 0002	J
A310-300	GE CF6-80C2A8	6
F27-200/400	RR Dart 532-7	11
DHC-6-300	PWC PT6A-27	2
On Order: 3 B777	'ERs	
PB AIR (Thailand	d)	
EMB 145		2
EMB 170		2
On Order: 1EMB	170	
PELANGI AIR (Malavsia)	
Fokker 50	PWC PW125B	2
Fairchild Dornier 228	3-202 Gar. TPE331-5-252	3
DELITA ALD CE	DV((CE /L :)	
PELITA AIR SE Fokker 100	RR Tay 650-15	6
Leased in: GECA	•	O
Fokker 50	RR Tay 620-15	3
F28-4000	RR Spey 555-15P	8
Leased in: 1 GEO	CAS	
DHC-7-103	PWC PT6A-50	6
CASA C212-100	Garrett TPE331-511C	2
BAe 146-200	Lyc ALF502-R5	1
BAe Avro RJ85		1
PHILIPPINE AI	RLINES	
B747-400	GE CF6-80C2B1F	4
Leased in: 4		
B737-300	CFM56-3B1/3B2/3C1	7
Leased in: 6	OFMER OF 40004	•
B737-400 Leased in: 3	CFM56-3B1/3B2/3C1	3
A340-300	CFM56-5C	4
Leased in: 4	OI 10100-00	4
A330-300	CF6-80E1A2	8
Leased in: 8		
A320-200	CFM56-5B4/P	3
Leased in: 3		
PHUKET AIR (T	hailand)	
B737-200 Adv		4
YS-11-200		1
YS-11-500		1
DUIANESIVA	AIRLINES (Western Sam	nos)
B737-300	CFM56-3C1	10a)
2707 000	C. 14100 001	



2

BN-2A Islande	r Lyc O-540-E4C5	1				
QANTAS AI	RWAYS					
(including subs	sidiaries Qantas Link, Eastern					
Australia Airline	es, Southern Australia Airlines	&				
Qantas New Z	ealand)					
B747-400	RR RB211-524G	24				
B747-400ER	CF6-80C2B5F	6				
B747-300	RR RB211-524D4U	6				
B767-300/ER	RR211-524H/GE CF6-80C2B6	25				
Leased in: 3						
B767-200/ER	RR211-524H/GE CF6-80C2B6	5				
B737-300	CFM56-3C1	13				
B737-400	CFM56-3C1	22				
Leased in:						
B737-800	CFM56	19				
B717-200	BRW715	14				
A330-200	CF6-80E1	4				
BAe146-300/200/100ALF502R-5 1						
DHC-8-300/200/100						
PW150/PW123/PW120A 44						

CFM56-7B

PWC PT6A-27

Leased In: B737-800

DHC-6-300

REGIONAL EXP	PRESS, AUSTRALIA	(REX)				
(formerly Hazelton a	and Kendell Airlines)					
Saab 340 GE CT7						
Fairchild Metro 23s	TPE 331-12	7				
ROYAL BRUNE	AIRLINES					
B757-200ER	RR RB211-535-E4	2				
Leased out: 1						
B767-300ER	P&W PW4056	6				
B767-300ER	GE CF6-80C2	2				
A319	V2524-A5	2				
On Order: 2 A320	s					

On Order: 2 B747-400ERs (2003-06); 4 B737-800s; 12 A380s (2006-2011); 3 A330-200s (2003-05); 6 A330-300s (2003-05)

