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NATURAL BORN AIRLINE LEADER

His budget carrier was “made in Japan”
but it will be an Asian brand,
says Peach Aviation boss, Shinichi Inoue

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YEARS

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is an industry
weapon

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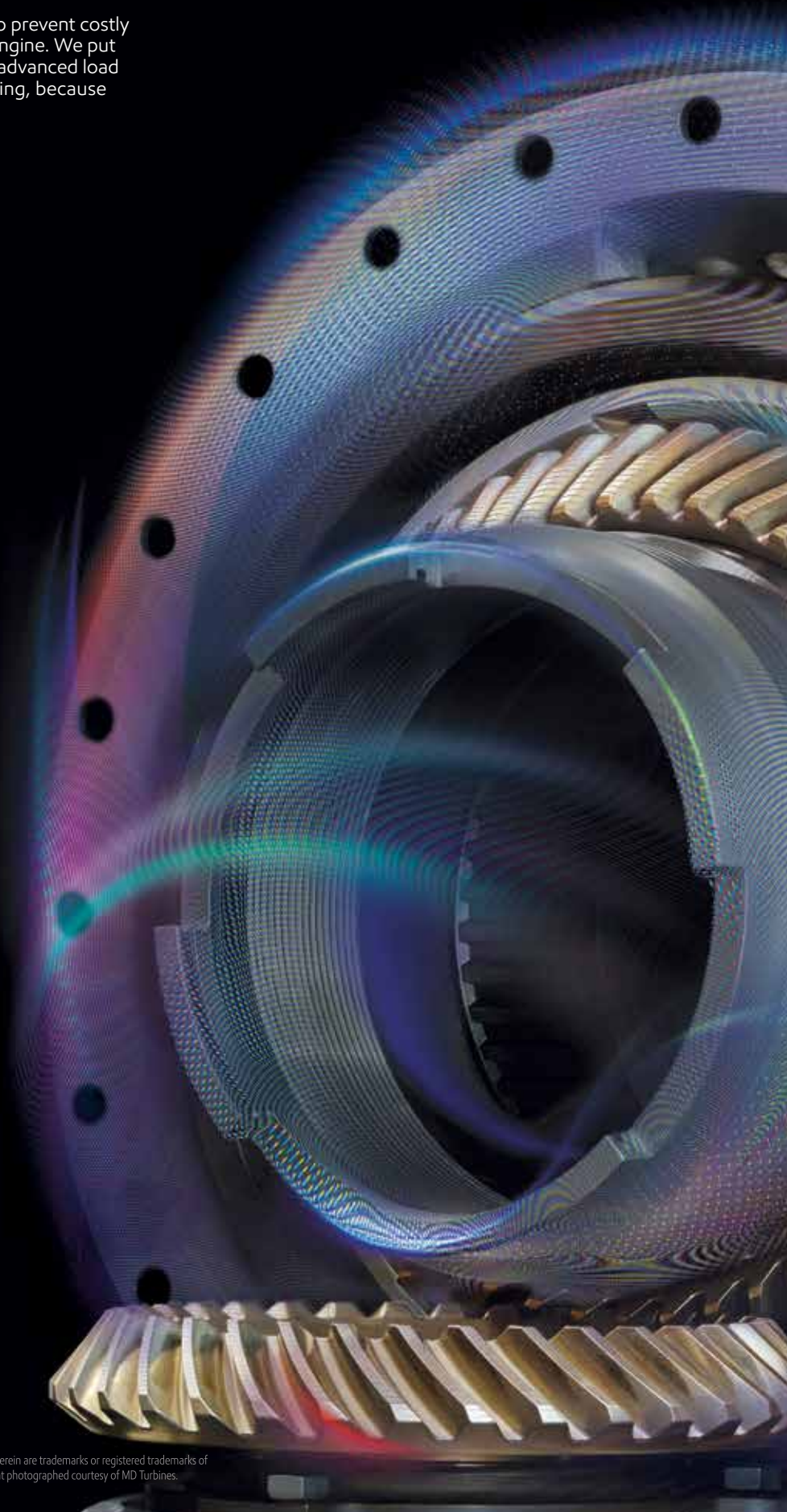
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Mailing address:
GPO Box 11435 Hong Kong
Office:
17/F Hang Wai Commercial Building,
231-233 Queen's Road East,
Wanchai, Hong Kong
Tel: Editorial (852) 2865 1013
E-mail: info@orientaviation.com
Website: www.orientaviation.com

Publisher & Editor-in-Chief

Christine McGee
E-mail: christine@orientaviation.com

Chief Correspondent

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

Greater China Correspondent

Dominic Lalk
Tel: (852) 2865 1013
E-mail: dominic@orientaviation.com

North Asia Correspondent

Geoffrey Tudor
Tel: (813) 3373 8368
E-mail: tudorgeoffrey47@gmail.com

India Correspondent

R. Thomas
Tel: (852) 2865 1013
E-mail: info@orientaviation.com

Photographers

Rob Finlayson, Colin Parker,
Graham Uden, Ryan Peters

Chief Designer

Chan Ping Kwan

Printing

Printing Station(2008)

ADMINISTRATION

General Manager

Shirley Ho
E-mail: shirley@orientaviation.com

ADVERTISING

Asia-Pacific, Europe & Middle East

Clive Richardson
Tel: (971) 50 554 6608
E-mail: clive@orientaviation.com

The Americas / Canada

Barnes Media Associates
Ray Barnes
Tel: (1 434) 770 4108
Fax: (1 434) 927 5101
E-mail: barnesrv@gmail.com

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Big data is a weapon

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Insights and applications drawn from our digital behaviour – both personally and in the work place – allow carriers to fine tune every part of their businesses, from maintenance and catering to staff management and flight operations.

Use of “the Cloud” has given the industry’s managers instant access to information across businesses. The “Internet of Things” is on the way, introducing a world in which almost everything imaginable will be connected.

But the most important advance of all, predict the information technology seers, will be the understanding Big Data will deliver to airlines about passenger aspirations and preferences.

Mining of Big Data and the use of data analytics, when properly interpreted, offer information that can keep carriers ahead of their rivals. Its applications can improve fuel consumption, saving millions of dollars annually, and deal objectively with disruption, whether

weather-related or otherwise.

But most importantly, Big Data can be used to provide individual customers with precisely what they want from an airline, fostering loyalty, efficiency and productivity. It is why Cathay Pacific Airways chairman, John Slosar, recently said Big Data and data analytics are the “next big things” for the airline industry.

“What we are going to see is that airlines which take on data analytics will really learn about customer segmentation and trends in the market and then find ways of turning that information into propositions that will attract loyalty from customers. The airlines that do this will be the winners, he said. “Those who don’t will be left behind.”

Today, aviation IT providers are putting a huge effort into developing various IT solutions to enable airlines to utilize Big Data information across every segment of their businesses. Whatever it costs, carriers who ignore the future by failing to invest in data analytics will become industry dinosaurs. They won’t be part of the future connected world. ■

TOM BALLANTYNE

Chief Correspondent
Orient Aviation Media Group

COMING UP IN OCTOBER

COVER STORY

No turning back says new Malaysia Airlines Berhad CEO, Peter Bellew

INDUSTRY INSIGHT

Yield hungry investors storm Mainland Chinese aircraft lessors

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“It has established itself as the primary source of information on industry topics in the Asia-Pacific region”

UK probes Airbus over fraud and bribery allegations

Britain's Serious Fraud Office (SFO) has launched a criminal investigation into suspected fraud, bribery and corruption in connection with commercial airplane sales by Airbus, parent Airbus Group said.

"We ourselves detected this issue and self-disclosed it to the authorities. This is as an effort of our enhanced anti-corruption (policy). Management has taken robust action and is determined to resolve this issue in cooperation with the authorities," the Toulouse-headquartered OEM said. The investigation is expected to take several years.

Earlier in 2016, a UK government agency, UK Export Finance, halted export credits to Airbus, which support deliveries to airlines with limited access to commercial funds, citing discrepancies in declarations by the manufacturer on the use of third party intermediaries during sales negotiations. The action was followed by France and Germany.

"Airbus has been informed by the SFO that it has opened a criminal investigation into allegations of fraud, bribery and corruption in the civil aviation business of Airbus Group relating to irregularities concerning third party consultants," the company said in a statement.

A SFO representative said additional details of the probe would not be made public until charges were brought forward or the investigation dropped. ■

Malaysia airport operator locks horns with country's biggest airlines

Malaysia's transport minister, Liow Tiong Lai, is stuck between a rock and a hard place as the country's two biggest airline groups slug it out with Malaysia Airport Holdings Berhad (MAHB) over fees, charges, airport nomenclature and substandard terminal and runway maintenance. The most recent flare up was the result of the AirAsia Group's desire to re-name Kuala Lumpur's relatively new low-cost terminal, Kuala Lumpur Terminal (KLIA2), as LCCT KL (low-cost carrier terminal Kuala Lumpur). The LCC group want to develop the budget terminal into a regional LCC hub. It is planning to spend US\$5 million on a marketing campaign to accelerate its efforts and successfully brand the Kuala Lumpur low-cost terminal as LCCT KL.

MAHB's managing director, Badlisham Ghazali, who also is the chairman of Kuala Lumpur International Airport (KLIA), opposes the name change. He believed it confused passengers and eroded KLIA's strategy of operating both terminals as a singled, integrated hub.

Last month, a compromise, although probably an unworkable one, was revealed. Liow said KLIA2



should not have a name change, but that the budget carrier group would be allowed to market it as LCCT. "They (AirAsia Group) can brand and promote it and attract more people to fly into KLIA2," he said.

That's not the end of Liow's woes. Peter Bellew, the new boss of Malaysia Airlines Berhad (MAB), wants airport passenger service charges

to be levied at the same rate at KLIA and KLIA2, "Charges for international passengers at KLIA are US\$8.25 more per person than at KLIA2. It is totally unfair and completely anti-competitive," he said. For MAB to become profitable it needed "a competitive set of charges at our home base" that would protect workers' jobs and create new jobs, Bellew told Malaysia media. The Association of Asia-Pacific Airlines and the International Air Transport Association (IATA) wrote to MAHB to object to the difference in charges at the two terminals. IATA said a solution should be sought that would be "revenue neutral to the airport operator" and did not discriminate between users of KLIA and KLIA2. *See page 12: Malaysia's Biggest Airline Group Bumps Up Against Airport Operator.* ■

Industry legend, Joe Sutter, dies aged 95

Legendary Boeing 747 designer, Joe Sutter, the aeronautical engineer who led the design of the world's first wide body passenger and cargo aircraft, the double decker B747, passed away on August 30.

Sutter, the son of a Slovenian immigrant, had a lifelong passion for aviation that started with part-time work on the Boeing assembly line, a job that funded part of his aeronautical engineering degree at the University of Washington in Seattle.

After post World War 2 studies at the engineering school of the U.S. Navy, Sutter joined Boeing as an engineer. He worked on the design of Boeing's first short haul jet, the B727 and with another brilliant Boeing designer, Jack Steiner, on the development of the B737. It was the first

airliner to have its engines positioned beneath the wing – a Sutter innovation.

Named by the Smithsonian National Air and Space Museum as the "Father of the 747", Sutter lead the design of the B747 from 1965 and saw the Jumbo Jet soar in popularity after it took to the skies in commercial operations in 1970. He rose in the ranks at Boeing to executive vice president for engineering and product development where he was closely involved in the concepts and manufacturing of the B757 and B767. He retired from Boeing in 1986 but continued to work as a consultant at the Seattle headquartered manufacturer until this year. He remained a sought after adviser to airlines and governments until the closing months of his amazing life. ■



Stellar returns at Air New Zealand and Qantas but Virgin Australia remains in loss

Air New Zealand continues to punch above its weight with the announcement of a full year profit, to June 30, of NZ\$463 million (US\$338 million), an increase of 42% over the previous year. Earnings were a record, up 70%, to US\$806 million, before tax and other items. The airline's CEO, Christopher Luxon, Orient Aviation's 2014 Person of the Year, said 8,200 staff not covered by other incentive programs would each receive a performance bonus of \$2,500 and the government, which owns 52% of Air NZ, would be paid a dividend of \$260 million.

Air NZ's achievement is all the more impressive when it is considered that not so long ago the carrier was in near death mode after a complicated series of investor missteps forced the New Zealand government to buy into the carrier to keep it alive.

