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Malaysia Airlines group CEO, Captain Izham Ismail, reveals his deep commitment to restoring the carrier to five star status

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Ex- CFO succeeds sacked Mansyuri at Garuda

India's airlines deserve a better government

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### Cyber complacency the unwitting accomplice of hackers

A cyber attack on an Asia-Pacific airline's data base is an everpresent danger. The fact that hackers accessed the addresses and personal and credit card details of 380,000 British Airways (BA) customers from late to August to early September this year is proof of that.

British Airways has yet to complete its investigation into the breach and also determine the damage the hackers did to the airline's reputation. In the meantime, the assault emphasizes the importance airlines must place on preserving the security of all their data.

In February, the Association of Asia-Pacific Airlines (AAPA), in partnership with the Qantas Group and Singapore aviation authorities, conducted the first of four interactive workshops on airline cyber security prevention. The second gathering will be held in Hong Kong next month.

Issues being discussed at the workshops range from risk awareness and strategic planning to strengthening resilience and fostering links in the airline supply and operations chain.

Elsewhere, Europe's introduction of the General Data Protection Regulation (GDPR) has added a layer of legal complexity to the business of running an international airline as it requires greater transparency about the collection of personal data from European Union citizens.

From May this year, businesses, including airlines, must report cyber attacks or data breaches within 72 hours of becoming aware of them. Failure to do so will attract severe penalties.

Generally, airlines have been reluctant to admit hackers have

stolen their passenger data out of fear of losing business. But criminal or mischievous hacking of valuable corporate data bases is no longer an isolated experience.

It is now essential, as far as the EU is concerned, that victims of cyber attacks admit the breaches so damage control systems can be quickly put in place.

It might be naively assumed that Asia-Pacific airlines don't need to bother about GDPR, but they are wrong. Our airlines may be based far from Europe, but the new rule applies to us too. Europeans fly on every category of carrier in the region and our websites are open to European eyes. Within the region, Singapore, South Korea and Japan are among Asian nations that have data protection rules as does the U.S.

At the 2017 Australian Airports Association conference, Sydney Airport general manager technology, Stuart Rattray, told delegates airlines and airports were "so connected through processes, people and also through IT that if one of us is under attack we can think of ourselves as all being under attack".

He added that "airlines should not rely solely on their IT departments to manage their cyber security". He said it was a generally accepted rule that 80% of cyber risk was about people and approximately 20% was about the technology.

The British Airways data breach and the GDPR, while not directly related, highlight with dramatic effect the dangers of digital data theft. They also emphasise the importance of investing in effective cyber defences to defeat the efforts of hackers intent on stealing passenger and operations data from airlines.

#### **TOM BALLANTYNE**

Chief Correspondent Orient Aviation Media Group

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### Qantas attacks Australia's fee "gouging" airports

Qantas turned a metaphorical blowtorch on Australia's major airports in September with accusations of "blatant profiteering" and fee "gouging" in a submission to the Australian Productivity Commission.

Qantas group executive government and regulatory affairs, v, told the commission that if airport fees were reduced by A\$4 a passenger airlines would save \$648 million (US\$467.5 million) a year.



regulation had opened the door to blatant profiteering by the airports. "It is the family visiting the Great Barrier Reef for the first time, the business traveller flying from Melbourne to Sydney for meetings and the dairy farmer

sending fresh milk to the Chinese market that ultimately pay for the high and rising costs," he said.

Qantas said it had reduced its operating costs by 4% (excluding fuel) since 2015, but the fees it paid to airports had risen 6.5% in real terms.

In response, the Australian Airport Association (AAA) told the inquiry its members had made significant investments in the last 15 years to facilitate the entry into the local market of international competitors that had driven down the cost of overseas travel for Australians.

At the June annual general meeting of the International Air Transport Association (IATA), held this year in Sydney, the global airline body called on national governments to "prioritise the long-term economic and social benefits delivered by an effective airport ahead of the short-term financial gains of a poorly thought-out privatization". Australia's major airports are fully privatized.

Parker said a lack of effective

### Asia-Pacific dominates air passenger growth

The Asia-Pacific continues to lead the way in airline traffic growth, even though none of the region's carriers have made the top five when it comes to total scheduled passenger kilometres flown, according to the latest annual statistics from the International Air Transport Association (IATA).

The 62nd Edition of the **World Air Transport Statistics** (WATS), the yearbook of the airline industry's performance, showed that last year the world's airlines carried 4.1 billion passengers on scheduled services, an increase of 7.3% over 2016, representing an additional 280 million trips by air. Airlines in the region once again carried the largest number of passengers, 1.5 billion, an increase of 10.6% over a year earlier giving them a 36.3% market share. That was well ahead of Europe with a 26.3% market share (1.1 billion passengers, up 8.2% over 2016) and North America's 23% market share (941.8 million, up 3.2% over 2016).

Latin America was fourth with a 7% market share (286.1 million, up 4.1% over 2016), followed by the Middle East's 5.3% share (216.1 million, an increase of 4.6% over 2016) and Africa's 2.2% (88.5 million, up 6.6% over 2016).

The world's top five international/regional and domestic passenger airport pairs were all within the Asia-Pacific. Internationally, they were Hong Kong-Taipei Taoyuan (5.4 million, up 1.8% from 2016), Jakarta Soekarno-Hatta-Singapore (3.3 million, up 0.8% from 2016), Bangkok Suvarnabhumi-Hong Kong (3.1 million, increase of 3.5% from 2016), Kuala Lumpur-Singapore (2.8 million, down. 0.3% from 2016) and Hong Kong-Seoul Incheon (2.7 million, down 2.2% from 2016).

Domestically, the world's top five domestic passenger airport pairs were Jeju-Seoul Gimpo (13.5 million, up 14.8% over 2016), Melbourne Tullamarine-Sydney (7.8 million, up 0.4% from 2016), Fukuoka-Tokyo Haneda (7.6 million, an increase of 6.1% from 2016), Sapporo-Tokyo Haneda (7.4 million, up 4.6% from 2016) and Beijing Capital-Shanghai Hongqiao (6.4 million, up 1.9% from 2016).

A new statistic in the WATS report was the ranking of passenger traffic by nationality



for international and domestic travel. U.S. citizens led the way with 632 million, representing 18.6% of all passengers, followed by the People's Republic of China (555 million or 16.3% of all passengers), India (161.5 million or 4.7% of all passengers), the United Kingdom (147 million or 4.3% of all passengers) and Germany (114.4 million or 3.4% of all passengers).

On the cargo front there was a 9.9% expansion in freight and mail tonne kilometers (FTKs) last year, outstripping a capacity rise of 5.3% and increasing the freight load factor by 2.1%. The top five airlines ranked by scheduled freight tonne kilometers flown were Federal Express (16.9 billion), Emirates (12.7 billion), United Parcel Service (11.9 billion), Qatar Airways (11 billion) and Cathay Pacific Airways (10.8 billion).

Star Alliance maintained its position as the largest airline alliance in 2016 with 39% of total scheduled traffic (in RPKs), followed by SkyTeam (33%) and oneworld (28%).

IATA said the industry's growth was supported by a broad-based improvement in global economic conditions and lower average airfares.