ROYAL NEPAL	AIRLINES	
B757-200/C	RR RB211-535E4	2
DHC-6-300	PWC PT6A-27	8
Pilatus PC6-B2H4	PWC PT6A-27	1
ROYAL TONGAN	I AIRLINES	
B757	RR RB211-535A4	1
Shorts 360		1
	OMMUTER (Japan)	
DHC-8-100		4
SAAB 340		1
On Order: 2 DHC-	8-100s	
	E RAYA AIR CHARTER (Indon	
C-212-100	Garrett TPE331-5-251C	2
F-27-200	RR Dart-7 MK532-7	1
Leased in: 1		
Piper PA31-350	Lyc TIO-540-J2BD	1
CEAM DIED AIR	NAVC (CIII-)	
	RWAYS (Cambodia)	
ATR 72-200		1
SHAHEEN AIR	(Pakistan)	
B737-400	(* 5)	1
Leased in:		·
SHANDONG All	RLINES (China)	
B737-300	CFM56-3B1/3B2	11
Leased in: 2		
Saab 340A		5
Leased in:		
Canadair RJ200ER	/LR	10
Cessna Caravan		5
Bombardier Challer	nger 604	2
	dair RJ700s; 2 Bombardie	
Challenger 604s (2		•
On Option: 30 Ce		
Ci. Option. 00 Ce	Jaiavaii	

SHANGHAI AIRLINES (China)