Across the Tasman, in Sydney, Qantas Group CEO, Alan Joyce, also introduced some historical perspective to his audience when he announced the group's recording breaking after tax profit for the year to June 30. "This is the best result in the 95-year history of Qantas and the best result in Australian aviation, full stop," he said. Joyce



was celebrating the turnaround of the group from a A\$2.8 billion (US\$1.13 billion) in 2014 to a \$557 million profit last year and a \$1.03 billion after tax profit in the 2015-2016 fiscal year.

At Virgin Australia's results announcement, the mood was more subdued. The airline reported a fourth quarter loss of A\$228 million (US\$170.8 million) as it booked costs for its fleet reduction program, including five ATRs

and all its E190 aircraft, the result of its financially painful capacity war with Qantas. The carrier, headquartered in Brisbane, forecast it would spend up to \$250 million in restructuring costs in the next two years. For the year ended June 30, Virgin reported an after tax loss of \$224.7 million, almost double its losses of 12 months ago. But it had an underlying pre-tax profit of \$41 million compared with a loss 12 months ago and increased its overall load factor by 4.5%. ■

THAI accepts first of 12 A350s

Thai Airways International (THAI) became the eighth operator of the A350-900 at the end of last month when it took delivery of the first of 12 A350-900s it has on order. The new 321 seat aircraft, which is on lease from

U.S. lessor, CIT Transportation Services, is configured with 32 lie-flat business class and 289 economy seats and powered by Rolls-Royce engines.

Initially, THAI said, its new aircraft

would fly Bangkok-Chiang Mai and then be transferred to its first long haul route, Bangkok-Melbourne. Previously, THAI has said it intended to operate its double daily Melbourne, Australian services with the A350 as the airliner becomes available to the carrier.

Independent global fleet analysts said four of the A350s will be owned by THAI with the remaining eight leased from CIT and Kuwait-based ALAFSCO.

Airlines operating the A350 are Cathay Pacific Airways, Ethiopian Airlines, Finnair, LATAM Brazil, Qatar Airways, Singapore Airlines and Vietnam Airlines. Airbus has firm orders for 810 A350s from 43 airline customers. ■

Rolls-Royce president civil aerospace Eric Schultz, Airbus CEO and president Fabrice Bregier, Thai Airways International (THAI) president and CEO Charnporn Jotikasthira and Jeff Knittel CIT president transportation services at the first A350 delivery to THAI.



Terrible twos knock out Taiwan's V Air

What a difference a month can make. When your correspondent spoke to V Air chief executive, Eleni Lung, in August, the mood was light, cheerful even. Lung and her team were preparing the winter season schedule. Fast forward three weeks, and the Taiwanese LCC, controlled by TransAsia Airways, announced it would shut down on October 1, two years after it was launched.

"TransAsia Airways passed a board resolution today (August 9), and officially announced service suspension of V Air, its 100%-owned low-cost airline, from October 1," said TransAsia chairman, Vincent Lin. The TransAsia boss said folding V Air back into the parent company allowed a speedier recovery at the airline group.

TransAsia reported a net loss of NT\$439 million (\$14 million) for the first quarter, easing from a net loss of NT\$1.2 billion in the previous three months. However, sales dropped significantly from NT\$10.6 billion in fourth-quarter 2015 to NT\$3.2 billion in the first quarter of this year. The carrier had two fatal crashes in 2014 and 2015 that killed 91 people.

Following the disappointing performance, TransAsia said it would sell or lease its four in-service A330-300s. The airline mainly flies the wide body jets between Taiwan and Japan. Increased competition has forced it to downsize to the A320 and A321 on its Japan routes.

Taiwan's third-largest airline company, following China Airlines (CAL) and EVA Air, will terminate services to Okinawa, Guiyang and Macau from October 30, leaving only Tokyo, Osaka, Sapporo, Siem Reap, Palau and twelve Mainland cities in its network.

Only months earlier Lin had said he wanted TransAsia to build a "hybrid" business model between a traditional carrier and a budget carrier, effectively signalling that V Air's budget offering faced an uncertain future.

"LCCs are such a new industry in Taiwan. In other countries such as Japan, there is a lot of government support, and they have specific terminals for LCCs. In Korea, they have protected route permits, but in Taiwan it is so new that the government does not really protect the LCC companies," Lung told Orient Aviation. In other words, Taiwanese LCCs use the same terminal at Taipei Taoyuan International Airport as their full-service counterparts, at the same cost. Budget carriers operating in Taiwan have grown from



zero in 2004 to 20 this year.

Lung said: "there are two runways at Taoyuan but they are always under construction. There are hours when we cannot use the runways". Lung added Taiwanese LCCs were barred from using Taipei's downtown Songshan Airport.

"We don't feel we have much support from the government. For instance, for new route applications we have to compete with legacy airlines. They have a lot of experience, and hence get a lot of scoring points. For us, as a new company, we're at a disadvantage."

In terms of the dual branding strategy between V Air and TransAsia, Lung said her carrier focused on secondary destinations not served by the parent, including Nagoya and Chiang Mai, while TransAsia capitalized on the traditional trunk routes, cross-strait and domestic flights.

V Air has two A321s and two A320s. Lung said in August the plan was to add two Airbus planes to V Air's fleet this year, but already cautioned then that "the entire economy in Taiwan isn't going too well", so the carrier was reviewing its expansion strategy.

Launched in December 2014, V Air last year reportedly recorded losses of NT\$450 million (\$14.3 million). Its bottom line has continued to deteriorate since, with aggregate losses in the first half of this year exceeding NT\$900 million, nearly half its founding paid-in capital of NT\$2 billion.

Asked about financial performance, Lung said V Air was "of course" not profitable yet. "But everything is on track as budgeted, so

hopefully in the coming few years we'll break even. We're aiming at next year," she said before she, and her carrier, were shown the door at V Air.

Passengers booked to Osaka and Naha after September 30 will be transferred to TransAsia Airways flights, while those travelling to Fukuoka and Chiang Mai will be rebooked once TransAsia secures the relevant route permits. Passengers bound for Bangkok, Busan and Nagoya will be fully refunded. Flights to Manila are already cancelled, while services to Haneda and Ibaraki will be suspended from September 20.

V Air was not alone in its uphill battle with mounting competition and only marginal profits. Taiwan media has suggested CAL is considering the fate of its Tigerair Taiwan subsidiary: either to recapitalize it or fold into its Mandarin Airlines unit.

Potentially a precursor for what is to come, Tigerair Taiwan has reduced frequencies from Taipei to Fukuoka, Hakodate and Nagoya, as well as from Kaohsiung to Macau and Narita. Tigerair Taiwan has admitted its load factors have dropped on some routes, like Nagoya, because it has significantly increased its flights to Japan.

New CAL chairman, Ho Nuan-hsuan, confirmed the parent company has established a task force to study the future of Tigerair Taiwan. CAL holds an 80% stake in Tigerair Taiwan, its Mandarin Airlines unit 10%, with the remainder owned by Singapore's Tiger Airways Holdings. **By Dominic Lalk ■**

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Indonesia cleared to fly to U.S after nine year ban lifted

The poor performance of air safety regulators in some Asia-Pacific jurisdictions has taken a turn for the better in recent months as news broke that Indonesia had its U.S. category one safety rating restored.

Tom Ballantyne reports

After nine years of excommunication from the U.S. market, Indonesia's airlines learned last month that they can re-start flying to the U.S.

In mid-August, the U.S. Federal Aviation Administration (FAA), announced it had restored Indonesia its top tier category 1 rating after a March safety review. Indonesia now complies with International Civil Aviation Organisation (ICAO) standards, an FAA statement said.

"With the International Aviation Safety Assessment (IASA) Category 1 rating, Indonesian air carriers can establish services to the United States and carry the code of U.S. carriers," the FAA said. It said that Indonesia "was not deficient in technical expertise, trained staff, record keeping or inspection processes".

In June, Garuda Indonesia's president and chief executive, Arif Wibowo, strongly hinted that Indonesia, which lost its top tier FAA rating in 2007, would soon have it restored. He told media at the International Air Transport Association annual general meeting in Dublin that he expected his airline to be flying to the U.S. in 2017.

Indonesian airlines have not operated services between their home country and the U.S. for 20 years reported the Wall Street



Journal last month. Analysts believe it would be hard for the Garuda, which is considering the destinations of New York or Los Angeles, with another stop at another Asian gateway, to make money on the route(s).

The American announcement followed a European Commission (EC) decision to permit three Indonesian carriers, Lion Air, Citilink and Batik Air, to fly to European destinations. Until the summer announcement was made, only flag carrier, Garuda Indonesia, was permitted to serve Europe.

Lion Air is the only Indonesian airline other than Garuda likely to be interested in broadening its network to Europe, but removal from the EC black list is significant for all three of the airlines. If an airline is included on the black list,

European travelers are advised against flying on it when travelling in Asia.

In Thailand, a June inspection of all Thai-registered airlines avoided the nation's carriers from being listed as having sub-standard safety practices in the latest audit by the European Aviation Safety Agency (EASA).

Transport Minister, Arkhom Termpittayapaisith, said the EASA announced 214 airlines from 19 countries failed to meet safety standards but "no Thai airlines were listed".

Arkhom said the government is speeding up its action plan to meet ICAO's safety requirements after the organization had sent eight experts on aviation safety to help Thailand overhaul its regulatory system, he said.

Thailand's cabinet recently

approved the funds to hire several experts from Britain and also the Royal Thai Air Force staff to train Thai inspectors in airline audits. A shortage of auditors has been blamed for lax supervision of Thai-registered airlines. Arkhom said Thailand needs at least 30 specialists in the next five years to audit carriers operating in the country. Trainers of auditors from the air force will be qualified military pilots.

The Civil Aviation Authority of Thailand (CAAT) has 23 inspectors available for auditing with another 10 inspectors from Britain's CAA International Limited providing support. Arkhom said the government expected to complete its action plan in the next six months. After that, there will be an internal evaluation of the country's overall aviation

safety measures.

India also avoided sanctions although it continues to suffer serious shortages of regulatory staff. A recent report prepared by Indian industry body, Assocham, and consultancy KPMG said air traffic control officers (ATCOs) increased to 2,600 last year, but there was still a shortfall of approximately 1,500 ATCOs to serve India's rapid aviation expansion.

India's Civil Aviation Ministry is considering authorizing private companies to train ATCOs to address the staff shortages at India's Air Navigation Services (ANS). The ANS comes under the authority of state-owned Airports Authority of India (AAI) and the public/private training proposal would include upgrading capacity at existing ATCO training facilities.

"This may be started in Public



Private Partnership (PPP) mode and then made fully open to the private sector, said the joint report, which also recommended that partnerships with international ATC training institutes should be explored.

India has ATC training facilities at the Civil Aviation Training College in Allahabad and at Hyderabad airport. A study by the U.S.-based Washington

Consultancy Group for AAI estimated 3,599 controllers will be required by 2020.

In South Korea, the government is tightening safety rules for budget carriers after a string of accidents. "We're going to make sure safety practises take root, publish the results of safety assessments of each airline and reflect them in their route allocations," said Prime Minister

Hwang Kyo-ahn.

A Ministry of Land, Infrastructure and Transport spokesman said the department will place much greater importance on safety when both full service carriers and LCCs are assessed for route allocations. They will be subject to tighter safety rules, the department said.

South Korea's budget airline market has grown rapidly, with some 24 million passengers carried on the country's six budget carriers in 2015. The passenger mix was 55% domestic and up to 45% of international.

Safety checks at South Korean airlines earlier this year revealed LCCs often had insufficient security staff and equipment and had failed to follow-up recommendations such as retraining of pilots and engineers after incidents and accidents. ■

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Malaysia's biggest airline group bumps up against monopoly operator

When is a low-cost airport terminal not a low-cost airport terminal? It's a question that is pre-occupying the AirAsia Group and its supporters as they lock horns with the country's airport authority about the branding of Kuala Lumpur's budget facility.

Tom Ballantyne reports

AirAsia Group chief executive, Tony Fernandes, and the head of the airline's Malaysia arm, Aireen Omar, have no doubts about the purpose of Kuala Lumpur International Airport's (KLIA) second terminal.

It is a low-cost terminal and they are calling it Low-Cost Carrier Terminal Kuala Lumpur, or LCCT2. They are spending \$5 million on a marketing campaign to promote the facility.

But the airport's operator, Malaysia Airports Holdings (MAHB) does not like the idea and is threatening legal action

to preserve its right to brand the LCC terminal as KLIA2.

The AirAsia Group's proposed name change, said MAHB managing director, Badlisham Ghazali, is confusing passengers. Misled by LCC branding, they are heading to the airport's now closed former low-cost terminal.