At the same time, airlines connected a record number of cities worldwide, providing regular services to over 20,000 city pairs in 2017, more than double the level of 1995. Such increases in direct services improve the industry's efficiency by cutting costs and saving time for both travelers and shippers alike. "In 2000, the average citizen flew just once every 43 months. In 2017, the figure was once every 22 months. Flying has never been more accessible. And this is liberating people to explore more of our planet for work, leisure and education. Aviation is the business of freedom," said IATA director general and CEO, Alexandre de Juniac. 🔳

### Former Garuda Indonesia CFO appointed president after Mansyuri removed

Indonesia's government has installed Askara "Ari" Danadiputra as Garuda Indonesia's latest president after his predecessor, former banker Pahala Nugraha Mansyuri, was judged to be failing in his transformation of the carrier. Chief correspondent, Tom Ballantyne, reports.

ndonesia's Ministry of State-Owned Enterprises, which controls Garuda Indonesia, not only removed the carrier's president director, Nugraha Mansyuri, last month but also demanded six of the eight directors of the airline's board follow him out the door.

Clearly Jakarta believed his promised transformation program for the flag carrier was not working, despite the fact that the carrier's most recent results of an interim loss of US\$116.9 million were a significant improvement over a loss \$281 million for the same months a year ago.

To Mansyuri's credit, he made some tough decisions, despite vehement opposition to change from Indonesia's labour unions. After he took charge in April 2016, he cancelled several unprofitable routes, including non-stop Jakarta-London, and froze fleet expansion.

He also attempted to reduce employee welfare benefits, a goal that provoked a union backlash.

Askara "Ari" Danadiputra, was Garuda's chief financial officer from 2016-2016. Most recently he was president of port operator Pelindo III, another state-owned enterprise.



At the announcement of his appointment, he told media the working conditions of the airline group's employees was a top priority.

"The leadership must face the turbulent economic conditions, starting from the depreciated rupiah to rising oil prices. The main focus of the new management is .an increase in employee happiness. Making employees happy will improve customer service," he said. "Human capital transformation is how we will make our employees happy so that they can deliver best service to customers."

New human capital director, Heri Akhyar, said Garuda needed to boost the morale of its employees. "Usually, when a company is in a state of loss, employee motivation drops. We have to try and bring that motivation back."

Danadiputra said the new leadership team would also



be enhancing revenue and redefining the airline's cost structure. Garuda needed to open profitable routes and close inefficient ones, he said.

He intends to renegotiate the company's aircraft leasing contracts, which his predecessor also said were a management priority. "The aircraft leasing contracts will definitely be renegotiated with the lessor. We will renegotiate, especially to extend the leasing period of the medium- and large aircraft contracts so the monthly rates will be lower."

If successful, revised contracts could reduce Garuda's leasing costs by 10% to 20% or up to \$100 million by year end, he said.

Local analysts said the leadership overhaul was necessary because the Mansyuri team was regarded as inexperienced in aviation and also had become a source of turmoil in the lead up to the re-election campaign of Indonesian president, Joko Widodo.

Indonesia, the world's fourth most populous country, is home to a fast-growing aviation market fueled by an influx of tourists from the region as well as increasing numbers of locals traveling abroad.

The flag carrier faces cutthroat competition for passengers from LCCs such as AirAsia, regional carriers and Gulf airilnes. Long haul LCCs will soon be a larger sector in the competitive mix.

Garuda's stock price has fallen to a record low and now has a market capitalization of around \$370 million, making it one of the least valuable airlines in Asia. The carrier's financial performance has been volatile for years.

During Emirysah Satar's Garuda reign, from 2005 to 2014, Garuda reported losses of \$7.2 million in 2005 and \$338 million in 2014. He was replaced in 2014 by Arif Wibowo, who delivered a profit of \$77.97 million for the carrier in 2015.

Profits declined to \$9.36 million a year later as LCCs undercut fares and the national economy grew sluggish. Wibowo was dismissed after the carrier reported a 2017 first quarter loss of \$283.8 million. Mansyuri was his successor.

Wibowo is now the finance director of state-owned oil and gas holding company Pertamina. "Rotations within state-owned enterprises (SOEs) are common refresher measures. We do it based on individual abilities," said the mining, strategic industries and media affairs undersecretary at the SOE Ministry, Farjar Sampurno. "The reasons for replacing (members) on the executive boards of SOEs are to meet the enterprise's needs in facing challenges."

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## India's airlines deserve better regulators

It is the world's fastest growing airline market with traffic numbers reporting its 50th consecutive month of double-digit growth yet India's airlines are reporting massive losses. Chief correspondent, Tom Ballantyne, reports on the crisis facing India's airlines.



ailure to even raise a bid for debt-ridden flag carrier, Air India, epitomizes the problems of the nation's aviation

sector. A grossly over-priced target for the carrier complicated by special interest ties doomed the sale of 76% of the airline.

But that is the least of the government's problems when it comes to aviation. The country's carriers are expected to post combined losses of up to \$1.9 billion for the financial year ending March 31, 2019 because of a weakening currency, higher fuel prices, brutal price cutting and excessive government taxes and charges.

The situation has become so serious that the secretary of the Ministry of Civil Aviation, Rajiv Nayan Choubey, has admitted the government is framing a relief package to offset mounting losses at carriers.

It is reported to include one

more cash injection to keep Air India open for business even though the carrier has debts of \$8 billion and counting after a reported loss of nearly \$830 million for the year ended March 31.

Speaking at an International Aviation Summit in New Delhi last month,Choubey said the government would offer Air India a state-guaranteed \$294 million loan and an equity infusion of \$120 million to keep it going following its failure to attract private investors,

India's privately owned airlines also are losing money. Jet Airways reported a \$189 million loss for the three months to June 30 and the country's largest carrier, LCC IndiGo, saw its profits plunge 97%, to just over \$4 million, in the same period.

It is estimated by analysts that India's airlines, including Air India, will need additional capital of \$3 billion in the near term to shore up their balance sheets.

This grim situation has developed against a back drop of rapid growth and boundless opportunity. The International Air Transport Association (IATA) said last month, that in 2010 79 million people traveled to/from/or within India.

Last year that figure had doubled to 158 million and is forecast to triple to 520 million passengers a year by 2037. India is close to becoming the world's third largest domestic market after the U.S. and China. Its domestic load factor has achieved a record high of 90%.

In 2017, India reported passengers made 98 million domestic journeys, which was equal to 7.3% of the nation's population. Domestic airport pairs have reached 700, a 50% increase over three years ago. LCCs account for about 70% of domestic seats.

The country's international market is growing more slowly than the domestic sector. In 2017, passengers made 60 million international journeys to/from





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### NEWS BACKGROUNDER



India. LCCs secured 25% of that market.

What is preventing Indian airlines from converting this huge passenger growth into profits? IATA director general and CEO, Alexandre de Juniac, said at the summit that "India's carriers are suffering a 'double-whammy' of steeply rising fuel costs and a decline in the value of the Indian Rupee.

"The rise in fuel costs is particularly acute for Indian carriers because fuel makes up 34% of their operating costs, well above the global average of 24%."

India is one of the world's cheapest domestic airline markets. It is common to pay US\$50 for a one-way ticket on the two-hour flight between Mumbai to Delhi. "It is easy to find Indian passengers who want to fly, but it's very difficult for airlines to make money in this market," said de Juniac.

"India's social and economic development needs airlines to be able to profitably accommodate growing demand. We must address infrastructure constraints that limit growth and

government policies that deviate from global standards and drive up the cost of connectivity." IATA urged India to introduce transparency in fuel pricing

transparency in fuel pricing and reduce excise duty on fuel, policies the airline industry has advocated for years. SpiceJet chairman, Ajay Singh, told summit delegates the industry is "in great stress". Jet Airways CEO, Vinay Dube, said the rise in the price of Brent fuel, a depreciating rupee and a resulting mismatch between high fuel prices and low fares have adversely impacted the Indian aviation industry.

Brent crude has risen 50% in the past year and the rupee recently touched a record low of 70 to the U.S. dollar. Indian airlines are charged taxes of up to 44% on jet fuel, the highest in Asia.