P&W PW2037

P&W PW4056

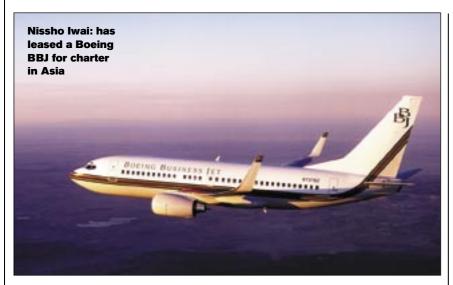
7

5

B757-200

B767-300/ER

Aircraft	Engines	No.	SOLOMON AIR	LINES		DHC8-200		1
B737-700	CFM56-381	8	DHC-6-310	PWC PT6A-27/34	2	DHC8-311	PW 123	12
Leased in: 3	CLINI20-301	0	DHC-5-310	PWC PT6A-27	1		3-212 Garrett TPE 331-5A	1
B737-800		5	BN-2A-8/9 Islander	r Lyc O-540-E4C5	2	BN-2A-26	AVCO Lyc 0-540	3
Canadair CRJ200	ER/IR	3	CDU ANIZAN AL	DUNEC		II I AND AIDIII	NEC (Taireaux)	
Hawker 800		1	SRILANKAN AI			U-LAND AIRLIN		
	57-200s (2004-05); 3 I		A340-300	CFM56-5C2	3	MD-82	P&W JT8D-217C	2
700s; 5 ARJ 21s	(, ,		Leased in: 3 A330-200	RR Trent 700	4	Leased Out: 1 Vie	tnam's Pacific Airlines	
,			Leased in: 4	KK Helli 700	4	VANAIR (Vanua	hu)	
SHANTOU AIR	RLINES (China)		A320-231	IAE V2500-A1	2	DHC-6-310	PWC PT6A-27	5
B737-300		2	Leased in: 2	IAL V2000 AT	2	BN-2A Islander	Lyc O-540-4C5	2
			Antonov AN12F		1		,	
	IRLINES (Chengdu)	0			·	VIETNAM AIRL	INES	
B737-300	CFM56-3B1/2/C1	6	STAR AIR ASIA	(Indonesia)		B777-200ER		3
B737-700 B737-800	CFM56 CFM56	10 2	B737-200/Adv		4	Leased in: 2		
B737-800	CLINIOO	2				B767-300ER	CF 6	7
SICHUAN AIR	LINES (China)		SUN AIR (Fiji)	DI4/0 DT4 1 4 5		Leased in: 7	051454 -5 :	, .
A320-200	IAE V2527-A5	7	DHC-6-210	PWC PT6A-20	2	A320-200	CFM56-5B4	10
Leased in:			DHC-6-310	PWC PT6A-27	1	Leased in: 10		_
A321-200	IAE V2500	2	BN-2A Islander	Lyc O-540-E4C5	4	A321		3
EMB 145		5	BE 65	Lyc 10-720	1	Leased In:	Tov MK 600 15	0
Y-7-100	WJ5A-1	5	On Option: 1 DHC	J-U-31U		Fokker 70 ATR 72-202	Tay MK 620-15 PWC PW124	2 5
			SUNSTATE AIRLI	NES (Queensland, Australia	a)	Leased in: 1	FVVC FVV 124	5
SILKAIR (Singa			Shorts 360-300	PWC PT6A-65R	4	ATR 72-500		3
A320-200	V2527-A5	6	!	00 PWC PW120A	12		7-200ERs (2003-05);	3
A319-100	V2524-A5	4	! ! !			5 A321s	2002113 (2000 00),	
On Order: 6 A32			THAI AIRWAYS	INTERNATIONAL		0710210		
On Option: 2 A3	320-200s		B747-400	GE CF6-80C2B1F	16	VIRGIN BLUE	(Australia)	
SINGAPORE A	VIDLINES		Leased in: 2			B737-300	CFM56-3B1	1
B747-400	P&W PW4056	38	B747-300	GE CF6-80C2B1	2	B737-700	CFM56-7B20/22	21
B777-200	RR Trent 884/892	27	B777-200	RR Trent 870	8	B737-800	CFM56-7B24/26	14
B777-200ER	RR Trent 892	14	Leased in: 4			On Order: 11 B73	37 New Generation	
B777-300	RR Trent 892	8	B777-300	RR Trent	6		(2)	
A340-300E	CFM56-5C4	2	B737-400	CFM56-3C1	10	WUHAN AIRLII		
A310-300	P&W PW4152	9	Leased in: 4 MD-11	GE CF6-80C2D1F	4	B737-300 B737-800	CFM56	6 2
On Order: 10 B7	777-200s; 10 A380-10	00s; 1	į	W PW4164/4167/4168A	12	Leased in: 3 ILFC	•	2
A340-300E; 5 A3	340-500s		Leased in: 3	W F W4104/410//4100A	12	Y-7-100	, WJ5A-1	4
On Option: 9 B7	'47-400s; 22 B777-20	0s; 15	A300-600/R	GE CF6'P&W4158	21	Y-5	HS 5	2
A380-100s; 5 A3	40-500s		Leased in: 5	GE 01 01 QVV4100	۱ ک	٠٠	.100	~
CINICATOR	NEL INFO ACTOR		ATR72-200	PWC PW124	2	XIAMEN AIRLI	NES (China)	
	AIRLINES CARGO	10	On Order: 2 B747		_	B757-200	RR RB211-535E4	7
B747-400F	P&W PW4056	13				B737-200/Adv	P&W JT8D-17A	2
On Order: 4 B74	·1-100FS		TRANSASIA AII	RWAYS (Taiwan)		Leased in: 2 GEO	CAS	
SKIPPERS AV	VIATION (Australia)		A320	IAE V2500-A1	3	B737-300		4
DHC-8-100	2222 (2000 0000)	2	A321-131	IAE V2500-A5	6	B737-500	CFM56-3C1	6
Emb 120ERJ/ER		5	ATR 72 500/200		10	Leased in: 4 ILFC		
Fairchild Metro 23		6	On Order: 1 ATR 7	72 500		B737-700	P&W JT8D	10
Cessna 400 Serie		8	TDANCARIE	D CEDVICES (Malanis)		VANCON AIDI	INEC (Dumes)	
				R SERVICES (Malaysia)		YANGON AIRL	INES (Burma)	_
SKYMARK All	RLINES (Japan)		B737-200C/Adv	P&W JT8D-9A	2	ATR 72-200		2
B767-300ER		3	Leased in: Lease B737-200F	P&W JT8D-9A	5	ZHEJIANG AIR	LINES (China)	
CKVNET ACIA	(1)		Leased in: 1 Leas		J	A320-200	CFM 56-5B4-2	5
SKYNET ASIA	(Japan)	^	B727-200F/Adv	P&W JT8D-15	4	Leased in: 2		,
B737-400		2		an I PWC PT6A-114	2	A319		3
			, Josepha Grand Galavi	1 1101 10/1117	-	DHC Dash-8-300	PWC PW127	3
SKYWEST AIR	RLINES (Australia)					Leased in: 1 AGE		
Fokker 50	PWC PW125B	5	UNI AIR (Taiwan					
Fokker 100		1	MD-90-30	IAE V2525-D5	10			
			Leased in: 7					
			1		i	'		



Culture shift?