"Why create the fuss and confusion? The brand stays. I hope (Malaysia's) Transport Minister, Liow Tiong Lai, will inform AirAsia. We will see what happens next," he said in July.

After a meeting with the Transport Minister and Malaysia's Director General of Civil Aviation,

Azharuddin Abdul Rahman, Fernandes appeared to be in a conciliatory mood. He tweeted the discussions were "very good" and indicated the government had accepted the second terminal was a low-cost facility.

"The important issue is not the name but that it's promoted inside the terminal and to the world that KLIA has a low-cost hub with low fares," he said. He added he was confident that ultimately Liow would be able to find a good "win-win" solution for both AirAsia and MAHB.

"The goal is to get more of Asean, Asia and the world to use our low-cost hub. One million

people have travelled through KLIA2 so far this year. We want to grow that. (This) will be great for the economy."

But Liow threw a spanner in the works. He said KLIA2 should not undergo a name change despite the fact that at the AirAsia Group it would definitely be known as LCCT2.

The sequence of events that led to this stand-off is one of the region's strangest aviation disagreements of the year. Unfortunately, it has emerged at a time when Fernandes was already at odds with the MAHB about its planned increases in airport fees and charges at the



second terminal.

At Britain's Farnborough Air Show in July, he posted a Facebook message that said the MAHB "can't charge passengers for its grandiose schemes". He labelled KLIA2, in its current state, as a "Frankenstein terminal" that is "neither premium nor low-cost".

Fernandes is most upset by the fact that AirAsia Group airlines make up 98% of the traffic at KLIA2 and therefore are MAHB's biggest customer at the terminal. Yet, said Fernandes, the airport authority was not willing to consider AirAsia's requirement for a basic low-cost terminal that would reduce the airline group's operating costs.

AirAsia Berhad CEO, Aireen Omar, wrote to Liow to seek the government's support to operate KLIA2/LCCT2 as a hub low-cost terminal that could make Kuala Lumpur the Dubai of the East.

"We wish to start addressing the airport terminal as LCCT2, which is the true identity of the terminal. But the MAHB has refused to admit the airport is meant for low-cost carriers," she said.

Omar said the MAHB had stated the KLIA Main Terminal Building (MTB) and KLIA2 are planned as an integrated hub, but there was no evidence to support

the argument. "An integrated hub should include seamless connectivity between terminals that encourages passengers to interlink and stimulate travel on both full-service and low-cost carriers," she said.

"The lack of airside trains and landside buses to connect KLIA to KLIA2 clearly showed the terminals are not part of an integrated hub. Passengers are charged RM2 one way for using the only train connecting the two terminals and the train operates on a sparse schedule."

The low-cost carrier group wants the MAHB to focus on a dual-hub strategy. The KLIA MTB could be led by national carrier, Malaysia Airlines Berhad, and supported by the oneworld alliance, while LCCT2 could be positioned as the region's low-cost carrier hub.

"AirAsia's fly-thru traffic has grown by almost 50% every quarter, with more and more travellers flying into Kuala Lumpur and using it as a transit hub. If MAHB can admit to the importance of LCCT2 as a low-cost carrier hub, we can work together to strengthen the position of Kuala Lumpur and reclaim the title of Asia's largest LCC hub from Bangkok's Don Mueang International Airport," AirAsia said.



“We wish to start addressing the airport terminal as LCCT2, which is the true identity of the terminal. But the MAHB has refused to admit the airport is meant for low-cost carriers”

Aireen Omar
CEO and executive director AirAsia Berhad

MAHB said KLIA2 is neither an independent airport nor a hub. It is Kuala Lumpur International Airport's (KLIA) second terminal and was a crucial part of the KLIA hub.

"Although KLIA2 is mainly used by low-cost carriers, it is designed to cater to all types of airlines as it supports the overall KLIA capacity," the airport operator said. MAHB added KLIA2 is the registered name of the terminal under the International Air Transport Association (IATA). Calling it by another name would be misleading for passengers and the public. AirAsia countered

when it said both terminals at KLIA would bear the IATA code of KUL.

MAHB, which manages and operates 39 airports in Malaysia and one international airport in Istanbul, Turkey, said its five-year business plan was aimed at positioning KLIA as an integrated hub that would provide seamless connectivity between full service, hybrid and low-cost airlines.

"Successful hubs are measured by the extent of their international connectivity. It is evident this could only be achieved by leveraging on the full service carrier network and alliances as well," it said. ■



Mainland regulator names and shames airline sinners

By Dominic Lalk

In an effort to curb malpractice, the CAAC has published its first ever industry blacklist, naming and shaming four executives and a training school in the process, and banning them from the industry for life.

The three aviation leaders who were added to the list were Zhang Pei, Zhu Nan and Li Qiang, the former president, deputy general manager and general manager of Shenzhen Airlines subsidiary, Henan Airlines. The trio rose to ignominy when it transpired that their lack of oversight and responsibility contributed to, if not caused, inadequate training and unsafe operations at the domestic airline, which led to the crash of Henan Airlines flight VD8387 on the night of August 24, 2010. The Embraer E190 aircraft hit the ground some 800 metres short of the runway at Yichun Airport in Northeast China's Heilongjiang Province amid dense fog.

The aircraft broke apart and caught fire, killing 42 of the 96 passengers on board. The CAAC attributed the accident to pilot error caused by insufficient training, funding and oversight.

The fourth executive to be publicly shamed is Ding Bangxin, general manager of Hebei Jinyan General Aviation, a pilot training school near Shijiazhuang. He was piloting a light training aircraft in the summer of 2013 when he ran out of fuel and had to make an emergency landing approximately 11 km from the



Three executives of the airline's subsidiary, Henan Airlines, accused of operational negligence

nearest airfield. Ding coaxed his subordinates at the flight school into keeping the incident under wraps by disassembling the light aircraft in secrecy inside a storehouse and attempting to delete ATC recordings.

Tianjin's Civil Aviation University of China (CAUC) Chaoyang Flight Academy was also added to the list after it tried to conceal a runway incursion incident involving one of its DA40D aircraft at Tianjin Airport that caused a near-miss with a Tianjin Airlines Embraer coming in to land. The CAAC has since grounded all training aircraft at the flight school.

The regulator said it would update the executive blacklist regularly on its official website.

As the CAAC is clamping down on dishonest industry leaders, passengers who misbehave also will face tougher sanctions. In August, the CAAC published a new draft amendment to the Civil Aviation Law in China to include

finest of 50,000 yuan (\$7,515) if passengers compromise civil aviation safety or "disturb order". Included under those terms are 14 types of undesirable behaviours, including using a mobile phone, even in airplane mode, smoking, forcibly occupying seats, blocking passage ways and gates, breaking into airports and planes, physically harming a crew member, other staff or fellow passengers.

More changes to the regulations governing the use of mobile phones would appear to be forthcoming. A law to amend the use of electronic devices on board is underway and the norms will be relaxed by the end of this year or in early 2017, Zhu Tao, director of the air transportation division at the CAAC has said. The decision is more than three years after onboard mobile phones were cleared by the U.S. Federal Aviation Administration and the European Aviation Safety Agency.

Once approved, mobile phone and Internet inflight usage are expected to open the door to billions of dollars in e-commerce opportunities in addition to giving an airline another way of differentiating itself from its competitors.

"From a business perspective, we definitely hope that there will be a breakthrough in the policy review," Zhang Chi, a deputy director at China Eastern Airlines has said. "While I let passengers browse the Internet for free, I can at the same time profit from advertisements and onboard shopping. There will be a big positive return."

Mainland carriers still have a lot to learn when it comes to inflight connectivity. Among the "Big Three" state-controlled airlines – Air China, China Eastern Airlines and China Southern Airlines – China Eastern and China Southern only offer data usage on a fraction of their long-haul fleets, while Air China does not offer the service at all. ■



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Evolution rather than revolution at Thai AirAsia

A new shareholder at an airline often means a new strategy. But not at Thai AirAsia. Founder and chairman of the King Power International Group, Vichai Srivaddhanaprabha, promises it will be steady as she goes at the Bangkok-based budget airline now that he has bought into the low-cost carrier.

Tom Ballantyne reports

Thai tycoon and owner of English Premier League champions, Leicester City, Vichai Srivaddhanaprabha, told Thai media he will adopt a “hands off” approach to his latest business acquisition, Thai AirAsia (TAA). Instead, he will identify synergies between the budget carrier and his other business interests.

The founder chairman of Thailand’s only duty-free store chain, the King Power International Group, told media: “I have always been interested in aviation businesses. We owned five per cent of Nok Air when it was launched, but the stake was too small to make a difference.”

But he is in a very different position now. With his recently acquired majority equity in TAA’s holding company, Asia Aviation (AAV), Vichai can combine the strengths of his retail and tourism empire with the expertise and affordable fares of Thailand’s most successful LCC.

“Thai AirAsia will add routes in China (the major market of both companies) and bring tourists to shop at King Power,” he said.

The 58-year-old tycoon, who is best known outside Thailand for his ownership of 2016 English Premier League



winners, Leicester City, said in a recent briefing that he may have the power to change management, but that it won’t be happening. “We want to see TAA’s management maintained,” he explained, and added he has no doubts about the talent of TAA’s team.

Vichai purchased his TAA holding from the Tassapon Bijleveld family in June this year for US\$227 million, with Tassapon retaining five per cent of the carrier in the deal. Tassapon will retain his position as TAA’s chief executive.

“Rest assured management, myself included, will continue the good work TAA always has done. The same team of executives and I will continue to manage the airline. We remain committed to growth just as we did when we launched 13 years ago,” Tassapon said.

TAA is on track to increase its A320 fleet from 48 to 51 by December and is forecast to carry 17 million passengers by year end. The LCC has 15 A320-200s on order. Last year, TAA carried 14.8 million passengers and reported a profit of \$30 million.

Vichai’s acquisition has received the corporate blessing of Tony Fernandes, AirAsia Group CEO, whose group retains 45% of TAA. “This investment proves that Thai AirAsia’s value proposition remains undiminished. The vote of confidence that comes from one of the most successful family businesses is fantastic,” Fernandes said.

“The potential tie-ups between AirAsia and King

Power, Thailand’s sole duty-free operator, are massive. We look forward to working together, not only in Thailand but across the group and Asean.”

So who is this relative newcomer to Asian airline ownership? Back in 2007, Vichai was ranked 21st in the Forbes’ list of Thailand’s wealthiest businessmen with net worth of \$200 million. Today, he is ranked fourth, with a fortune of \$2.8 billion. He founded his duty-free retail company, King Power, in 1989 with the opening of his first store, selling Thai handcrafts, in Mahatun Plaza in central Bangkok.

He later opened a pick-up point for customers at Don Mueang airport, then Thailand’s international airport. It was a significant step for the retailer as it was the only company allowed to sell duty free goods at the airport.

Vichai’s fortunes really took off in 2001 with the election of Thai Telecoms tycoon, Thaksin Shinawatra, as the country’s prime minister. Thaksin’s pet project was the construction of Bangkok’s Suvarnabhumi Airport, which opened in 2006.

Vichai was awarded exclusive rights to operate duty free outlets at the new airport, a right observers said at the time

“Thai AirAsia will add routes in China - the major market for the airline and the duty free retailer - and bring tourists to shop at King Power”

was a licence to print money. He is known to have powerful connections with Thailand's elite and with its revered royal family. He has donated millions to charities supported by Thai royalty. At one stage had millions of yellow armbands printed which read "We Love HM the King" to mark the 60th anniversary of King Bhumibol's reign, reported author MacGregor Marshall.

According to one local commentators, Vichai's connections allowed King Power and its chairman to survive during the political unrest of 2006 to 2008 in Thailand. In those years Thaksin was removed from office in a coup and a pro-Thaksin party was elected in 2007. The political climate heated up with the rise of the anti-Thaksin Yellow Shirt movement in 2008 that saw protesters occupying the city's Suvarnabhumi Airport as well as Phuket's airport.

Like many Thais, Vichai is an



The Bangkok-based LCC plans to have a fleet of 51 A320s by year end

avid supporter of English soccer, but when he paid \$55 million for Leicester City in 2010 it was a second tier team. After the team's promotion to the Premier League in 2014 he said he would spend \$240 million to break into the top five clubs within three years. He beat his own deadline

by 12 months.

Also a polo enthusiast, Vichai and his polo playing son, Top, often arrive at Leicester's home games by helicopter and have the pitch blessed before kick-off by monks flown from Thailand for the occasion.