The key challenge faced by Indian airlines on the cost front is that 60%-70% of expenditure is exposed to fluctuations in oil prices and currency markets," said CAPA consultant, Binit Somaia. "In some instances, airlines also are charged goods and services taxes on airline MRO. It makes domestic [MRO] work uncompetitive."

Summit speakers

re-emphasised the need for a national master plan to develop efficient and digitally equipped airports to accommodate Indian aviation expansion including expansion of civilian airspace. India has announced it will build 100 airports at an estimated cost of \$60 billion in the next 10 to 15 years, but although the industry doubts the target will be achieved.

### IATA template for Indian aviation

IATA's chief economist, Brian Pearce, said the fundamentals supporting Indian market growth are strong. By 2036, India's population is expected to reach 1.6 billion with average incomes to rise to almost \$5,000 per person, a five-fold increase from 2006).

An International Air Transport Association study of Indian aviation forecast:

• "Indian middle class households should reach 20% in 2036 from 2% in 2006. IATA said domestic markets would continue to drive industry growth. Of the 359 million additional passengers expected to fly in 2036, 228 million would travel on domestic flights and 131 million on international journeys. By 2026 India will be the third largest air transport market in the world compared with seventh place this year.

• A baseline growth rate of 6.1% a year should result in a market of 520 million Indian passengers in 2037. Globally, liberalization and policy stimulus could see India's growth rate rise to 9.1%, which would means nearly 900 million passengers a year by 2037. Equally, protectionist and other negative policy impacts globally could hold India's growth back to 4.9% and a 400 million passenger market by 2037.

• In the last five years, India has risen from 132 to 100 on the World Bank's Ease of Doing Business survey to 100. Continued improvement in this area will be critical to sustainable growth of aviation, IATA believed.

• India has improved its ranking in the Forum's Travel and Tourism Competitiveness Index from 52 in 2015 to 40 last year. Improvements in visa policies, infrastructure and preservation of monuments have assisted this rise. Continuous improvements in these areas as well as in human resources development, airport infrastructure density, and tourism infrastructure are among the areas that could further enhance India's competitiveness.

• Meeting the significant growth potential of Indian aviation will also create challenges for the airlines, its industry partners and policy-makers. For example, this will require the right type of infrastructure at the right time and in the right place. Equally, the broader business and policy environment should not impose hurdles to growth and reduce the benefits aviation can deliver to the nation. The industry, its supply chain partners and the government and policy-makers have a clear mandate to work in collaboration towards the common goal of ensuring that aviation's economic and social benefits are fulfilled.



## ENGINE MAKERS ADDRESS DELIVERY DELAYS

The last two years have been tortuous for several airlines operating fleets of new generation engines. Propulsion systems design problems caused inflight shutdowns, aircraft fleet groundings and costly adjustments to airline schedules. Is there an end in sight?

#### **Chief correspondent, Tom Ballantyne, reports**

t was the last thing Rolls-Royce wanted to hear. Last month, the crew of an Iberia A350 flight from New York to Madrid had to shut down one of its Trent XWB engines and make an emergency landing at Boston's Logan Airport. No-one was injured but the incident sparked the biggest one day drop in the share price of the British propulsion manufacturer in more than a year.

The market reaction reflected investors' fears that the newest generation engine might have problems similar to Trent 1000 engines. At the time, Rolls-Royce was at pains to point out the XWB was based on a different architecture and is "categorically" unaffected by the same flaws as the Trent 1000".

The cause of the Iberia event is being investigated. A Rolls-Royce statement said: "We are aware of the issue and will be working closely with the airline to support it. The Trent XWB has enjoyed the smoothest entry into service of any wide body engine. We continue to see the engine achieving market-leading levels of reliability."

The Trent 1000 is the engine of choice for B787 Dreamliner operators. Surprisingly, most of them have been very patient with their engine supplier and often have publicly praised the commitment of its engineers to get the engines flying as soon as possible. But the schedules of B787 carriers continue to need adjustment as more Rolls engines are identified for unscheduled maintenance checks and repairs.

A recent example of this problem was Air New Zealand's announcement that it would be terminate its seasonal Auckland-Ho Chi Minh City B787-9 this month: The reason? The "ongoing challenges" it is experiencing "as a result of the issues affecting the Rolls-Royce engines" on its Dreamliner fleet.

The carrier has three of its 12 B787-9s on the ground at its Auckland headquarters because of endurance issues affecting the engines and the decision of regulators to place limits on the length of B787 sectors. Airlines have had schedule and network issues because the compressor in the Trent 1000 package C engines is not lasting as long as expected.

Previously unscheduled inspections have been required for the effected engine categories that have forced Rolls-Royce airline customers to take much needed aircraft out of service while the checks are done. Air New Zealand has had to lease in less fuel efficient aircraft, at significant cost, to deliver scheduled services to passengers.

Boeing and Airbus have dozens of single-aisle jets parked at their facilities awaiting engines. Last month, 53 undelivered jets were standing

### MAIN STORY



idle at Boeing Commercial Airplane's Renton facility in Seattle compared from just over 40 a month earlier.

Thirty eight of the airplanes were the new B737 MAX model and 14 were without the new LEAP engines manufactured by U.S./Franco joint venture company, CFM International.

At its plants in Toulouse and Hamburg, Airbus has A320neo aircraft awaiting installation of Pratt & Whitney's geared turbofan (GTF) engines. As with the B787, customers operating the A320neo are experiencing GTF issues that have grounded delivered aircraft because spare engines are in short supply.

In India last month, low-cost carrier, IndiGo, removed one more A320neo equipped with Pratt & Whitney engines from its operating fleet after oil chips were found in the engine.

There are 60 A320neo flying with GFT engines in India: 41 with IndiGo and 19 with GoAir. There have been numerous groundings in the last year, including an Indigo A320neo that had flown less than 50 hours since delivery.

Fixes for the problems are in place, but new malfunctions continue to crop up. It was recently reported that the U.S.-based engine manufacturer was investigating incidences of excessive engine vibration in A320neo GTF engines. Pilots have received alerts of high vibration levels in flight. The Federal Aviation Administration (FAA) is studying the problem.

Is there an end in sight to what many in the industry described as an engine crisis? The answer engine and aircraft manufacturers told Orient Aviation is yes. Boeing and Airbus said their delivery schedules would be back on track by year end and engine manufacturers were confident its design problems were being solved.

A Pratt & Whitney spokesman told Orient Aviation last month that its GTF engine is on three airframe platforms, with this year's inaugural of Norway's Wideroe's E2 joining the A220 (formerly known as the Bombardier C Series) and the A320neo. "All three GTF variants are proving their worth to our airline customers by driving significant fuel savings [at airlines] of more than 40 million gallons of fuel since the GTFengine entered service in 2016.

The email reply added that as the newest technology and architecture was introduced in jet propulsion, Pratt & Whitney had worked through some entry into service issues and focused on supporting customers.

"Our industrial ramp up is on track. We are meeting our delivery commitment to airframers. It is interesting to note that while it took 30 years to produce and deliver 7,000 V2500 engines, it will take a third of that time to meet demand for the GTF." Pratt & Whitney has received orders for more than 2,000 GFT systems in the last 12 months, it said.

At Rolls-Royce, its engineers are completing the development of a suite of modifications to resolve the reliability issues on large numbers of Trent 1000-powered B787s. It is confident the final piece of the package will be cleared for introduction into airline fleets in the next few months. The improvements are expected to allow airlines that have bought earlier-standard Package B and C engines to resume long-range flights with no limits and relieve the carriers of the extra inspection burdens that have been required since the engine malfunctions were identified in 2016.