Bid to educate Japanese executives on the effective role of business jets

By Daniel Baron in Tokyo

n September, Japanese trading company, Nissho Iwai, began marketing charter services using business jets, including a BBJ on lease from Boeing. The aircraft will be parked in Guam, with operation and maintenance conducted by ACI Pacific Co., which is already based on the island. The joint partnership began offering the aircraft in October under the name ShareJet.

The launch of the joint venture marks the first time a BBJ has been based full-time in the region and used exclusively for charters and block-hour sales. A Malaysian operator had been marketing its own Kuala Lumpur-based BBJ.

However, that effort appears to have faded away, possibly due to heavy usage by the originally intended user, the Malaysian royal family.

In contrast to other developed countries, Japanese involvement in corporate aircraft charters and fractional ownership has been minimal to say the least.

Factors such as lack of landing slots at key airports, lack of parking space and fixed-base operations (FBOs) and high costs – double those of other countries – have for the most part kept out business jets from Japan altogether.

This is due, in part, to a culture that historically has valued the appearance of self-restraint, explained Yuji Nohara, a veteran of Nissho Iwai's aerospace division and also vice-president for sales and marketing at ShareJet.

This is not to imply that business aircraft have had no presence in the country. There are wealthy Japanese individuals and corporate executives using business jets, albeit out of sight of both the general public and, apparently in some cases,

the tax authorities.

Nohara said Share-Jet would target both Japanese and foreign corporations and wealthy individuals.

For its part, Boeing is no doubt eager to support the new venture. The manufacturer, which employs Nissho Iwai as an agency

for commercial aircraft sales to Japanese carriers, is keen to see more exposure for the BBJ in Asia, where sales have lagged behind North American and European markets.

As for location, Nohara explained the choice of Guam allowed the closest possible proximity to Asia while operating with U.S. registration, a necessity due to lack of Japan Civil Aviation Bureau-certified flight

crews, operating procedures and overseas maintenance centres.

Acknowledging the potentially high cost of aircraft placement for a charter customer, Nohara added that Nissho Iwai and ACI Pacific would eventually look for a second base, most likely in southern Southeast Asia, in order to attract interest from the Australian market as well.

Nohara said ShareJet is aiming for 600 hours of flight time for the BBJ during the first year, with 800 hours considered a "major success." Nissho Iwai has set a goal of five years, he added, to fully realise the potential of the venture.

It will not be the first Japanese company to offer a fully-fledged charter service. Tokyo-based Aviation Business International (ABI) was the pioneer in the field. Its president, Toshio Iwata, who is managing director of the Japan Business Aviation Association (JBAA), spent 30 years at Nissho Iwai before going solo.

For more than six months, ABI has been marketing a charter service under the name of Royal Flight Service, using the aircraft of several offshore operators such as Rainbow Jet, the corporate charter subsidiary of Jinan-based Shandong Airlines that owns several 12-14 seater Challenger 604s.

"Japanese aviation law has hardly changed in the last 50 years," said Iwata, referring to outdated regulations that have hindered the expansion of business aviation in the country.

Slowly but surely the situation is beginning to improve, Iwata said. He pointed to

a new China-Japan aviation agreement signed in August that finally allows free movement between the two countries of chartered jets seating up to 19 persons. The previous agreement did not include rights for small aircraft charters, he explained.

As for potential markets, Iwata has his sights

on business travellers needing to reach Asian destinations, particularly in China, that scheduled airlines do not serve with sufficient frequency. "To this end we, in conjunction with the JBAA, have begun a campaign to educate Japanese executives to view corporate jets as a business tool that can save them a lot of time," he said.