TAA already is performing well, but the combination of the LCC and the duty free empire could be a potent mix. TAA claims it is one of the leading airlines operating scheduled flights between Thailand and China, with 20% of its revenue generated by the Chinese market. Both TAA and King Power say it is not difficult to see how an alliance with TAA will promote King Power's retail business in China.

An estimated 10 million Chinese visited Thailand last year, with most of them having direct exposure to KPIG's duty free stores at the country's two main Bangkok airports and regional airports at Phuket and Chiang Mai. The duty free retailer also has three dedicated anchor stores in Bangkok.

TAA flies to all of these destinations and also directly between Thailand's regional airports and Chinese destinations. From Bangkok it

serves Changsha, Chongqing, Guangzhou, Hangzhou, Kunming, Nanchang, Shenzhen, Wuhan and Xi'an, as well as Macau and Hong Kong.

TAA also flies to Yangon and Mandalay in Myanmar, where King Power is planning to open duty free stores. Analysts said the ability to deliver duty free goods directly to Chinese passengers travelling with TAA and offer cross incentives with the airline and its potentially captive customer base is a huge opportunity.

Growth also is forecast to increase from outside the region. TAA's long-haul budget airline, Thai AirAsia X (AAX) has been aggressively expanding its network, bringing in more tourists to the KPIG's retail ambit.

It flies six A330s to more than 20 regional and 29 international destinations from Bangkok's Don Mueang International airport. In June, it launched flights to Muscat in Oman. In 2015, 85,000 tourists visited Thailand from Oman, according to figures from the Tourism Authority of Thailand. The numbers are projected to rise above 10% to 100,000 in 2017. Also in June, AAX started direct flights to the Iran's capital, Tehran. ■



AirAsia Group retains 45% of Bangkok budget carrier, Thai AirAsia

Asia-Pacific airlines lead demand for regional jets

Airlines with fleets of smaller jets and turboprops have long taken a back seat when orders are announced but as Farnborough proved, there are signs the sector will surge.

Tom Ballantyne reports

Despite the fact that the Commercial Aircraft Corporation of China's (COMAC), ARJ-21 regional jet made its June commercial debut ten years behind schedule does not mean it is without customers.

After the ARJ21's first flight with Chengdu Airlines, China Aircraft Leasing Co. (CALC) placed a \$2.3 billion order for 30 of the aircraft type, with options on another 30, at the Farnborough Air Show. It is the largest single order for the 78-90 seat jet. They will be delivered in the next five years to an as yet unnamed Indonesian carrier that CALC associate company, Friedmann Pacific Asset Management, is supporting. Mainland funded COMAC will establish maintenance and after-sales offices in Indonesia as part of the deal.

The Chinese manufacturer was not the only new entry manufacturer to breakthrough at Farnborough. Mitsubishi Aircraft Corporation, the maker of Japan's first passenger jet, won an order for as many as 20 of its new MRJ (Mitsubishi Regional Jet) from Swedish leasing company, Rockton.

It was the second order for the airplane following a deal earlier this year to sell 20 of the jets to U.S. lessor, Aerolease Aviation. The MRJ is Japan's attempt to break the regional-jet

duopoly of Brazil's Embraer and Canada's Bombardier. Mitsubishi is producing two versions of the MRJ, which can seat 78 to 92 passengers.

The Japanese jet made its inaugural flight last November with the manufacturer scheduled to deliver its first aircraft, to launch customer All Nippon Airways, in mid-2018. It has 427 orders for the jet, including options and purchase rights.

At Embraer, the Brazilian manufacturer has signed a firm order for five of its new E190-E2 regional jets plus purchase rights for another five of the aircraft with Indonesia airline, Kalstar Aviation. Established in 2007, Kalstar connects passengers to cities in the province of Kalimantan, an area known for mining and agriculture.

The airline operates an E190 and two E195s on domestic routes in Indonesia. "Kalstar Aviation has taken a differentiated path in the Indonesian market by utilizing current generation E-Jets, and soon the E2s, to grow their business sustainably and provide their passengers with an unparalleled cabin experience," said John Slattery, president and chief executive of Embraer Commercial Aviation.

Said Kalstar's chief executive Andi Masyhur: "We are looking forward to the enhanced performance

and economics that the E190-E2 brings, while still maintaining a high level of cockpit commonality with the existing E-Jets. This means an easy transition for our pilots when they operate both the current E-Jets and the E-Jets E2."

Overall, the future for regional flying appears favourable. In its latest market outlook to 2035, Embraer projected global airlines will require 6,400 new jets, worth US\$300 billion, in the 70-130 plus seat sector, 2,300 aircraft in the 70-90 seat market and 4,100 90-130 aircraft.

The Asia-Pacific will lead demand with 31% of the market followed by North America (26%), Europe (18%) and South America (11%).

Turboprops will also be in demand, said European manufacturer, ATR. It forecasts 3,000 new short-haul routes will be flown by turboprops in the next two decades fed by demand for regional connectivity.

Almost 50% of the new services will be in the Asia-Pacific, including the forecast fastest growing market, Mainland China. About 1,400 new routes are predicted to be established in the Asia-Pacific, followed by North America (800) and Europe, Africa and the Middle East accounting for the rest.

To 2035, ATR anticipates an annual average growth rate in regional traffic of 3.9%, or 2,800 new turboprop aircraft worldwide. Demand for regional connectivity is not only increasing in key markets such as India and China but also in Iran, Japan and the U.S., ATR said.

By 2035, the Asia-Pacific, excluding China, will have the world's largest fleet of operating turboprops, up from 640 in 2015 to 1,180 in 20 years. China's turboprop fleet is forecast to increase from 35 in 2015 to 320 by 2035. ■

John Slattery, CEO Embraer Commercial Aircraft: Brazil's Embraer has sold five of its new E190-E2 jets with five options to Indonesian regional airline, Kalstar Aviation



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Big Data and data analytics offer airlines more opportunities to determine travel trends than at any time in history. Carriers must apply the insights of data mining now to stay ahead in the region's brutally competitive industry.

Tom Ballantyne reports





Cathay Pacific Airways chairman, John Slosar, said in May that unless airlines are spending big on Big Data and data analytics today they will be falling behind. The airlines that are will be winners, he said. Those that don't will be the losers. And he's far from being alone in his prediction.

At Garuda Indonesia, president director and CEO, Arif Wibowo, has said the carrier is "strengthening its IT backbone". "I am sure from the trend of the digital economy, e-commerce has to be improved as soon as possible and that is why Garuda has to be very strong in high-tech. We have to build a very strong IT base," he said.

Speaking at a recent conference in Helsinki, Qantas Group chief executive, Alan Joyce, said the "biggest opportunity" Qantas has is harnessing Big Data and expanding on the techniques it can use to leverage it.

"We have to tap into the future by using this Big Data and take these opportunities now. Qantas has been collecting customer data for 30 years," he said, "with more nuggets of information added to each individual's profile over time."

Slosar, speaking at a recent Lunch with Orient Aviation in Hong Kong said: "What is data analytics? It is using Big Data to understand better the trends of your customers or your operations and then finding a way to extract advantage from those trends. For instance, in planning the proposition you are going to make to the market place.

"The airframe and engine manufacturers have done a fabulous job of making the aircraft more reliable and more predictable. As a result, flight operations and engineering are better and better and certainly more systematized.

"This has allowed the rocket science in the last 10 years to shift towards revenue management, which developed in the 90s really. It devised strategies using data technology to optimize revenue streams for the airline.

"If you can get 2% or 3% more out of your revenue streams, in an industry where you only make 2%-3% profit margins, that means you double your profit."

But now, Big Data is coming in to play across every aspect of an airline's operations, from maintenance to revenue management and marketing to staff deployment and fuel management.

"The companies that are more likely to succeed in the travel industry will be those that embrace Big Data and experimentation," said the head of travel intelligence at the Amadeus IT Group, Pascal Clement.

"They'll try out new ideas and approaches to increase their operational efficiency, enhance the customer experience

and benefit from new revenues and increased loyalty."

Utilizing data analytics to retain customer loyalty is only one example of the opportunities Big Data provides for airlines. Malaysian low-cost carrier, AirAsia, is using cutting edge data capture and analytics technology to keep its fares low.

It operates GE's Flight Efficiency Services (FES) to implement precision navigation services, flight data analytics and fuel management services. The data-driven services produce cost savings and increase aircraft utilization. By using FES AirAsia hopes to save between \$30 million to \$50 million in the next five years.

In 2015, Singapore Airlines (SIA) wrote a five-year contract to use Rolls-Royce's Big Data analytics to reduce fuel consumption across its fleet. And earlier this year the carrier signed up for Amadeus' Altéa Network Revenue Management, Dynamic Pricing and Altéa Group Manager Solutions. "A changing landscape requires a revolutionary approach," said Julia Sattel, senior vice president, airline IT at Amadeus.

"Traditional revenue management systems are no longer adequate to support the complex needs of network carriers and this is where 'Big Data' creates opportunities for more sophisticated practices," she said.

Cathay Pacific also uses data analytics to significantly reduce fuel costs and to inform its crew and shift deployment decisions. Analytics software processes information about employee skills, the aircraft on which they are trained, destination data and special breaks to optimize airline schedules. The process has

boosted productivity and reduced staff downtime at the airline.

Hainan Airlines is using a new data intelligence tool, which assists airlines in adopting the best Big Data technologies. "Understanding our business performance in the context of the wider marketplace is essential as we develop and refine our business strategies," said Jack Li, director, International business division at Hainan.

"Amadeus Booking Analytics allows us to understand exactly the source of our bookings, both in terms of origins and destinations and points of sale. We can determine how this compares with our competitors and make more effective strategic decisions."

Data analytics can be efficiently integrated into an airline to make all the operational gears move more smoothly, resulting in reduced scheduling issues, fewer lost bags, less delays and lower overall costs. But most importantly, data analytics can guide airlines towards marketing strategies that provide passengers with what they really want when they are

What we are going to see is that airlines that take on data analytics really learn about customer segmentation and trends in the market. They can find ways of turning that information into propositions that will attract loyalty from your customers. The airlines that do this will be the winners

John Slosar

Cathay Pacific Airways chairman



considering airline travel choices.

Japan Airlines (JAL) has begun the first overhaul of its main computer system for 48 years to better understand the needs of its customers. The carrier configured its own passenger services system, which handles reservations and ticketing, in 1969 and has been using the same one ever since, albeit with tweaks along the way.

Next year the airline will switch to a new cloud service at a cost of \$828 million. Until now, JAL has not been able to make full use of the vast volume of its customer data because separate databases have managed reservations, ticketing, the mileage program and other services.

Managing this data in the Cloud is expected to facilitate analysis of the Big Data. The airline plans to crunch passenger data to determine the most popular food on specific routes and flights so menus can meet true demand. Better management of flight management and airport services support is planned by 2020.

Chinese carriers also are focusing on increasing their ability to do business using Big Data.

Analysts report that China's business analytics services market reached US\$1.4 billion in 2014, up 16.4% from 2013. In the next five years it is expected to grow to \$3 billion.

Seattle-based Tableau Software recently set up operations in Shanghai where one of its customers is China Eastern Airlines (CEA), China's second largest and the world's ninth largest carrier by scheduled passengers. CEA uses Tableau to analyze market research, optimize its "Origin-to-Destination" routes and increase revenue.

James Pu, senior executive of networking and revenue at CEA, said: "In six months, we've developed nine dashboards for separate uses. Now we have 500 people who use the dashboards to analyze marketing, our competition, the other carriers and our flights-to-revenues.

"It is easy for everyone who uses Tableau to drill down, past the peel of the orange and to the core," he said. One year into using Tableau, the airline reported a 2% increase in revenue, which represented about \$200 million.

Cathay Pacific's Slosar said there was no doubt that with revenue management becoming more systemized, the next big move is to Big Data and data analytics.

"This is going to be very important. What we are going to see is the airlines that take on data analytics really learn about customer segmentation and trends in the market and then find ways of turning that information into propositions that will attract loyalty from your customers," he said.

He said airlines that may not be known as the most

advanced users of Big Data and data analytics today could be seen to be world class in this space in the next decade.

According to global consultants, McKinsey & Company, clairvoyant airlines can improve travel margins by 5% to 10% and it does not take magic to achieve these results. "The secret is insights from Big Data and analytics that offer a prescriptive solution to business disruption. It's always a hard call to hold a flight or leave passengers behind, but airlines no longer have to guess about the right decision. Now they can use real-time data to make the best choice in any given situation," it said.