Airbus declined to provide Orient Aviation with the specific number of its aircraft that were awaiting engine installation. "The engine manufacturers are working hard to meet their commitments. The number of parked A320neo Family aircraft awaiting engines is going down each month. We are still target to deliver around 800 aircraft (all Airbus aircraft types, excluding A220 Family) this year," an Airbus Commercial Aircraft spokesman said.

A Boeing Commercial Airplanes told Orient Aviation it was "working closely with suppliers, both Spirit and CFM as they track toward recovery, as well as our customers. Our team has been mitigating supplier delays and our factory continues to build 52 airplanes a month." Spirit supplies fuselage parts for Boeing aircraft. i

At CFM, the engine problems centre around a new high-pressure turbine blade. Precision Castparts Corporation (a Warren Buffet company) and rival Arconic Inc. have been struggling to manufacture the airfoils and a handful of other parts for the upgraded engine.

Production pressure is so intense that Precision Castparts, the leading source of the blades cast from molten nickel alloys, has informed customers in writing that it cannot accept new orders.

Boeing has dedicated additional resources to its Renton site to ensure timely deliveries to customers. "We have about 10,000 people across three shifts at the Renton site. Over the three shifts at Renton, about 600 Boeing employees from other Puget Sound locations are temporarily working in Renton as we take steps to expedite customer deliveries," Boeing said.



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"Our workforce strategy allows us to redeploy employees to the 737 program without interrupting our other programs. Our team made good progress in August and we're focused on fully recovering the delivery schedule by the end of the year."

Boeing delivered 48 B737s in August, well up on the 29 narrow-bodies it sent to customers a month earlier. The July delivery numbers were one of the lowest monthly tallies at the manufacturers in years.

At press time, CFM told Orient Aviation in an email reply that "it continues to work closely with Airbus and Boeing to mitigate limited manufacturing issues and keep engine delivery disruptions to a minimum".

"The company has experienced some production delays and is currently a few weeks late to airframer request. However, CFM has a line of sight to close the gap by year-end. Supported by the redundant sourcing strategy on LEAP production parts, CFM is working to accelerate the flow of parts and engines to minimize the impact on customers and meet production commitments," the manufacturer said.

CFM said the plan included the addition of surge production capacity, acceleration of capital expenditure and employing more technicians.



### General Electric expands aviation presence in Malaysia

ast month, now former GE chairman and CEO, John Flannery, signed an agreement in the presence pf Malaysian prime minister, Dr. Mahathir bin Mohamad, and several government ministers that committed the U.S. conglomerate to a US\$80 million investment in GE Engines Services Malaysia (GEESM) as well as the establishment of a global IT service desk at GE's Malaysian headquarters.

GEESM will enter into a long-term tenancy with a subsidiary of the Malaysia Aviation Group Berhad, the parent of restructured Malaysia Airlines Berhad, at facilities to be built adjacent to Kuala Lumpur's Subang aviation centre. The new workshop, to be equipped to the highest tooling and technological standards, will conduct MRO on joint venture CFM's LEAP engines. It will be GE's first workshop outside the U.S. to conduct such services. LEAP engines power single aisle A320beo, the B737s and China's C919.

Flannery said: "GE has a long history of partnership in Malaysia and we want to see this relationship continue. The GEESM Centre of Excellence is one of our flagship facilities in the region and the renewed lease agreement is a testament to the great work delivered by local talent.

"The establishment of the GE Global IT Service Desk in Kuala Lumpur further represents our beiief in the hugely beneficial shared future that Malaysia, GE and ASEAN (Association of Southeast Asian Nations) have ahead of us."

GE's Malaysian Global Help Desk is one of three centres across the globe. Its 130 staff will provide 24/7 dual English-Chinese support for GE customers worldwide when it opens next month.

The potential of the engine leasing and engine MRO sectors for conglomerates such as GE was highlighted with release of a recent World Routes survey that said destinations serviced by single aisle aircraft were the fastest growing routes in the Asia-Pacific.

Top of the Routes table for the busiest routes on the planet were Seoul's Gimpo to the country's holiday island of Jeju, with 180 scheduled flights daily and a reported 13.4 million passengers carried last year. The remaining nine airports in the table were all from the Asia-Pacific and all short haul journeys.

In the same survey, the nine out the ten fastest growing scheduled airports routes in the world were from the region and also short haul flights. Only Saudi Arabia's Jeddah-Riyadh route made the top ten at number eight, tied with Jakarta-Kulanamu.

The Asia-Pacific also swept the table for the busiest scheduled international routes in the world. Top scorer was Hong Kong with five of the busiest international routes in the world. New York's JFK-London Heathrow was the only non-Asia-Pacific route in the top ten, positioned at number 9.

The fastest growing scheduled air routes in the world in 2017 were: Bangkok-Survarnabhumi-Chiang Mai (36%), Seoul Incheon-Kansai (30.3%), Jakarta-Kuala Lumpur (29.4%), Delhi-Pune (20.6%), Chengdu-Shenzhen (16.8%), Hong Kong-Shanghai (15.5%), Bangkok-Survarnabhumi-Phuket (14.9%), Jeddah-Riyadh (13.9%), Jakarta-Kualanamu (13.9%) and Kolkata-Delhi (13.4%). ■

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### COVER STORY

## A PERSONIAL CRUSADE

SIK-NAC

Malaysian aviation is emerging from the most traumatic period in its seven decade history. Following the losses of MH370 and MH17 in 2014, passengers abandoned the airline and forced the Malaysian government into rescuing the troubled legacy carrier. Last month, Group CEO of Malaysia Aviation Group and Malaysia Airlines Berhad, Captain Izham Ismail, a 39-year veteran of the group, told Orient Aviation's Dominic Lalk that it is his "goal and purpose" to stabilize and unite the airline group. alaysia Airlines gave a life to me and my family, including my late mother and my late father," Malaysia Airlines Berhad Group CEO, Izham Ismail, told Orient Aviation in an exclusive interview

last month. "This is something I will never forget. I have found my purpose in life by giving the best I've got to this organization. I have two families, my immediate family and my extended family. Malaysia Airlines is my extended family."

Izham joined his "second family" 39 years ago after he graduated from Manila's Philippines Aviation School in 1980. He has never worked for anyone else. Initially, he said, his career plans were different. "I come from a very poor family. We really, really struggled to find a meal on a daily basis," he said.

"Luckily, I had the chance to further my studies. I dreamt of becoming an engineer, but I realized that it would take years before I could support my family out of poverty. Flying school, when the opportunity became available, was the fastest track to stability for my family, so I took that route."

Izham started his career in 1980 as a second officer flying a Malaysian Airline System (MAS) Fokker 27. He flew the turboprop for two years before earning certification for the B737-200, followed by the wide body DC 10-30, the Fokker 50 and then B737-300/400/500, A330-300, B777-200 and B747-400 aircraft. He has flown 13,054.4 hours of which 7,473,52 hours were in command.

"I flew a lot of airliners in my day. I was on the B737-200, the DC 10 and took delivery of the A330 when it was launched in 1993. I then moved to the B777. My last aircraft type before I stopped flying was the B747-400," he said.

Izham said that even as a second officer in the eighties, he knew he did not want to spend his entire career in the cockpit because it would take him away from his family. He loved flying, but when he was offered a Malaysia Airlines management traineeship in 1990 he did not hesitate to accept it.

"As time had progressed, I felt this was not me, this is not Izham. I was very lucky when Malaysia Airlines realized in 1990 it was very weak in leadership succession planning. It launched a management trainee programme and I was very fortunate to be selected," he said.