Business jet barriers in Japan

- Lack of landing slots at key airports
- Lack of parking space
- Lack of fixed-base operations
- High costs double those of other countries

Banking on China

Laoag, Philippines

Application submitted

Meixian, Guangdong

Wenzhou, Zhejiang

Nanning, Guangxi

Jinan, Shangdong

But it's early days for CR Airways

By Charles Anderson

n the side of a main slip road leading to Hong Kong International Airport (HKIA), among the advertising boards occupied by the heavy hitters of the aviation industry, sits a lone hoarding featuring the single Bom-

bardier CRJ-200 in service with the Special Administrative Region's (SAR) fledgling third carrier, CR Airways.

"Discover the Undiscovered Asia" is the tagline. In the background you can also make out a Challenger 604, although there is no sign of the company's third aircraft, a Sikorsky S762+ helicopter. The CRJ began scheduled charter operations to Laoag in the Philippines in June, the Challenger is available for business charter and the Sikorsky, the management admits, is not doing much at the moment after kicking off the business in 2002.

These are very early days for CR Airways. It's easy, when looking at the might of Cathay Pacific Airways and the continuing growth of Dragonair, to dismiss its establishment as a development of little importance.

Talk to Robert Yip its chairman and currently 100 per cent owner, however, and a business plan emerges that looks at the kind of modest, continuing growth that could be sustainable as China's aviation regime opens further and if Hong Kong's position as a hub for the Pearl River Delta and further into the mainland, strength-

But first Yip, who originally made his money in the garment industry in Hong Kong before moving into property and Internet portals, had to take moves to ensure potential problems at his Hong Kong main board-listed investment company, China



Rich Holdings, did not interfere with that aim.

China Rich Holdings, which Yip also chairs and in which he has a 37% stake, has not declared a profit in two years and at press time had five pos-

sible court actions outstanding against it or its subsidiaries. The company now plans to de-list, it said in a statement, creating a new listed holding company to protect CR Airways - the CR stands for China Rich from "potential disruptions" linked to China Rich Holdings and to inject extra cash into the airline.

"In the next 20 or 30 years most of the world's business will be directed China's way," said Yip, when asked about risks involved in starting up a business with notoriously thin margins. "Even though Dragonair is flying to China regularly, it has over 1.28 billion people and just one province is comparable to entire countries elsewhere. They have only opened around 150 airports so far, but it will go up to about 300."

Yip anticipates China residents, now free to come to Hong Kong, will use it as a base for further travel. Ease of access to the SAR from elsewhere globally will also encourage tourists and business people to fly on to the mainland from HKIA.

"I don't think this pattern will change for at least the next 30 years," he said. "Now that we are starting another Hong

> Kong airline, it will be very useful for people with those intentions. I don't think investing in this particularly airline is risky at all. Also, we don't have much competition."

> Applications are gazetted for four routes to China - Meixian in Guangdong, Wenzhou in Zhejiang, Nanning in Guangxi and Jinan in Shandong. Further destinations in the Philippines and southeast Asia are being explored. A second CRJ-200 is due by the end of the year and 2003 should see three scheduled routes in place with scheduled charters serving other points.

> An increase to eight, possibly as many as 10 routes, mainly into China, using 10 CRJ-200s or larger aircraft is planned by Yip within five years, to take

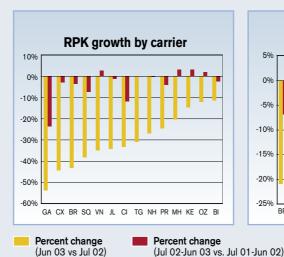
advantage of approved routes unused by Dragonair. There are plenty to choose from with Dragonair flying to only 19 of 48 Chinese cities named under its agreements with Beijing. And, when the basics are in place, a push will be made on the business jet front by acquiring more Challenger 604s.