The consultancy said an example of the application would be an airline deciding if it would hold a plane for 15 minutes. "In reality, it will take 32 minutes for the passengers and their bags to make it onto the plane because of specific gate locations and airport traffic conditions. If the plane waits, the airplane will miss its takeoff slot and eight other passengers will be in danger of missing their connections at the destination airport.

"Without analytics, there's no way to take all these factors into account when making a decision. The airline has to make its best guess and deal with the consequences. Add analytics to the equation and the airline can run an algorithm that considers the arriving gate information, walk and bag transport time between gates, the cost of re-booking passengers and the frequent flyer status of the affected passengers. Now the airline can foresee that the 15-minute hold will likely turn into a 30 or 40 minute delay and make a decision accordingly. How is that for clairvoyance?"

If we see there's an expected weather event in Sydney, rather than wait for it and react, we can go to our customers the night before. Then they have options. They can delay their meeting or take their chances. They are taking control of that choice, with analytics putting the decision back in the customer's hands

Paul Fraser

Qantas Airways head of operations

If an airline uses analytics to examine travel data about its past delays, it might realize that having specific airplane parts on hand can reduce them. McKinsey & Company said that more than 80% of all warning lights are caused by the same three parts. "When the warning light flashes, airlines can use data analytics to proactively alter the flight schedule using a combination of predictive analytics and historical data," it said.

Qantas uses data analytics to more quickly respond to disruption and has been able to reduce the number of flights reported late by 60%. "At the Qantas Operations Centre, we want better predictive analysis on what's going to happen each day," the airline's head of operations, Paul Fraser, said.

"If we see there's an expected weather event in Sydney, rather than wait for it and react, we can go to our customers the night before. Then they have options. They can delay their meeting or take their chances. They are taking control of that choice, with analytics putting the decision back in the customer's hands." ■



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European LCC warrior succeeds Mueller at Malaysia Airlines

Malaysia Airlines Berhad CEO, Peter Bellew, is determined to maintain the pace of reform set by “airline crisis boss” Christoph Mueller, who resigned from the carrier nine months into his three-year contract “for personal reasons”.

By staff reporters

Christoph Mueller prematurely departed Malaysia Airlines Berhad (MAB), bound for Emirates Airline on July 1, two months earlier than originally planned, in a truncated resignation period that disappointed the airline reformists at the Kuala Lumpur-based flag carrier and also his industry fans.

In his place, after a three month global executive search, is the airline’s former chief operating officer, Peter Bellew (51). Irishman Bellew, who lists distance running among his hobbies, became MAB’s CEO on July 1. He is charged with getting Mueller’s reforms, aimed at returning the carrier to profit in 2018, across the finishing line.

His job will be difficult, although he is neither a newcomer to the airline nor a novice in managing airline staff and operations. His last job before he moved to Kuala Lumpur was director of flight operations at Ryanair, a carrier that has attracted controversy under the leadership of its founder, Tony O’Leary. Among the senior positions Bellew held at Ryanair was head of sales and marketing where he was credited with successful media campaigns that made a hefty contribution to the LCC’s sales.

He arrived at MAS as COO in January 2015, as the stricken



carrier was preparing for its re-making under the 100% ownership of the country’s Khazanah Nasional sovereign wealth fund. In the previous March, MAS MH370, a B777 flight bound for Beijing from Kuala Lumpur, disappeared on March 8 – with the aircraft and all passengers and crew onboard yet to be found. A little more than four months later, the airline’s MH17 aircraft was shot down over the Ukraine, killing all onboard.

Former CEO Mueller, most recently the successful

turnaround CEO of Aer Lingus, arrived in Kuala Lumpur a few months after Bellew. His new executive team, heavily weighted towards expatriates, launched Malaysia Airlines Berhad from the ashes of MAS on September 1 last year.

Mueller’s three-year program eliminated a third of the airline’s workforce, deep cleaned the fleet, canceled unprofitable routes, upgraded inflight service and terminated several overpriced third party provider contracts. And, it has been alleged in the media, annoyed

quite a few locals who had been beneficiaries of the flag carrier’s gravy train.

Last February, MAB reported its first monthly profit for almost a decade. But then Mueller dropped his bombshell. A few weeks after the positive profit report, he truncated his three-year contract and announced his resignation because “of personal reasons beyond my control” from September 1. At that stage, he planned to serve on the airline’s board from September.

Rocked by Mueller’s decision, media critical of the airline said some MAB staff were not interested in improving the carrier’s performance or ridding it of suspected corruption. They alleged the last straw for the former CEO, who also criticized the work ethic of some MAB staff, was the return to service, without his knowledge or approval, of a B747. In a second shock, at least to the outside world, Mueller brought forward his departure from MAB to June 30. He is now Emirates Airline’s Chief Transformation Officer, in charge of digitisation at the carrier.

In a July 8 interview, his first since he became CEO, Bellew said a challenge “would be managing the cultural differences of staff”. The fifty-one-year-old, who has a keen eye for economy at the carrier, emphasized

saving money would not mean compromising on safety or the quality of the airline's products and services.

To illustrate his determination to achieve its target of sustained profitability by 2018, Bellew said MAB would launch flights from Kuala Lumpur International Airport's second terminal (KLIA2) next year because charges at the facility were lower than at the main terminal - by an average of \$8.25 per passenger, or \$1,350 for each flight.

"On one daily flight this simple saving will be \$500,000 per annum. We will pass these savings onto customers with lower fares. Each and every cost of everything we do will be checked minutely each day without any change in quality," he said.

There had been "great

progress" in the past year at MAB, Bellew said. "Our first quarter showed performance indicators were on track. Yield was up 23.4%. Costs were down 32.9% and our bottom line is ahead of budget," he said.

The airline had fuel savings of 10,000 tonnes in the first quarter of this year. "We will stop doing things that lose money. We will rebuild our relationships with the travel trade globally. We will lead a worldwide marketing initiative to promote the wonders of Malaysia," he said.

"We will start routes from various Malaysian airports to new, unserved ASEAN (Association of South East Asian Nations) destinations. A new website, mobile app, trade reservations system and airport equipment will be in place in the next 12 months.

"The digital experience when booking with Malaysian Airlines will see significant investment in 2016-2017. From the choice of seats and the quality of the Nasi Lemak (a Malay fragrant rice dish cooked in coconut milk and Pandan Leaf) to time of travel, we should ensure the needs of each guest, with their different individual preferences, are met."

The selection of Bellew as Mueller's successor was near to guaranteed as he has played a critical role in putting in place the former CEO's turnaround plan. As MAB chairman, Nor Yusof, said: "Peter has been a key figure in the airline's senior management team responsible for executing the biggest and fastest transformation in our history. Peter's appointment will pave the way for a smooth transition to ensure the continued

success of our national airline."

As the Dublin-based LCC's director of flight operations Bellew oversaw 70 bases around Europe and a fleet of 320 aircraft. He is credited with creating a training organization for 600 new pilots, built employee representative council structures in 19 countries, opened 61 overseas bases and introduced new technologies to reduce costs across the airline.

A graduate of Trinity College, Dublin, he began his career in the travel business, ironically dealing with a very young Ryanair, and was the founder and CEO of Irish online travel agency, vbnet.com.

He was general director of Kerry Airport in southwest Ireland and managing director of Drive Ireland before he joined Tony O'Leary's executive team in 2006. ■

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NATURAL BORN AIRLINE LEADER

Shinichi Inoue, the extroverted boss of Peach Aviation, the first “made in Japan” low-cost carrier, has built the airline’s success on brutal pricing discipline and person-to-person marketing intelligence.

Geoffrey Tudor
reports from Tokyo

Joint venture budget carrier CEO, Peach Aviation Ltd’s Shinichi Inoue is a very different kind of Japanese boss. Fluent in English and Mandarin and never too busy to stop and chat with his staff, he is a tireless and tireless leader of a new type of Japanese airline: a successful low-cost carrier.

Good humoured as well as approachable, Inoue takes inspiration and ideas from his workers – from ground staff to the cabin and the cockpit – as well as his manager lieutenants – when setting strategy at Peach.

It is this approach of believing that employee feedback builds an accurate picture of customer reactions, demands and trends that has been a significant factor in Peach’s success and also that of Inoue’s squire ship of the carrier.

He is also acknowledged by colleagues as “having a bit of the show man” about him with an eye for good publicity. When Peach was launched in early 2012, he donned a captain’s uniform and posed with flight attendants for the occasion, a rare example indeed of a Japanese CEO lightening up for the cameras.

Inoue was All Nippon Airways’ (ANA) director of corporate affairs Asia before he moved to Peach Aviation Ltd to work on its formative strategy in 2011. He was a clear favourite to head the team that set up Peach and was appointed its CEO and Representative Director, and later its president when the budget carrier was formally established.

Despite some industry scepticism about the Japanese appetite for budget flying, Peach Aviation became the first Kansai based “Asian regional” airline with an original business model. Based at Kansai International Airport in Osaka, it was set up as an unconsolidated subsidiary of ANA Holdings and is

run as a financially independent entity.

As Japan’s first LCC, Peach was launched in March 2012 with domestic services from Osaka to Sapporo and Fukuoka. International flights commenced two months later to Seoul, South Korea. At year-end 2012, the airline had added Hong Kong and Taipei (Taoyan) to its groundbreaking operations.

In November of its inaugural year, Peach had carried more than one million passengers and was the first Japanese LCC to hit the magic million mark for seats sold. It also became the first home-grown LCC to make an operating profit, achieved in its second year of business, to March 31, 2014.

Peach followed up that success with two consecutive years of increased revenue and profits, which has allowed the airline to pay off its accumulated losses and to start the current year, ending March 31, 2017, with a clean financial slate.

In the 12 months ended this March 31, Peach reported operating revenue of 47,939 million yen (US\$475,620) and earned an operating profit of 6,181 million yen. Net earnings were 2,744 million yen. Average seat load factor was 86.7% and the number of revenue passengers was 4.55 million.

In the current year, Peach is forecast to carry between five and six million passengers, increasing to six to seven million in the following year.

These estimates could be on the low side as inbound traffic continues to record strong growth. Inoue said Peach passengers could reach 10 million for the 2018 year.

According to the Japan National Tourist Organization (JNTO), visitors to Japan in the January-June period this year grew 28.2% over the same months a year ago, to a record 11,713,800. The figures topped the 10-million threshold for



Bred for success

Shinichi Inoue, the Representative Director and CEO of Peach Aviation Limited, was born and raised in the Shonan district of Kanagawa Prefecture, a region adjacent to Tokyo and bordering the Pacific Ocean to the south.

Inoue (58) graduated in law from the prestigious and internationally successful private Waseda University in 1982. The highly regarded tertiary institution has produced seven prime ministers and scores of leaders of industry, including the maverick founder of Sony. From 1982 until 1990, Inoue worked for Mitsubishi Heavy Industries in thermal power plant development.

He moved to All Nippon Airways in 1990 and until 2011 held senior management positions at the airline, both in Japan and overseas, before he took on Peach Aviation.

Married with three sons, he has maintained his family home in Shonan, where he enjoys reading for relaxation, particularly non-fiction history.

Last November, Japanese Prime Minister, Shinzo Abe, established a panel that is developing a program aimed at increasing overseas visitors to Japan to 40 million by 2020. Chaired by Abe, it includes 10 cabinet ministers and seven outside expert advisers, including Inoue, the only airline industry representative on the panel.

the first time for a first half performance.

It was the fifth consecutive year that first half visitor numbers had increased, said JNTO, with the growth led by more international flights and cruise ship visits.

The original target for foreign visitors was 20 million by 2020, the year of the Tokyo Olympics, but that target was reached last December. By 2020, inbound visitors to the country could increase to 30 million, said Japan's tourism officials.

Clearly, Peach has shown that the LCC business model can succeed in Japan, despite the country's unique commercial aviation environment.

But in 2012, sceptics predicted Japanese LCCs would fail because of the country's stringent regulations and Japanese travelers' demands for highly personalized service.

At Peach, Inoue attributes four factors critical to the LCC's strong performance: operational quality, cost management, branding and innovation.

"Since we started we have tried hard to explain to customers that they should see us as a 'flying train' so people would perceive aircraft as an everyday mode of transport," said Inoue.

"With our range of low fares this 'train' concept has been well-accepted and more and more people are enjoying low-cost travel. We are changing people's lifestyles – and making air travel a normal everyday event."

Led by Peach, the low fares created by Japanese LCCs have attracted customers who had never flown. Women, retirees, students and, increasingly, business travelers, are all marketing targets for the carrier.