Izham completed the traineeship and went on to Harvard Business School where he graduated with a degree in advanced management. He has held 17 management positions at the airline group, including executive vice president flight operations, director of operations, Malaysia Airlines emergency response centre chairman and CEO of MASwings, Malaysia Aviation Group's turboprop subsidiary that serves rural Sabah and Sarawak.

He also is on the boards of Hamilton Sundstrand Malaysia and GE Engines Services Malaysia and several MAS subsidiaries, including the training academy.

Before Izham was promoted to Group CEO of the Malaysian Aviation Group and Malaysia Airlines Berhad in December 2017, he was the airline's chief operating

### MAB CEO said B787 deal has lapsed

"The agreement with Boeing for the 787 Dreamliners has lapsed. The Memorandum of Understanding we signed was a non-binding MoU," Izham told Orient Aviation. "To be honest with you, I'm not in a rush to buy new airplanes. My number one objective at this stage is to stabilize the organization," MAB group CEO, Izham Ismail, told Orient Aviation exclusively.

"Notwithstanding that, I am very cognizant the A330 fleet will be ready to leave in 2023 or 2024. With that in mind, my primary objective is not to spend too much money, stabilize the organization, bring everybody to first base, identify and groom my successor and equip him or her, with what it takes to bring Malaysia Airlines to second and third base."

officer (COO). His responsibilities included restructuring the engineering division, bringing digital transformation to the airline and introducing the technology for live 15-minute tracking of aircraft at MAB as now required by the Internatonal Civil Aviation Organisation. Within a few months of his appointment as COO, he had implemented 43 fuel initiatives that reduced fuel burn by three per cent.

Izham is very conscious of the fact he is in charge of one of Malaysia's oldest and most recognized brands. He oversees a workforce of 13,000 and a fleet of 84 aircraft (as of October). Public scrutiny of his performance extends to his management of fierce competition and a challenging operational environment, as well as the airline's progress to profitability.

In the first half of this year, MAB's fuel costs increased by 37% and the carrier was hit by a severe pilot shortage. "The most challenging period was the second quarter when we ran out of pilots. We had to reduce our production and cancel flights throughout the year," he said.

"Two months on, we have managed to recover. We have recruited approximately 110 pilots. We expect normalization by the middle of the fourth quarter, which is early December. We are targeting full production in 2019."

MAB's criteria for qualifying pilots is 4,500 flying hours, higher than the industry average of 3,500 flying hours. "When we reset the organization and started from zero, 6,000 employees left, but we kept all the pilots. But it became clear our packages were not attractive enough and people started to leave," he said.

"We were looking to recruit new pilots, but we could not attract experienced people. We only appealed to young pilots, cadet pilots. The situation has improved, but it remains a long-term focus for us. According to the latest figures, 257,000 new pilots will be needed in the Asia-Pacific to 2037."

"People are actually rejoining. People who left for so-called better opportunities are starting to return. We adjusted the packages to going rates and added some benefits. We have set an internal target of recruiting 250 pilots by the beginning of next year. As of today, we have hired 110." MAB is three years into its biggest transformation, the Malaysia Airlines Recovery Plan (MRP). It was designed by two former and successive MAB CEOs, Christoph Mueller and Peter Bellew. Mueller now works for Emirates Airline and Bellew has returned to Ryanair in Dublin. The MRP has reduced the carrier's comparable unit costs by 5%.

Following a weak 2017, yield and RASK have improved for the last three quarters, but Izham told Orient Aviation the gains were offset by raising fuel prices, foreign exchange volatility and overcapacity in the domestic market.

"There are certain challenges to executing the MRP. When the turnaround plan was designed it took into consideration certain parameters for capacity in the market, fuel and foreign exchange," he said.

"But as you know, our industry is very competitive and evolves on a daily basis. It is difficult to stay on track. But if you ask me if we are on track with the MRP, I can say 'yes, in totality we are', although we are facing strong headwinds from the current market place. Malaysia Airlines needs to be agile and respond to changes quickly."

Everybody in the industry is curious to know if MAB is making money. Since the company was delisted, financial transparency has been limited. "I'll be very clear. The next two quarters will be very tough. We are not looking at turning a net profit in 2018, but remain very hopeful about profitability in 2019. We all hope 2019 will be a better year for us," he said.

The airline's focus is to improve and drive yield with better pricing strategies, especially for its premium cabins and corporate clients. MAB has upgraded its in-flight catering after recommendations from a special "food taskforce" that examined the choice and quality of on-board meals.

The 71-year-old carrier will make "market-based" adjustments to its network that veer away from low yield routes especially on sectors "swarmed" by AirAsia and Malindo Air.

"Our competitor is not AirAsia. Our competitors are in the premium market, the likes of Singapore Airlines and Cathay Pacific. But you are right, AirAsia is playing in our playground and for a premium organization to go head-to-

### MAB boss frustrated by airline overcapacity

For years, industry analysts have pointed to overcapacity in the Malaysian market and warned the system could collapse. "That's my headache and frustration, too," said MAB Group CEO, Izham Ismail.

"The capacity supply in Kuala Lumpur is sitting at 1.79 times more than demand. It is really, really, really very challenging. I need to be looking at what's good for the country, but at the same time there are four airlines based at our Kuala Lumpur hub – AirAsia, AirAsia X, Malaysia Airlines and Malindo Air. It's crazy. That's something I hope the policymakers will eventually look into. It's a very sensitive subject."



head with a budget organization is tough. Very, very tough. So, what do we do?," he said.

"Our strategy is to remain relevant in those markets swarmed by AirAsia, but at the same time to take our business to other markets in ASEAN of four to nine hour flights where there is less competition."

Izham said MAB will never abandon the domestic market. "We remain relevant in the domestic market as the national flag carrier. For example, we used to fly to Alor Setar five times a day. AirAsia and Malindo are flying there five to six times a day. So, is it really necessary for us to still fly five times a day? No. So now we fly twice a day only," he said.

"Let's not forget this is good for our country. When the two biggest airline companies in Malaysia go head-to-head, the customer benefits. We understand very clearly that the domestic market is low-cost, 'so we say okay, let them do it'. In the end, everybody wins. The country wins and it will be a positive economic development for Malaysia."

Long-haul AirAsia X recently revealed it was evaluating A321neo and/or A321LR aircraft. It said it could potentially operate its shorter flights of up to eight hours with the A321neo/LR and fly its A330-300 and incoming A330neo fleets on longer missions. The long-haul LCC said it planned "to grow markets with a smaller aircraft and defend markets I'm continuing the path of the MRP. If we were talking baseball, you could say I'm bringing the team to first base. When the organization is strong enough, my successor will take Malaysia Airlines forward to the second and third bases. My job is to douse the fires, stabilize the organization and turn it around

> **Captain Izham Ismail** Group CEO Malaysia Airlines Berhad

with a bigger aircraft". AirAsia X operates 31 A330-300s and has ordered 100 A330-900neo jets.

AirAsia has outstanding orders for 100 A321 neo and 275 A320 neo, which could potentially be converted to A321 LRs for AirAsia X. Lion Air Group, which includes Kuala Lumpur-based Malindo Air, has an order backlog of approximately 250 B737 MAX series aircraft.

Malaysia Airlines has 84 aircraft flying to 61 destinations, including 16 domestic routes. Its longest flight is a double daily service to London Heathrow. The British capital is MAB's only European destination after it eliminated Amsterdam, Frankfurt, Paris, Rome and Zurich from its network as part of the MRP. The carrier also has stopped flying to Buenos Aires, Cape Town, Karachi, Los Angeles, Manchester and New York.