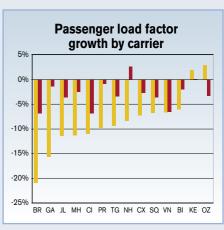
A 49% stake was secured at the beginning of this year in Shandong Rainbow Business Aircraft, a subsidiary of Shandong Airlines, which holds the remaining 51%. Rainbow's business jet company licence, one of only two in China, helps considerably in that area while Shandong can supply surplus CRJ-200s from its fleet if needed.

A possible tie-up between HKIA and Shenzhen airport for domestic flights does not appear to worry him, nor does talk of Air Macau becoming a low-cost carrier. The latter is not a path CR Airways plans

Direct flights and value-for-money pricing are its main selling points. "There are many gaps in the industry, which is why we are not a low-cost airline," said Yip. "Because we are the only airline going to these places, we don't need things like discounted fairs to attract people."

AIRL	INE CODES
BI	Royal Brunei Airlines
BR	EVA Airlines
CI	China Airlines
СХ	Cathay Pacific
GA	Garuda
JL	Japan Airlines
KE	Korean Airlines
МН	Malaysia Airlines
NH	All Nippon Airways
ΟZ	Asiana Airlines
PR	Philippine Airlines
SQ	Singapore Airlines
TG	Thai Airways Int'l
VN	Vietnam Airlines





SARS drop arrested

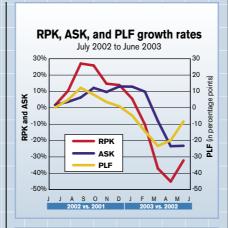
Compiled and presented by **Kris Lim** of the Research and Statistics Department of the Association of Asia Pacific Airlines Secretariat.

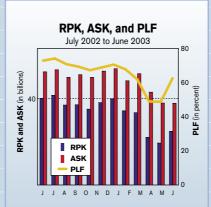
ssociation of Asia Pacific Airlines (AAPA) member carriers' international passenger traffic improved in June, but their collective revenue passenger kilometres (RPKs) were down 32.5% year-on-year following the SARS crisis. The number of passengers carried (PAX), 5.5 million, declined 38.1%.

The figure was a considerable improvement on May when only 4.1 million passengers were recorded, by far the lowest monthly figure in over a decade. Overall capacity, expressed in available seat kilometres (ASKs), declined 23.5%. The passenger load factor (PLF) of 65.7%, although down 8.7 percentage points year-on-year, recovered from two straight months of record lows.

Individually, Cathay Pacific Airways' RPKs declined 44.5%, a considerable improvement over the massive 67.5% drop recorded in May. EVA Air (-43.2%), China Airlines (-33.3%), Singapore Airlines (-38.3%) and Vietnam Airlines (-34.9%) also posted less drastic declines.

The fall in PLF for most member airlines also moderated. The two Korean carriers, Korean Air and Asiana Airlines, bucked the trend and were the only ones to post an improvement in load factor year-





on-year. Four carriers managed a PLF in the 70% range – Asiana Airlines (72.9%), Singapore Airlines (71.8%), Philippine Airlines (71.4%) and Cathay Pacific (70.7%).

CARGO

AAPA international freight traffic, expressed in freight tonne kilometres (FTKs) shrank 1.3% in June, the first decline since February last year. Overall capacity edged up 0.9%. Freight load factor (FLF) fell 1.6 percentage points to 69.7%.

The slowdown had an impact on AAPA members, with only five carriers posting an increase in FTKs in June – EVA Air (11.4%), China Airlines (10.2%), All Nippon Airways (10%), Korean Air (9.5%) and Malaysia Airlines (6.5%) – as opposed to six carriers in May and 10 in April.