Travelers who had used express buses or sea ferries can now fly on an LCC for the same price, but the journeys are much shorter. Retirees who have the time to travel now do so more frequently thanks to the low fares offered by LCCs. To cater particularly for this market, Peach has developed its "Active 60" fare campaign.

Another promising market is staff at Japanese banks and trading companies as well as members of the civil service who are regularly posted to provincial offices, usually without their families. LCCs help these families stay in touch at weekends and holidays.

Female office workers, especially young working women with limited vacation time, can book LCC packages such as one-day shopping or gourmet dining trips from Osaka to Seoul, South Korea. Female travelers from Taipei fly to Okinawa for beauty treatments.

The airline is paying special attention to young female travelers interested in style and casual luxury. The Peach livery, for example, attracts many "selfie" photo takers among female flyers of all nationalities.

Before it launched, Peach asked local residents in the Kansai region what they would like to experience as an airline passenger.

They had many responses. One was for the airline to





commence Kansai-Narita flights so housewives could take their children to Tokyo Disneyland for the day.

“These families don’t have the time to spend a night away from home, but by taking early and late flights they can pack in a visit to the Magic Kingdom - and save on the hotel cost – in a day,” Inoue said.

Low fares offered by Peach on routes to Okinawa, the semi-tropical island south west of mainland Japan, have influenced local real estate trends. Kansai residents have been buying condominiums as second homes for weekend and holiday stays, which was unthinkable just a few years ago.

Initially, Peach concentrated on the market in the Kansai area, a district with a population of around 20 million centered around the commercial centre of Osaka and Kyoto, the ancient capital. It was a good place to learn.

“Almost from the very beginning we were accepted,” said Inoue. “Kansai people have this strong, mercantile background. They readily took to the concept of the low-cost carrier style.

“At the same time, they are very demanding. They expect value for money. We found that if we satisfied the typical Kansai customer, we satisfied anybody.”

On flights in and out of their main base at Kansai International airport, Peach cabin crews make their announcements in the distinctive Kansai dialect, which has a rich and unique vocabulary; a practice that receives high marks from passengers.

“But the crew speaking that way must be authentic Kansai folks,” said Inoue. “I’m from near Tokyo. If I were to attempt to speak the Kansai dialect, it would not go down well.”

Peach flies to 14 domestic and 10 international routes from its bases at Kansai, Naha and Narita. “We’re considering a variety of possibilities for our domestic network and also for overseas expansion,” he said.

“We regard potential Peach destinations as those that can be reached within four hours from one of our base airports, whether they’re in Japan or in other countries. Four hours is the practical range of our A320 equipment.”

Last July, Inoue made this point to local media in the

Cardboard creativity

Outstanding among the innovations that Peach has introduced into the industry are self-service check-in kiosks made largely of cardboard.

“By using cardboard for the exterior of the kiosks, it’s easier to update branding and advertising imagery and it reduces overall manufacturing and transportation costs,” said Inoue.

The airline worked with an Osaka company, Yaneura Design, on the kiosks, which are taller than previous models and stand out in the terminal building. The 32-inch touch screens are more than double the size of the screens on conventional kiosks and are much more customer friendly.

Peach can split the large screens to display advertising or other promotional content alongside the step-by-step self-service check-in instructions. The top half of the screen can display messages to prompt queueing passengers to prepare their passports so check-in is speeded up. Kiosks automatically select the language used at the time of booking.

Cardboard kiosks cost 80% less than traditional units and have been installed at Kansai airport since last October.

northeastern Japanese city of Sendai when he outlined the airline’s plans for Sendai to be a Peach base by the northern summer of 2017. At present, the airline flies up to four times daily between Osaka Kansai and Sendai.

“Taipei, Kaohsiung, Seoul, Pusan and Hong Kong, routes where the required flight time is within four hours, are candidates, but other destinations are being studied,” he said.

“The majority of inbound Peach passengers are individual travelers looking for unique travel experiences in Japan. Not so long ago, every overseas visitor wanted to visit Tokyo, but that is changing.”

Recently privatized Sendai Airport is the gateway to scenic Tohoku in Japan’s northeast. It has suffered a tourism slump since the March 2011 earthquake and tsunami, but is working hard to hike back visitors.

The region’s spectacular scenery and hot spring resorts will benefit from a national government backed promotion drive in 2016 aimed to increase the 500,000 visitors to the region in 2015 to 1.5 million by 2020.

To build its traffic, Sendai is offering attractive landing fees to airlines. The carriers, in turn, have put cheaper air fares into the market that are increasing passenger numbers. Hotel stays, shopping and sightseeing are up. “That’s what LCCs can do,” said Inoue. “It’s a win-win situation.”

Twelve months ago, Peach once again raised eyebrows when it launched daily flights to Taipei from Tokyo’s Haneda Airport, using late night-early morning slots. In February this year, it followed up with similarly timed flights to Seoul.

“We’re looking forward to opening up our third and fourth international routes from Haneda,” said Inoue, without specifying any destinations.

Constraints at Haneda limit Peach and other LCCs to





‘ We really want to be an Asian brand, not just a Japanese brand. The biggest challenge for Peach is to develop our business model to maturity. We are still developing and have some way to go. After the Lehman Shock in 2008, Ryanair was the only airline to generate profits. That was completely due to their lower fare structure. We want to be like that. We’re still working on it. Every day is a challenge ’

Shinichi Inoue
Peach Aviation CEO

arrivals and departures between 11 pm and 6 am, so likely routes could be to cities already on the Peach network such as Kaohsiung or Hong Kong.

Other destinations Inoue is considering are in South East Asia beyond Peach’s Naha hub. The airline also is contemplating an overseas base which would very probably be at an airport served by the airline.

Peach flies 17 A320s, with more of the aircraft type to be delivered by year end. Another two A320s are scheduled to

enter the fleet by March 2018. “We basically plan to double the fleet to around 40 aircraft by the end of 2020 or fiscal year end of March 31, 2021,” said Inoue.

A constant concern for Peach is the supply of cockpit crew. This, Inoue noted, is a worldwide issue. Peach is coping, but two years ago the young carrier was forced to cancel more than 2,000 flights between May and October because of a captain shortfall.

Cabin attendants are a different story, with Peach recruiting staff in Osaka and Naha. It also is hiring cabin crew from Taiwan and South Korea and trains them at the All Nippon Airways’ centre in Osaka.

“We don’t seek applicants with previous cabin service experience, but look for at least a high school education as well as basic health checks and a pleasant personality,” said Inoue.

“When we advertised for our first cabin crew intake in 2011, there were about 2,000 applications for 100 places.” Among Peach’s 800 employees motivation is high. Inoue’s philosophy is: “Work hard, have fun”.

Peach has been criticized for its on-time performance, which was 80.7% in 2015. Inoue admitted Peach had to improve on this metric. “We’ve been concentrating on sustaining a higher completion rate, which was 99.3% for the 2015 fiscal year. We are now addressing the on-time operation rate, based on Ryanair’s model of around 90%,” he said.

Recently, several of the region’s budget airlines formed the Value Alliance. Members include Vanilla Air, an ANA Holdings airline carrier, Singapore Airlines-affiliated Scoot; Cebu Pacific Air, NokScoot, Tigerair Australia and Jeju Air. Was Peach interested?

“We’re certainly paying attention to any industry development, but our priority is to maintain the fundamentals of the LCC business model and attract our customers by our unique style,” he said. ■

Online barriers tumble

The reliance of LCCs on direct sales for their bookings via the internet was cited as a potential problem for budget airlines in Japan where customers traditionally relied on agents or telephone bookings for their travel arrangements.

After four years, the percentage of Peach’s online sales, irrespective of being direct or via intermediary sales, is more than 90%. Peach doesn’t disclose the detailed figures for the percentage of mobile sales, but it is very high and has been continuously growing.

The airline does not have a mobile application, but is considering developing an application with timing to be decided.

Meanwhile, direct sales, irrespective of online or offline, are approximately 98%. Some customers still want to use retailers so Peach offers package tours with Japan Travel Bureau and H.I.S. Travel, but the demand is not that big, said Inoue, who added the airline did not sell them.

Nor does the carrier offer the ‘Do It Yourself’ dynamic packaging of air fare plus hotel through intermediaries, an option some carriers provide.

Asian airlines keep tills ringing at Farnborough

Asian airlines carried the week at the recent Farnborough Air Show where they signed multi-billion dollar orders for mostly single aisle jets. It confirmed the region as the world's largest future air passenger market.

Tom Ballantyne reports

The big aircraft manufacturers may have sold around \$62 billion worth of jets at the Farnborough air show in July, but the sales figures were a long, long way from the record \$204 billion signed at the previous UK show in 2014.

The 2014 book may have been inflated by the massive orders of the Middle East airlines, but the big shift downwards this year definitely defined the times as the Asia-Pacific's continuing moment.

More than half of this year's Farnborough deals, estimated at \$34.35 billion, were written with Asia-Pacific airlines.

And as analysts forecast lower global sales will continue, mainly because most major carriers have large orders scheduled for delivery into the next decade, the evidence continues to highlight that aviation's centre of gravity is moving east.

Airbus chief operating officer, customers, John Leahy, said in the manufacturer's most recent forecast: "while established European and North American markets continue to grow, the Asia-Pacific is the engine powering growth in the next 20 years.

"China will soon be the world's biggest aviation market



and together with emerging economies, further population concentration and wealth creation, strong air traffic growth will be fueled. We are ramping up production to meet market demand for our leading aircraft products. We will also ramp up our customer service offerings to meet the increasing demands of air transportation."

At Farnborough 2016, Airbus won the battle for orders, but not by much. It secured 279 orders and commitments worth \$35 billion, at list prices, from

airlines. Boeing won orders and commitments for 182 aircraft at \$26.8 billion.

But the real story was in the detail. No major orders from big full service carriers were signed, with the exception of a \$2.85 billion purchase of eight A350-1000s by Virgin Atlantic. The new order essentially replaced an earlier agreement for A380s.

The largest order was for 100 A321neo from AirAsia, valued at \$112.6 billion, followed by part Qantas-owned Jetstar Pacific's commitment to A320s worth

\$980 million. All the other orders were from Chinese airlines and went to Boeing.

Donghai Airlines ordered five B787-9 Dreamliners (\$4.07 billion) and Kunming Airlines signed up for 10 B737MAX worth \$900 million. Ruli Airlines converted its Memorandum of Understanding to a firm order for six B787-9s at list prices of \$1.68 billion, Xiamen Airlines agreed to buy 30 B737MAX for \$3.39 billion and an unidentified Chinese customer will take 30 B737 MAX and NGs for \$3 billion.

Airbus and Boeing remain extremely bullish about their sales. With a record backlog of 13,500 aircraft between them, they have sufficient orders to keep their production lines humming for a decade at current output rates.

Nevertheless, some analysts have cautioned that economic risks, ranging from slowing growth in China to Britain's decision to leave the European Union could cause orders to start to dry up or be cancelled, particularly for larger twin-aisle jets.

Both major manufacturers have raised their forecasts for airliner demand in the next two decades. Boeing estimates airlines will need 39,620 new

More than half of this year's Farnborough deals, estimated at \$34.35 billion, were written with Asia-Pacific airlines

aircraft worth \$5.9 trillion in the next twenty years, an increase of 4.1% over its 2015 forecast.

“Despite recent events that have impacted the global financial markets, the aviation sector will continue to see long-term growth, with the commercial fleet doubling in size,” said Randy Tinseth, vice president marketing at Boeing Commercial Airplanes. Boeing forecasts airline passenger traffic will increase 4.8% a year in the same period.

Airbus has raised its 20-year forecast to 30,070 new aircraft, up 500 from its previous estimate, and predicts passenger traffic will increase at an average of 4.5% a year. “Middle classes in emerging markets will double to 3.5 billion people by 2035,”

‘ Airbus and Boeing said demand for single-aisle jets, rather than twin-aisled aircraft or four-engine extra-large aircraft, are the drivers of their revised upward forecasts ’

it said, predicting particularly strong growth in China and India.

Airbus and Boeing said demand for single-aisle jets, rather than twin-aisled aircraft or four-engine extra large aircraft, is the driver of the revised forecasts. Of the 279 orders Airbus signed at Farnborough, 269 were for its A320 family.

Boeing did not mention China specifically in its forecast. It expected the Asia-Pacific to order 15,130 new airplanes

worth \$2.35 billion to 2035, with single-aisles attracting 11,160 orders, or 74% of all orders.