"Would it be beneficial for us to compete in a sector that is unprofitable? No, of course not. A very good example is Kuala Lumpur-Canton (Guangzhou) which we fly with a B737-800," he said. "It is a very profitable sector so we will roster an A330 on the route from October. This is what I mean by navigating ourselves in the market place."

At press time, the fleet of Malaysia Airlines was made up of 15 A330-300s, 5 A330-200s, 6 A380s, 6 A350-900s, 48 B737-800s and 3 A330-200Fs. "We have enough wide body capacity. We are leasing ex-airberlin A330-200s. We have five in the system and one more for delivery this month. That should be sufficient for us to manage our network," Izham said.

"We're still in the RFI [Request for Information] phase with the OEMs. The fleet renewal campaign is being examined. We should have more visibility in Q1 about extra new-generation wide bodies. It all depends on where we decide to fly next."

The airline group has firm orders for 25 B737 MAX aircraft and 25 options. The airline said these would be replacement aircraft for current B737-800s from 2019.

It also had agreed in principle to acquire eight B787s, worth US\$2.5 billion at list prices in 2018, which were scheduled for delivery from mid next year. Many in the industry said the deal would add unnecessary complexity to the airline's all-Airbus wide body fleet. More extreme was the criticism the order was written to please friends in Washington. Whatever the reasons for the deal Izham is not proceeding with it, he revealed exclusively to Orient Aviation.

For the A330 fleet replacement, MAB is considering the A330neo or additional A350s, but again, Izham emphasized he was not ready to sign any deals soon as the focus is on returning to "full production".

In late July, the Malaysian government released an independent report on the March 8, 2014 unsolved disappearance of MH370 and all passengers and crew en route to Beijing. The document identified lapses in communications at Air Traffic Control centres in Malaysia and Vietnam and forced the retirement of the minister in charge of aviation at the time of the MH370 loss. The independent investigating team refused to rule out third party interference in the loss of the aircraft.

Izham told Orient Aviation last month: "The new Malaysia Airlines Berhad is not really connected to MH370 anymore. The old Malaysia Airlines is being run by the administrator who is guiding and liaising with the government. The old Malaysia Airlines provide data and support. At the new Malaysia Airlines, we remain steadfast and continue to also offer support to the next of kin, especially the crew members. We will continue to do so."

As for the challenges ahead for the "new" Malaysia Airlines Berhad, Izham recognized there are plenty. "Of course, there are many, many challenges ahead, but it will be okay as long as we are stable and united as an organization," he said.

"I know the organization inside out. I've been with the airline for 39 years. I have been groomed in management since 1990 and placed in various divisional departments, so you can say that I have risen from the rank and file," Izham said.

"I have tons of friends at Malaysia Airlines, I call them my family, which makes it sometimes difficult to reprimand, but also to award outstanding performance. I'm not an expert in all areas, certainly I'm not an expert in revenue management," he laughed.

"My strength is getting along with people. My number

one agenda at MAB is to unite our 13,000 family members. That is my calling and my strength," he said.

Izham stressed that people development and succession planning was an integral part for the organization's sustained success. Earlier this year, he appointed Boo Hui Yee and Ignatius Ong, as CFO and Group Chief Revenue Officer, respectively. They were both drawn from the ranks of the carrier.

"As I keep saying, this organization has given a life to me and my family. This is something I will never forget, and I have found my purpose in life giving the best I've got to Malaysia Airlines. How do I lead these people? I lead them from my heart. I learned to be very hard on people who are not connected to this family. My team knows I'm not shy to speak out when I see something that is not right. But, I also

### A380s move to MAB's Amal Airlines

alaysia Airlines' six A380s serve Kuala Lumpur-London, Sydney and Tokyo Narita. From October, the A380 will replace the A330 from Kuala Lumpur to Seoul and Jeddah; steep capacity increases on the routes. The airline has gone through some strategy shifts for its A380s. After it failed to find buyers for the aircraft, it put them up for lease without success. Former group CEO, Peter Bellew, then announced the carrier would form its own A380 airline subsidiary.

"We need to smartly swap assets in the fourth quarter, which is the start of the winter season 2018. We will continue to capitalize on our A380 fleet during the peak season, slotting it in to London and Australia," he said. "Sometimes we even fly our A380s to Incheon

and Narita when there is



learnt to be very forgiving, accommodating and create career paths for those who do their best, who unite the extended family that I have. This is the most important," Izham said.

"On certain weekends, I used to fly a small twin-engine plane, a Diamond 42 (DA42). We went island hopping and such things, but for the last 10 months we've had zero trips," he said.

"Nowadays, my life starts at 7am and ends at 10pm. The 7-8am window is my 'me time' in the office and I use that quiet and peaceful period to prepare myself for the day and reply to the most important emails. I get on average of 300-350 emails a day, including some 20-30 customer complaints that come to me directly. I try my best to respond to every one of them. The 7 o'clock window is very important to me. It's my time to ask, "is my organization on track today?".

high demand. To a certain extent, the A380 fleet is quite a challenge for us to manage, but there are definitely also great opportunities with this aircraft."

Izham said he remained committed to establishing an independent A380 subsidiary – Amal Airlines – under a separate AOC. "Amal will be geared toward the evergrowing hajj and umrah sector," he said.

"But there are low seasons for hajj and umrah. We are very cognizant that we have this asset. Even after Amal is established, there will be times when we will swap the A380 with the A330 on pilgrimage flights to Jeddah and Madinah," Izham added.

Malaysia Aviation Group expects to receive the AOC for Amal in the first quarter of 2019, but Izham is still unsure if the group will transfer all six A380s to Amal's AOC.

"We are looking at a few financial models. My predecessor was planning to transfer all six A380s to Amal, but we have to consider today's fuel and forex environment. If you transfer all that cost to the new airline, then the new airline is at a disadvantage because it's affected by high fuel prices, which doesn't make sense either," he said.

"The A380 is a four-engine airplane which consumes more fuel than a twin-engine jet. We are diligently conducting our studies, but we have to be careful. Two wrongs never make a right."

Earlier this year, the airline group signed an agreement with four umrah tour operators – KRS Travel Sdn Bhd, ATS Global Travel & Charter, Ecoriths Leisure Travel & Tour and Rayhar Travels Sdn Bhd – to provide charter services for the umrah season from this month to June, 2019.

It has committed to 149 A380 flights, an agreement that represents the highest number of scheduled services for the umrah season to date for MAB. More than 70,000 pilgrims will be flown to Saudi Arabia from Malaysia, neighbouring Thailand and Indonesia.

The Malaysia Aviation Group hopes "the old Malaysia Airlines" [Malaysian Airline System] that is connected with the unsolved loss of MH370 and the shooting down of MH17 will be dissolved by the time Amal is launched.



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AVIATION WEEK

## Qantas selects regional Queensland city for first flight academy

By Tom Ballantyne

**TRAINING** 

antas Airways' first dedicated cockpit crew academy, which will train up to 250 pilots annually from Australia and overseas, will be built at Wellcamp Airport in Toowoomba, 125 kilometres west of Brisbane, Australia. The training centre will be developed at Australia's only privately-owned international airport, thanks to three times a week cargo flights from Hong Kong operated by Cathay Pacific Airways.

As well as the winner, Alice Springs, Bendigo, Busselton, Dubbo, Launceston, Mackay, Tamworth and Wagga Wagga made the shortlist for the training centre in a competition that attracted more than a score of bids for a facility that will provide a big economic boost for the rural city.

The remaining short list



contenders are in the running for a second Qantas Group pilot academy. Qantas Group CEO, Alan Joyce, said that decision will be announced later this year.

Joyce said the airport, state and local government and the community had convinced Qantas that Toowoomba would be a great home for its first dedicated crew training centre.