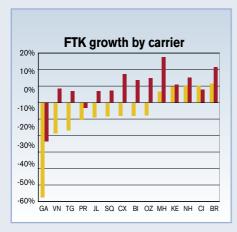
Results of the 12 months to June 30, 2003

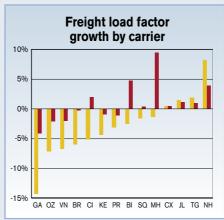
PASSENGER

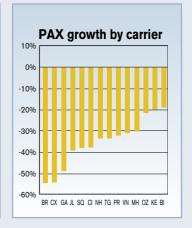
The AAPA consolidated RPKs declined 3.6% for the 12-month period. PAX fell 6.2% year-on-year. Capacity grew marginally 0.7%, which resulted in a load factor of 69.3%, a decline of 3.1 percentage points.

CARGO

AAPA consolidated FTKs increased 11.5% for the 12 months under review. Capacity rose 9.5%, which resulted in a







load factor of 67.9%, an improvement of 1.2 percentage points.

SUMMARY

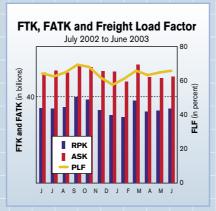
Year-to-date RPKs, affected by the poor results of recent months, fell 18.3% compared to the 2002 corresponding period. Year-to-date capacity declined only 4.1%, which dragged the load factor down by a massive 11.1 percentage points to 63.9%. The first half-year's FTKs, on the other hand, showed a positive growth of 5.2%. The load factor dropped 1.2 percentage points to 66.8% on the back of a 7.1% increase in capacity.

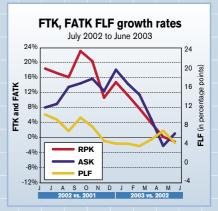
The modest passenger traffic recovery in June versus May gave hope for a better traffic outlook for the remainder of the year. Many AAPA members restored services in anticipation of a rise in demand in the summer season.

The business outlook also has improved. The U.S. economy was expected to pick up in the third quarter with a projected annual GDP growth rate of 3.5%, according to Bloomberg News. This would revitalise the waning export growth from the Asia-Pacific region witnessed over recent months.

E-mail: krislim@aapa.org.my







ROLLS-ROYCE NEWS DIGEST

"Rolls-Royce has won a \$350 million order from Thai Airways International for Trent 500 engines to power eight Airbus A340s."



AAPA MONTHLY INTERNATIONAL STATISTICS

Summary of Consolidated Results (thousands)