Boeing believes air traffic will increase at an annual average 6% per year and that by 2035 the region will account for 48.7% of the worldwide airliner demand. China is expected to contribute an increase of 6.2% per year, Boeing said.

Airbus sees growth being driven mainly by China and India and said the Asia-Pacific

will order 13,458 new aircraft, valued at \$2.25 trillion, and that 9,074 of the new aircraft will be single-aisle jets.

Post his Farnborough Air Show order, AirAsia Group chief executive, Tony Fernandes, said his airlines fly close to 1,000 flights every day to more than 120 destinations in 24 countries. “We recorded a robust load factor of 85% in the first quarter of 2016, up eight percentage points from the same period last year,” he said.

“We are confident of maintaining this momentum. The A321neo will help us to meet ongoing strong demand as well as reduce our cost per Available Seat Kilometre across the group. It will translate to lower air fares for our guests.”

The A321neos the AirAsia Group has ordered will be “operated on our most popular routes and especially at airports with infrastructure constraints. It will allow us to bring in higher passenger volumes with the same slots, providing immediate benefits to the airports”.

Vietnam’s Jetstar Pacific sees similar advantages with its new A320s. “This agreement marks a milestone in our development,” said Le Hong Ha, the carrier’s chief executive, at Farnborough.

“The new aircraft will allow us to expand our operations on our international network from Vietnam as part of the wider Jetstar Group. With low operating costs and a comfortable cabin, the A320 enables us to offer our passengers a quality, value-based product in a highly competitive market environment.”

Based in Ho Chi Minh City, Jetstar Pacific is a joint venture between Vietnam Airlines (70%) and the Qantas Group (30%). The airline operates a fleet of 12 leased A320 Family aircraft, flying to 28 domestic and regional destinations. ■



Reliable WiFi determines passengers' airline choices

High quality onboard WiFi is vital for both retaining and attracting customer loyalty, said a recent industry survey.

Tom Ballantyne reports

A study by diversified aerospace technology and manufacturing conglomerate, Honeywell Aerospace, has warned airlines they risk losing customers if their onboard WiFi disappoints passengers.

The survey of more than 1,000 flyers was done in the U.S., but the findings reflected a worldwide trend, including the preferences of airline travelers in the Asia-Pacific, Honeywell said.

The Honeywell Aerospace Connectivity 2016 Survey was

conducted by analysts, Kelton Global, last April and published in July. It found passengers were more frustrated with current inflight WiFi than they were in 2014.

Nearly three out of every four passengers would switch airlines if another carrier offered faster and more reliable WiFi. Additionally, the survey said, passenger annoyance was growing. In the last 12 months, 22% of passengers said their inflight WiFi was extremely reliable, compared with an approval rating of 27% in 2014.



More than 90% of passengers want quality WiFi available for their entire airline journey

Passengers are serious about getting the best inflight WiFi experience possible. To avoid losing passengers and revenue, airlines need a connectivity service that is reliable all the time, no matter where they fly

Carl Esposito

Vice president, marketing and product management, Honeywell Aerospace

The Honeywell survey said airlines must deliver high standard IFE WiFi because:

- Travellers expect reliable onboard WiFi connections to keep in touch with friends and family, complete work or be entertained. In 2016, more than one in five (21%) of survey respondents abandoned their preferred airline for one with better onboard WiFi, an increase of 4% over 2014.
- Inflight service is clearly a top priority for passengers and influences the flight bookings of 68% of airline travelers.
- Six in 10 travelers said they would most likely feel disappointed or frustrated if they travelled on a plane that did not have inflight WiFi.
- Eighty four per cent of respondents want an inflight WiFi service that matches the quality of their work and home WiFi.
- Most travelers said a reliable WiFi connection has to be

available for their entire journeys (90%) and be fast enough to stream audio or video from sites like YouTube and Netflix (83%).

- Millennials, who are born between 1982 and 1999, are the most connected generation to participate in the survey. They also are the first full generation to grow up in the digital age with news, entertainment, commerce and social networks at their fingertips.

- If airlines want to earn the business and loyalty of Millennials, one of the largest consumer groups worldwide, they must offer the best global in-flight WiFi service.
- More millennials than older generations - 73% versus 63% - said WiFi availability influenced the flights they book and they want speed to stream content (89%). More than one in four Millennials (27%) had switched from their preferred airline to an airline with better in-flight Wi-Fi options. ■

China remains at the top of Asia-Pacific domestic air travel table

By Tom Ballantyne

The unstoppable expansion of Asia-Pacific airlines continued across the globe in 2015, the International Air Transport Association's (IATA) said in its latest World Air Transport Statistics (WATS) report.

The year book of the industry's worldwide performance said the region's airlines carried 1.2 billion passengers in 2015, which was 34% of the world's airline market. The expansion added 10% more travelers to Asia-Pacific airlines in the period reviewed.

The record breaking numbers were well ahead of Europe (26.2% of traffic or 935.5 million passengers) and North America's 24.8% or 883.2 million passengers. The growth also outpaced expansion in the Middle East, where Gulf carriers had a 5.3% global market share in 2015, or 188.2 million passengers; an increase of 8.1% over 2014.

Worldwide, 3.6 billion

passengers took scheduled airline journeys in 2015, which was an increase of 7.2%, or 240 million airline trips, compared with the previous 12 months.

The Asia-Pacific also swept the board in airport performance. Both the top five international/regional passenger airport pairs and the top five domestic passenger airport pairs operated within the region.

The world's leading international/regional routes in 2015, compared with 2014, were Hong Kong-Taipei (5.1 million passengers, up 2.1%), Jakarta-Singapore (3.4 million passengers, down 2.6%), Bangkok Suvarnabhumi-Hong Kong (3 million passengers and a 29.2% increase), Kuala Lumpur-Singapore (2.7 million passengers up 13%) and Hong Kong-Singapore (2.7 million passengers and down 3.2%).

Domestically, compared with 2014, the top five city pairs in the world in 2015 were Jeju-Seoul Gimpo (11.1 million, up 7.1%), Sapporo-Tokyo Haneda (7.8 million, up 1.3%), Fukuoka-Tokyo

Haneda (7.6 million, a decrease of 7.4%), Melbourne-Sydney (7.2 million, down 2.2%) and Beijing Capital-Shanghai Hongqiao (6.1 million, up 6.1%).

Among the world's largest domestic markets, India recorded the fastest passenger growth in 2015, at 18.8%, in a market of 80 million domestic passengers. It outpaced Russia (11.9% growth in a market of 47 million domestic passengers), China (9.7% growth in a market of 394 million domestic passengers) and the U.S. (5.4% growth, in a market of 708 million domestic passengers).

Despite China's dominance, the region had only one representative, China Southern Airlines, in the top five airlines ranked by combined domestic and international passengers carried. Reflecting strong domestic business, the U.S.'s American Airlines (146.5 million), Southwest Airlines (144.6 million), Delta Air Lines (138.8 million) were the top three carriers in the world for total passengers carried, followed by

China Southern Airlines (109.3 million) and Ryanair (101.4 million), respectively.

Three Asia-Pacific and Middle Eastern carriers were among the top five freight airlines for the 2015 calendar year, but the air cargo business remained in the doldrums, the WATS statistics revealed.

Global air freight and mail tonne kilometers increased by 2.3% last year against a capacity increase of 5.8% for the 12 months. As a result, the freight load factor dropped by 1.6%. The five leading airlines for scheduled air cargo carried were FedEx Express (7.1 million), United Parcel Service (4.5 million), Emirates Airline (2.5 million), Cathay Pacific Airways (1.6 million) and Korean Air (1.5 million).

The 3.6 billion airline passengers carried in 2015 were the equivalent of 48% of the Earth's population. Airlines also transported 52.2 million tonnes of cargo, at a value of \$6 trillion. The industry produced some \$2.7 trillion in economic activity and 63 million jobs. IATA said. ■



Independent MROs underdogs in after market price war

Original equipment manufacturers (OEMs) continue to build their businesses in the maintenance, repair and overhaul (MRO) aftermarket with the sector worth a forecast \$3 trillion in the next two decades. But airlines are unhappy and assert they are being overcharged and restricted by the scope of MRO contracts.

Tom Ballantyne reports

Airline MRO aftermarket services is lucrative business for major aircraft and engine manufacturers and equipment suppliers. It also is becoming a major arena of conflict between OEMs and their customers.

Tony Tyler, until recently a distinguished director general and CEO of the International Air Transport Association (IATA), said earlier this year that when it comes to aftermarket services airlines have "little alternative but to sign on to long-term maintenance and parts agreements containing pricing escalations that are often above the inflation rate".

Privately, airlines are increasingly uneasy about the power wielded by equipment suppliers, who are controlling a market formerly serviced –largely – by third party MRO companies. Some carriers have said equipment suppliers of are withholding crucial information on products, such as manuals and technical drawings, to ensure that only they or their partners can provide spare parts or carry out high-quality maintenance.



Rolls-Royce aircraft engines earned 51% of total revenue from aftermarket contracts in 2014

Late last year, the chief executive of European airline group IAG, Willie Walsh, threatened legal action over the increasing cost of repairing his aircraft and accused manufacturers of "restrictive practices".

Walsh's allegations led to intervention by the European Commission's competition authorities, which sent out dozens of questionnaires to airlines, engine makers and

component suppliers about the issue. So far, no official inquiry has been launched but Brussels is sufficiently concerned by the complaints to explore whether the growing hold of OEMs on airline MRO could be anti-competitive.

Not surprisingly the OEMs who have commented on the claims strongly deny the allegations. Philippe Petitcolin, chief executive of GE's engine partner, Safran, said Walsh's complaints were unjustified and

his customers were not forced into buying his engines or sign up for service contracts.

If the matter does progress at the EC, Airbus, Boeing, Rolls-Royce, General Electric, Honeywell, United Technologies and Pratt & Whitney are expected to defend their sales strategy with the full force available to them under EU law.

At Britain's Farnborough Air Show in July, Airbus published its first Global Services Forecast (GSF). It predicted that in the next two decades the industry aftermarket services sector would be reach US\$3 trillion.

Airbus said MRO spend would grow from \$53 billion this year, at an average annual growth rate of 4.6%. MRO specialist consultancy, ICF International, has estimated MRO income would reach \$96 billion by 2025, underpinned by rising demand for engine and component services in the Asia-Pacific and other emerging markets.

Despite the verbal skirmishing between airlines and manufacturers about MRO costs, OEMs are intensifying efforts to expand their MRO aftermarket businesses. With the accelerating demand for new routes and the region's expanding fleets, the Asia-Pacific is the largest market for MRO business and the training of pilots and technicians.

Europe and North America combined will account for approximately one third of the total MRO market spend, said Airbus. "Moreover, with the ever increasing growth of the commercial aircraft industry, with Airbus' OEM expertise, Services By Airbus will deliver value-adding and quality services for its customers worldwide – on a par with the quality of the aircraft which we deliver," says Laurent Martinez, senior vice president of Airbus' Services business unit.

Services By Airbus is the unit responsible for providing

INDUSTRY INSIGHT

MRO EMERGING TRENDS IN THE ASIA-PACIFIC

Maintenance, Upgrades, Training and Flight Operations for Airbus customers.

Another company with a strong dependency on the Asia-Pacific market, is Britain's Rolls-Royce. Last year, the manufacturer restructured its engine MRO network and established a global customer service center (CSC) chain to improve responsiveness to airline clients.

It should have happened years ago, as Rolls-Royce's TotalCare power-by-the-hour customer-support program serves 85 airlines that fly 14 million hours a year.

The manufacturer's installed engine base has grown from 2,160 units to more than 4,500. Rolls-Royce, the world's second-biggest largest maker of aero engines, generates 52% of its civil aircraft revenue from after-sales services. It is understood the service business is so lucrative that Rolls-Royce will sell its engines at a loss in return for a long-term service contract.

At Farnborough this year, Rolls-Royce announced an extension of its Trent Services Network to Abu Dhabi, where it will operate an approved maintenance centre (AMC) network. It will provide maintenance for the Trent XWB engine that powers A350 aircraft, a practical decision when the orders of A350s in the Middle East are tallied up. Other engine makers also had a successful show, with GE Aviation signing up a number of airlines for its TrueChoice aftermarket package. GE's joint venture CFM International engines amassed more than \$8 billion in engine orders and service contracts at the show.