"Qantas has a well-earned reputation for having some of the world's pilots. For many of them, the journey will start in Toowoomba. Toowoomba will be an amazing place to learn to fly. It's home to Australia's newest airport, offers more than 300 days of Queensland sunshine every year and is an environment that is textbook for pilot training," he said.

"The region itself is a great place to live, work and study. We've already had many students express their interest in moving to Toowoomba for pilot training."

In partnership with the Queensland Government and owners of the airport, the Wagner Corporation, investors are building

A320 Integrated Procedure Trainer. By year end 2019, AAG will have 26 training aircraft available to student pilots at its academy.

AAG also operates one Alsim Flight Navigation Procedure Trainer, an Aeosim A320 Basic Instrument Training Device/ Integrated Procedure Trainer and an MPS A32000 Fixed Base Simulator. Its CAE training devices are a CAE A320 FFS, EASA (European Aviation Safety Agency) certified Level D and a CAE A330/ A340 FFS, also EASA certified to Level D.

AAG Philippines trains cadets for domestic carriers and also targets airlines across the region. This year, the academy has 300 student pilots enrolled in its various state-of-the-art training facilities and student accommodation.

"What we're ultimately creating is a world-class pilot school for students from Australia and around the globe," said Joyce. Investment in the new infrastructure is estimated at A\$35 million, with the majority of the funding contributed by private sector partners.

The academy is planned to expand to 500 graduate pilots a year at Toowoomba and the second academy, including training crews for third party airlines and the general aviation sector.

Qantas has appointed world-leading L3 Commercial Aviation as the training provider for the Toowoomba academy. L3 has pilot training centres in the UK, Portugal, New Zealand and the U.S., with Toowoomba to become its first centre in Australia. More than 18,000 people have registered interest in training as pilots with Qantas.

training courses. More than 800 of its graduates are flying with carriers that include Philippine Airlines, Cebu Pacific and AirAsia Philippines.

"The projects are in line with AAG's commitment to provide world-class training solutions to its partners," said AAG regional director Asia-Pacific, Christopher Magdangal. "These investments are part of our advocacy to help the Philippines grow and prosper as a premier aviation training hub in the region."

Apart from AAG's investment in the expanded Clark facility, the Bank of Philippine Islands (BPI) and BPI Century Tokyo Lease and Finance Corporation also provided funding for the project.

### Alpha Aviation invests US\$11 million in simulator upgrade

sian pilot academy group, Alpha Aviation Group (Phillipines), has announced an US\$11 million expansion of its suite of simulators and hangar facilities. The development includes installation of an Airbus A320 full flight simulator at the company's Clark air field base north of Manila.

The Airbus FFS, which will be operating at the training centre

from next year, will increase the simulators at the AAG centre to six. The new FSS will be equipped with Full Upset Prevention and Recovery Training for both the ceo and neo versions of the aircraft type. In addition to the new FFS, the training centre will be expanded to a four bay simulator centre.

The academy's training options will be increased by the addition of more Cessna G1000 basic flight trainer aircraft and an

### Etihad Airways extends content agreement with Travelport

Global travel commerce platform, **Travelport**, has signed a multi-year agreement with **Etihad Airways** that commits the carrier to continued use of merchandising tools, Travelport Rich Content and Branding, Travelport Sponsored Flights and Travelport Business Intelligence. Etihad also has renewed its contract for Travelport Digital to extend its reach and deliver innovative mobile services to its customers.

Travelport Rich Content and Branding provides the IT travel group's 68,000-connected agencies with graphically rich experience as they search and book fares and also offers wider exposure to ancillary offers. Travelport Sponsored Flights' digital media platform allows an airline to promote its flight options with highly targeted advertising solutions.

Etihad uses Travelport Business Intelligence to provide its sales, marketing and network planning teams with the information needed to respond to industry change, reduce inefficiencies and be more profitable. Travelport's Travel Commerce Platform supports this sector of Etihad's operations by identifying market trends drawn from analysis of present and past route demand patterns.

Etihad's vice president revenue management, Dieter Westermann, said: "Travelport's edge in technological innovation, mobile engagement platforms, merchandising and intelligence helps to ensure us we have the right content, promoted to the right audiences at the right time and right way.

"This provides us with an important edge, which we value greatly, especially in today's high competitive environment."



Travelport vice president air commerce Europe, Middle East and Africa said: "We are proud to continue this longstanding relationship with Etihad. Today's announcement is another significant endorsement for the value our technology, leadership, intelligence and merchandising capabilities provide."

### GE installs outsider CEO after firing Joe Flannery

Appointed as CEO in August last year, General Electric (GE) has fired Joe Flannery in a surprise move that initiated a huge surge in the conglomerate's share price.

Flannery, who was recently in Malaysia to announce an US\$80 million upgrade of GE's MRO and support services, was replaced by **Larry Culp**, 55, a GE board member since February and the CEO of industrial equipment supplier, Danaher Corp. Media reported Culp was the unanimous choice for the position because of his 14-year record at Danahar where he grew the company into a broader conglomerate and increased earnings.

Reuters said GE was unhappy with Flannery's slow progress in a much needed turnaround. Issues of his leadership came to a head at the end of last month, when directors learnt about a US\$23 billion write down in the power plant division. The board "was persuaded to seek a new CEO", the news agency said.

A scaled back GE, which was once the most valuable company in the U.S., will focus on jet engines, power plants and renewable energy. ■

### Embraer Commercial Aviation expands responsibilities fleet leasing expert Baur

In September, a 27-year veteran of United Airlines (UA) and Continental Airlines, **Ron Baur**, has added global leasing to his portfolio of strategy at **Embraer Commercial Aviation**. The senior vice president, global leasing and strategy, who graduated in aeronautical engineering from Georgia Tech and later completed an MBA at California State University, will report directly to



Embraer Commercial Aviation chief commercial officer, Arjan Meijer.

At UA, Baur was responsible for acquiring all new mainline and regional aircraft, managing the acquisition and return of all leased aircraft and lessor relations, the South American aircraft company said. He acquired, remarketed and sold more than 750 aircraft with lessors around the world. In his last position before he moved to Embraer, Baur was UA's vice president of fleet charged with managing a mainline and regional fleet of 1200 aircraft. He was responsibilty for launching UA's B737-900ER, the B737MAX 10, the A350-1000 and the enhanced Embraer E175.

Baur joined Embraer in June as its commercial aviation strategy head and before leasing was added to his portfolio in September. He is based in Chicago. ■

### Lessor AerCap promotes Bart Ligthart

AerCap CEO, Aengus Kelly, announced last month that Bart Ligthart is the lessor's new head of trading and portfolio management with effect from September 24. Ligthart joined the AerCap portfolio management team in 2007 and was appointed head of trading earlier this year.

He was central to developing and executing AerCap's narrow and wide body aircraft management strategy, the Dublin headquartered lessor said. "We are very fortunate to have someone of Bart's calibre and experience to lead our portfolio management team and to take advantage of market opportunities," Kelly said. ■

### Cathay Pacific and Salesforce accelerate digital transition

Hong Kong's **Cathay Pacific Airways** has engaged global customer relationship management platform, **Salesforce**, to assist it in the development of new revenue streams and improve customer experience through personalized engagement. The airline has been a customer of **Salesforce Sales Cloud** and **Service Cloud** since 2014.

In the carrier's latest partnership with Salesforce, it will use Salesforce Marketing Cloud to concentrate on three critical areas of its business: new customers, personalizing all touch points along a traveller's journey and acquiring a 360-degree view of Marco Polo loyalty program members.

"Expanding our relationship with Salesforce was a very easy decision to make," **Cathay Pacific chief customer and commercial officer, Paul Loo**, said. "By adding Marketing Cloud, we enrich the understanding of our customers through enhanced engagement across channels and devices.