2002-3	RPK	ASK	PLF	FTK	FATK	FLF	RTK	ATK	PAX
Jul-02	42,398,522	55,409,545	76.52%	3,500,284	5,148,358	67.99%	7,456,166	10,215,620	9,714
Aug-02	43,885,864	56,363,848	77.86%	3,483,972	5,263,891	66.19%	7,580,274	10,409,895	10,123
Sep-02	39,155,092	52,723,895	74.26%	3,547,914	5,160,898	68.75%	7,204,078	9,986,464	9,014
Oct-02	39,304,575	54,021,467	72.76%	4,025,748	5,476,828	73.51%	7,714,662	10,424,647	9,282
Nov-02	37,133,162	52,622,659	70.57%	3,896,693	5,411,113	72.01%	7,431,531	10,228,207	8,765
Dec-02	40,350,605	55,780,248	72.34%	3,412,854	5,224,033	65.33%	7,176,043	10,322,547	9,386
Jan-03	42,164,204	56,955,320	74.03%	3,175,167	5,208,333	60.96%	7,125,834	10,420,186	9,547
Feb-03	36,307,917	51,036,989	71.14%	3,068,329	4,733,196	64.83%	6,402,145	9,446,000	8,626
Mar-03	35,405,748	54,487,442	64.98%	3,855,555	5,529,579	69.73%	7,195,795	10,525,858	8,413
Apr-03	23,316,893	45,438,886	51.31%	3,322,708	4,961,615	66.97%	5,582,093	9,135,756	4,954
May-03	20,547,549	40,172,793	51.15%	3,369,718	4,913,660	68.58%	5,381,130	8,604,086	4,068
Jun-03	26,260,546	40,003,801	65.65%	3,465,179	4,973,816	69.67%	5,979,535	8,652,666	5,466
TOTAL	426,230,676	615,016,892	69.30%	42,124,120	62,005,320	67.94%	82,229,285	118,371,932	97,358
2002-3	RPK	ASK	PLF	FTK	FATK	FLF	RTK	ATK	PAX
Jul-02	0.67%	0.89%	-0.17	18.15%	7.80%	5.95	7.89%	4.32%	2.47%
Aug-02	1.29%	1.43%	-0.10	16.96%	8.76%	4.64	7.79%	5.05%	2.97%
Sep-02	9.96%	3.28%	4.51	15.88%	13.25%	1.56	12.43%	8.39%	9.47%
Oct-02	26.73%	5.95%	11.93	22.82%	14.21%	5.15	25.40%	10.42%	24.09%
Nov-02	25.56%	11.82%	7.73	20.10%	15.45%	2.79	24.29%	13.93%	21.47%
Dec-02	14.39%	9.29%	3.22	10.43%	12.18%	-1.04	13.04%	10.87%	11.88%
Jan-03	13.54%	12.66%	0.58	14.54%	17.82%	-1.74	13.75%	15.39%	12.50%
Feb-03	5.19%	12.60%	-5.00	11.09%	14.16%	-1.79	0.16%	19.42%	3.88%
Mar-03	-10.64%	9.54%	-14.67	7.52%	11.21%	-2.39	-1.72%	10.44%	-10.01%
Apr-03	-37.43%	-8.38%	-23.62	3.69%	4.70%	-0.66	-16.56%	-1.45%	-44.21%
May-03	-45.45%	-23.81%	-20.17	0.04%	-2.36%	1.67	-22.13%	-12.35%	-53.95%
Jun-03	-32.50%	-23.54%	-8.67	-1.26%	0.93%	-1.56	-16.63%	-10.87%	-38.10%
GROWTH	-3.57%	0.67%	-3.05	11.52%	9.51%	1.23	2.84%	5.54%	-6.19%
CY 3	RPK	ASK	PLF	FTK	FATK	FLF	RTK	ATK	PAX
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	51,519,551	68.47%	74,179,615	104,437,440	94,242
2000	462,592,401	617,966,475	74.86%	39,027,134	56,258,060	69.37%	82,551,363	112,893,269	103,610
2001	446,371,390	627,039,303	71.19%	35,863,984	55,755,572	64.32%	77,654,045	112,989,919	102,847
2002	467,340,919	627,191,375	74.51%	40,801,462	59,566,958	68.50%	85,046,259	116,493,219	108,974
2003	184,002,856	288,095,230	63.87%	20,256,655	30,320,199	66.81%	37,666,532	56,784,552	41,074
CY	RPK	ASK	PLF	FTK	FATK	FLF	RTK	ATK	PAX
1999	9.08%	3.43%	3.75	13.95%	11.50%	1.47	12.15%	7.45%	9.33%
2000	10.98%	7.24%	2.52	10.63%	9.20%	0.90	11.29%	8.01%	9.94%
2001	-3.51%	1.47%	-3.67	-8.11%	-0.89%	-5.05	-5.93%	0.09%	-0.74%
2002	4.70%	0.02%	3.33	13.77%	6.84%	4.17	9.52%	3.10%	5.96%
2003 4	-18.26%	-4.05%	-11.10	5.19%	7.09%	-1.21	-7.70%	2.61%	-22.05%

Note: 1. The consolidation includes 15 participating airlines. Consolidated results for JAN 2003 to JUN 2003 are subject to revision. 2. KA and NZ do not participate in this report.

3. CY denotes Calender Year. 2000, 2001 & 2002 figures have been updated with Air Nippon's traffic results. Air Nippon is a subsidiary of All Nippon Airways.

4. YTD Comparison: JAN - JUN 2003 vs. JAN - JUN 2002.