It is clear the aggression of the OEMs' efforts to secure airline aftermarket business is changing the MRO landscape. Wolfgang Weyness, senior vice president at Lufthansa Technik,

one of the world's top 10 MROs, said recently; "We are seeing a new level of competition. Manufacturers are intensifying their efforts to increase their part in the entire supply chain. These are big challenges. They will have consequences for margins." Chris Doan, of Oliver Wyman, estimated that 15% to 20% of MRO spending could be redistributed as a result of the changes to the traditional practice of airlines when buying MRO services.

In a report earlier this year, Frost & Sullivan analysts said the MRO landscape was "disrupted" by the emergence of new technologies and the growing presence of OEMs in the aftermarket. The aftermarket provides a variety of critical services, including engine, components, base and line maintenance, with engine maintenance accounting for around 40% of total maintenance cost, they said.

"These services have largely been provided by in-house ('captive'), airline third party and independent MRO service providers, with OEMs playing a more limited role. However, aggressive forays by engine and airframe OEMs into the aftermarket were re-shaping the sector, forcing traditional aftermarket service providers to re-evaluate their value propositions," said the Frost & Sullivan report.

MRO service demand also is being reduced or displaced because new aircraft need less frequent maintenance, overall maintenance needs, airlines are buying greener fleets that require fewer shop visits and the Middle East is displacing demand at traditional maintenance hubs.

Technology factors also are having an impact on airline MRO practice. A modern fleet promises improved reliability, but also increased maintenance complexity, which requires skills

from technicians that not all MROs provide.

The shift to advanced materials such as composites mean new strategies, techniques and schedules are needed compared to the more mature metallic processes of MRO shops. Similarly, advances in data analytics and the shift to predictive maintenance are introducing requirements that not all third party MRO providers would be able to accommodate.

Airlines that typically spend between 10% to 15% of annual revenues on direct maintenance costs, are facing significant unit maintenance pricing. IATA said the average maintenance cost in 2013 was \$1,167 per flight hour, \$3,021 per flight cycle and \$3.1 million per aircraft per year.

Today, for a wide-body aircraft, the MRO cost could reach \$5 million annually. As fleets age and carriers start to incur the costs of major maintenance milestones, such as C and D checks, airlines are exposed to a growing maintenance burden. As a result, airlines are focused on reducing MRO expenditure.

Historically, engine OEMs have been relatively successful in cultivating strong aftermarket relationships with airline customers. By leveraging the technical complexity and material-intensity of engine maintenance activities, significant barriers to entry have been established in both the wide-body and rapidly growing narrow-body markets.

In the wide-body aftermarket, Rolls-Royce is an acknowledged aftermarket leader. In 2014, it held 24% of the wide-body aftermarket by engine volumes an 83% of its commercial transport engine fleet was covered by its TotalCare service. Fifty two percent of civil aerospace revenues were earned from aftermarket services.

GE-Snecma engine joint venture, CFM, accounted for

51% of total deliveries in 2014 and controls around a third of the aftermarket services business for its products. Significantly, 80% of CFM's next generation LEAP engines are to be bundled with long-term service agreements.

In the past, airframe manufacturers traditionally have held a lower proportion of aftermarket MRO business. Boeing's GoldCare offering covers around 1,600 aircraft, the equivalent of 15% of its active fleet. "However, motivated by the need to recover heavy development costs and capitalize on the projected growth in MRO revenues, the airframe OEMs have redoubled their efforts to secure Long Term Service Agreements (LTSA) at the point of aircraft sale," said Frost and Sullivan.

"Combined with the technological complexity of the latest airframe designs, restrictive licensing agreements and strategic intellectual property advantages, these offerings make it more difficult for non-affiliated MROs to compete," said the report.

As the airframe, engine and component OEMs cement their presence in the aftermarket, the development of collaborative OEM-MRO partnerships will be essential for MRO survival.

Most analysts agreed that as more new generation reliable aircraft come on stream, that will have longer gaps between maintenance checks, third party MRO demand will plateau.

Another aviation consultancy, The Cavok consultancy, believed the presence of more planes with advanced technology in airline fleets will result in decreased MRO demand. It advised to develop "aggressive and innovative plans for growth" if they want to remain competitive in the market.

The industry should anticipate more such improvements as airlines use broadband connectivity to bolster maintenance proficiencies, it forecast. ■

China's winning ways boost HAECO group

Swire Pacific's Hong Kong Aircraft Engineering Company (HAECO) has hit a purple patch in profits. Its operations in Mainland China are paying dividends and the MRO Group is expanding globally, including developing its business jet completions company.

Tom Ballantyne reports

HAECO's shareholders could not be happier. They are receiving a special interim dividend after the Hong Kong headquartered company posted a 337.4% spike in interim net profit, to \$143.2 million. The result was boosted by the \$103.8 million made from the sale of Hong Kong Aero Engine Services Ltd's interest in Singapore Aero Engine Services Pte Ltd. But even with that factor excluded, group profit increased by 29.1%, to \$42.3 million.

On closer examination however, the results were mixed across the group. HAECO's operations in Mainland China are winners - there has been a surge in the cash contribution from its units there - but net profit from the MRO's Hong Kong operations fell by 17.2%, to \$10.6 million.

HAECO's Xiamen facilities include specialist shops for cabinetry, veneer finishes, upholstery and other cabin décor work. In addition to its authorization from the Civil Aviation Administration of China to operate as a Mainland MRO, the company holds Part 21 approval from the Hong Kong Civil aviation authority.

Part 21 approval means the European Aviation Safety Agency validates HAECO's supplemental type certificates. And through the HAECO Americas division,



HAECO Group CEO, Augustus Tang: HAECO plans to add 350 staff to its 16,900 member work force by year end

the MRO has access to the certification process of the U.S. Federal Aviation Administration.

In July, HAECO Xiamen redelivered its 2,500th aircraft in the thirty-year history of the MRO and modifications company. It has completed more than 1,000 B747 redeliveries, 250 B767s, 200 B777s, 170 A330s and 650 narrow-body inputs, including the world's first B747-800BCF passenger-to-freighter conversion.

To date, it also has delivered 60 freighter conversions on B737s, B747s and B757s. HAECO Xiamen's offerings include a line services network on the Mainland, technical training, parts manufacturing and private jet services.

HAECO chief executive, Augustus Tang, said demand for airframe services in Hong Kong in the first half of the year was

lower than 12 months earlier and that the business for airframe and component maintenance services in the second half of 2016 would be stable.

Its line services capacity is on the rise and HAECO plans to hire more staff. In the first half of the year, it increased its employees by 1.1% (189), to 16,892. The company has committed to hiring 350 aircraft maintenance personnel by year end. Seasonal factors will affect business in the current six months, he said, as there is usually less demand for aircraft maintenance during the northern summer.

HAECO is continuing its overseas expansion. Last month, its Americas division broke ground on a fifth hangar at its facility in Greensboro, North Carolina. "It offers jobs for a proposed 500 more employees, which is really important to us," said Jim Sokol at HAECO Americas maintenance operations. "Those aircraft maintenance employees will work inside the \$60 million hangar on planes from around the world.

"Beyond our evident focus on U.S. registered aircraft, we have expanded our approvals to cover those from regulators in China and the Middle East," said Richard Kendall, HAECO Americas chief executive.

"We can build demand for the services we provide with aircraft operators in the fastest

growing segments in the world." Once completed, the 250,000 square foot hangar, the size of 40 basketball courts combined, will be the largest hangar the company has ever built.

"This hangar will accommodate up to eight narrow-body aircraft or two wide-bodied aircraft and two narrow-bodied aircraft simultaneously," Kendall said. The hangar will be finished late next year with the first customer scheduled to come through the door in January of 2018.

Another HAECO subsidiary, Private Jet Solutions (PJS), was a prominent exhibitor at July's European Business Aviation Convention & Exhibition (EBACE) in Geneva. HAECO PJS has an engineering house in San Antonio, Texas and operates the first Asia-Pacific Airbus approved and Boeing licensed cabin completion centre in China at the HAECO's Xiamen campus. In June, at an ABACE business jet exhibition in Shanghai, PJS announced it had become one of the five worldwide authorized service centers for Airbus Corporate Jets (ACJ).

At Geneva's ABACE, PJS unveiled an agreement with Rockwell Collins to distribute its in-flight entertainment (IFE) systems and products. The pact gives the maintenance and completions company access to the sales and support network of the U.S. electronics and communications company, an important factor sustaining business jet operations in the Asia-Pacific.

"Establishment of the dealership by HAECO PJS allows both companies to provide the region's private end business jet customers and operators with a broader range of products and services, which are more cost-effective and reliable," said Henry Chan, PJS's commercial vice president. ■

MTU Aero Engines propels ahead

MTU Aero Engines reported its third consecutive quarter of record revenue from its MRO division in late July, with business proving particularly brisk for maintenance of engines for single aisle A320s.

In the first six months of 2016, MTU's revenues increased in the commercial and military maintenance sectors. MTU Aero's MRO business registered the highest growth for the interim



period, when revenue increased by 18%, to Euros 893.3 million (US\$1.012 billion at press time).

"The principal source of

revenue was the V2500 engine for the A320 family, the company said in its profit announcement.

"Second quarter revenues in

the MRO segment amounted to Euros 464.5 million making this the third successive quarter with record figures," said chief program officer, Michael Schreyogg.

The engine repair business is under pressure, wrote the Financial Times, as major manufacturers have lowered their prices for airline after-market contracts, which has put pressure on revenue targets for third party supplies such as MTU Aero, the newspaper said. ■

BRIEFLY...

Rolls-Royce announces accounting change

British Engine group, Rolls-Royce, after it posted its interim results earlier this year said it would no longer take revenues from its MRO contracts before the engines were delivered for repairs. The engine manufacturer and MRO provider will now bill clients as work is done.

Until this change was announced, Rolls-Royce had brought forward profits from its decade long after sales MRO services to compensate for the initial losses the company suffered when it sold engines to airlines. It is estimated that after market MRO contracts make up to 50% of earnings for the major engine manufacturers. ■

Cathay Pacific Airways signs an A350 contract with Satair

Satair Group has won its first A350 customer with the completion of a deal that requires the wholly owned subsidiary of Airbur S.A.S. to provide Integrated Material Services (IMS) for Cathay Pacific Airways' ordered fleet of 48 A350XWB aircraft. In May, the airline's first A350-900 was delivered to the carrier's headquarters in Hong Kong. Under the terms of the IMS contract, Satair will supply an end-to-end supply chain package for the carrier's expendable material.

The agreement includes planning, sourcing, purchasing, logistics and inventory management of 15,000 part numbers. Satair started to supply the expendable material for Cathay Pacific's flight simulators, upfront stocking of outstations and the airline's central stock in Hong Kong from May. ■

Lufthansa Technik expands China Airlines partnership

China Airlines (CAL) and global MRO, Lufthansa Technik AG, have expanded their partnership to include total component support for Taiwanese carrier's A350 fleet. The Total Component Support TCS package requires the Hamburg-headquartered MRO to provide CAL with maintenance, reliability monitoring and enhancement and logistics support for the airline's A350 aircraft when needed in Europe and The Americas as well as the Asia-Pacific.

Lufthansa Technik has been supplying material for CAL's A330 and A340 fleet under a TCS contract since 2010. ■

THAI seeks partner for MRO "smart" hangar

The Asia-Pacific's major maintenance, repair and overhaul (MRO) businesses are centred in Singapore, Hong Kong

and China. But Thai Airways International is hoping to leap frog its rivals by building a new facility that "would be the best in the region".

The "smart" hangar will be built at U-Tapao airport south of Bangkok and will serve as a computerized "hospital" for aircraft, according to THAI executive vice-president, Chalermpon Intarawong.

THAI has MRO facilities at the airport, but is in talks with Air France with the goal of setting up a joint venture between THAI and the European airline. "We need a huge amount of money to build a smart hangar, but in terms of value, it can be used for up to 30 years," said Chalermpon.

The "smart" hangar will run all airline checks and repairs on computer systems. Aircraft will be scanned to identify engine, fuselage, cockpit and cabin defects. Inspections will be supported by high-definition cameras and robots which can even be controlled to check inside the fuel tanks.

THAI hopes to draw business away from the established MRO operations elsewhere in the Asia-Pacific, but specifically from Singapore, Hong Kong, China's fast growing airlines like Malaysia's AirAsia Group.

The flag carrier has decommissioned almost half of its fleet of about 100 aircraft in the last three years as it attempts to turn around its struggling business. The company needs to keep its repair unit active. It has increased its third party MRO customers by 10% in 2016, to 40% of its total maintenance business, said Chalermpon. ■

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