"The airline and the travel industry is being disrupted and we need to be ready for the customer of the future – the digital natives and those with a digitally savvy mindset and accompanying expectations."

Salesforce general manager and executive vice president Asia-Pacific, Mark Innes, said: "Customers today expect seamless and hyper-personalised experiences and their expectations are higher than ever. To stay competitive, airlines need to leverage technology to meet and exceed these expectations."



### Royal Brunei Airlines signs AFI KLM E&M for LEAP engine support

Global airline MRO, AFI KLM E& M has signed an agreement with Royal Brunei Airlines for full maintenance and repair of its seven A320neos. "Taking our first steps in the market for a new engine type is always significant, said the MRO's senior vice president group engine product, Michael Grootenboer.

"As we did previously with the GEnx, we want to be at the forefront of new technological and market developments. We are proud of this contract with Royal Brunei and thank them for the confidence they have displayed in entrusting us with the engine maintenance of their latest generation medium haul fleet."



Royal Brunei Airlines head of engineering and maintenance, Rob Woods, said: "It was quite natural for us to turn to AFI KLM E&M to support our LEAP engines. We have experience from the strength of our existing relationship plus the international reputation of a player that has proven its worth in the engine maintenance market."

### Inmarsat and Panasonic Avionics Corporation announce 10-year collaboration agreement

Inmarsat and Panasonic Avionics Corporation agreed last month to an initial 10-year collaboration that will combine inflight and communications products from each company into a single IFE broadband connectivity package for airlines and aircraft manufacturers.



The agreement stipulates Inmarsat will be Panasonic's exclusive provider of Ka-Band inflight connectivity to commercial airlines. It will offer Inmarsat's high speed broadband connectivity service, GX Aviation, powered by the world's first global Ka-band satellite network to be owned by a sole operator.

The new partners will work together to develop a next generation GX Aviation terminal, new connectivity enabled services, data analytics and technology services.

Inmarsat CEO, Rupert Pearce, said: "Today's landmark announcement is clear evidence of Inmarsat delivering on its strategy and strengthens our conviction that by building on the success of the global GX network, aviation will be significant growth driver of our overall business. It also demonstrates Inmarsat's commitment to becoming a reference IFC network for airlines around the world." ■

### BRIEFLY .....

- Airbus delivered its first aircraft from its Mobile Alabama production line, an A321, that is 15% powered by Air BP sustainable jet fuel to U.S. carrier, JetBlue last month. In the longer term, Airbus envisions supporting industrial production of sustainable aviation fuel in the Southeastern U.S.
- Hong Kong listed China Aircraft Leasing Group Holdings (CALC) delivers its first aircraft under Hong Kong's new tax regime. CALC intends to lease more aircraft to global airlines through Hong Kong.

### ADB SAFEGATE wins Indian airport lighting contract

The second runway at **India's Bengaluru airport**, due to open in October next year, will be equipped with **ADB SAFEGATE SafeLED** airfield ground lighting (AGL). It is the first contract the Belgium headquartered company has signed with an Indian airport operator.

Kamepedowda International Airport's second runway will accommodate 55 flight movements and hour, said Bangalore International Airport Ltd chief project officer, Tom Shimmin, last month.

"We believe ADB SAFEGATE's LED airfield lights will bring us the advantages of performance, cost, energy gains, ease of operations and maintenance and overall safety and efficiency," he said.

ADB SAFEGATE is responsible for the design and supply of AGL and Advanced Visual Docking Guidance Systems. The second runway's construction is planned to be completed in four stages in 30 months. "From a little more than nine million passengers when it opened in 2008 to a forecast 32 million plus passengers for the 2018 year, Bengaluru [airport] has come a long way," said ADB SAFEGATE CEO. Christian Onselaere, said.



The new runway will have an advanced CATT-111 (B) instrument landing system that can cater for all aircraft types including the A380 and B747-8. The public/private partnership airport is reported to be the second fastest growing airport in the world and the third busiest airport in India. ■

### ST Engineering announces aircraft leasing partnership

Singapore Technologies Engineering Ltd (ST Engineering) has incorporated Keystone 5 Pte Ltd, a wholly owned subsidiary of



joint venture company, **Keystone Holdings** (**Global**) **Pte. Partners** in the joint venture parent group are ST Aerospace Resources Pte and SJ Aviation Capital Pte. Keystone Holdings has a portfolio of aircraft leased to global carriers.

ST Engineering said in the announcement statement last month that **Keystone 5** would allow it to develop its leasing business by acquiring more mid-life narrow body airliners now on lease to airlines. ■

#### TRAINING

### South Pacific's Aircalin has selected Spatial to supply cabin crew trainer

New Caledonian carrier, **Aircalin**, has chosen **UAE's Spatial Composite Solutions** to manufacture a hybrid A320/A330 Cabin Emergency Evacuation Trainer (CEET) and a Cabin Service Trainer (CST) to train cabin crew for its A320 and A330 aircraft. The CEET will instruct cabin crew in door and exit operations, evacuation procedures and fire and smoke training in a hyper realistic environment.

The A330 CST simulator will ensure cabin crew fully understand the aircraft type's business and economy passenger cabin layouts, lighting systems, communications equipment, galleys and washrooms positioning.

Aircalin head of cabin crew, Jean-David Rolland, said: "These advanced training devices will provide even more quality and effectiveness to our operations. Our excellent partnership with Spatial goes beyond delivering training devices and software to supporting design of the training facilities and infrastructure. Spatial managing director, Marc Van den Broucque, said the two simulators would be shipped to New Caledonia after being built at Spatial Composite Solutions. ■

### Indonesia's Flybest Flight Academy chooses Pacific Simulators

Flybest Flight Academy, based in Indonesia's Batam, has ordered a Flight Simulator Training Device and a Eurojet FJ2000 Cockpit Procedures Trainer from Christchurch-based Pacific Simulators. The training systems will be used to training A320 and B737 cadets, respectively.

Flybest Flight Academy **CEO and** co-owner is **Captain Dhamardi**, a 40-year veteran pilot that flew thousands of hours on A300 and B747s. He most recently was **CEO of Indonesia AirAsia** before establishing Flybest.

"Our simulators provide cost-effective training for flight schools, universities airlines. Because of their lower costs, and pilots can spend more time improving their skills [on the training devices] before moving to full flight simulators," **Pacific Simulators sales director, Iain Pero**, said in Singapore last month. ■



### INDUSTRY INSIGHT SPECIAL REPORT COUNTERING CYBER THREATS AT ASIA-PACIFIC AIRLINES

## British Airways cyber attack a forewarning for Asia-Pacific airlines

The cyber jacking of the financial profiles of 380,000 British Airways passengers in August and September revealed the sophistication of cyber criminals. It also highlighted the cross border complexity Asia-Pacific carriers must master to conform with Europe's New General Data Protection Regime. Chief correspondent, Tom Ballantyne, reports.

t was hardly a surprise. Tech experts have been warning the industry for years that a major cyberattack on an airline was not a matter of "if" but "when".

For British Airways (BA) "when" was August 21 this year. The breach was stopped by September 5. Required by Europe's new General Data Protection Regime (GDPR) to notify the European regulator within 72 hours of being made aware of an attack, BA reported the cyber haul from its passenger database included the victims' credit card information, residential addresses and email addresses. Travel itineraries and passport details had not been accessed.

Now being investigated as "a matter of urgency", the attack revealed the vulnerability of airlines to cyber criminals and reminded the airline industry that the new European regulations on data protection could cost international airlines millions of dollars in penalties if they fail to comply with the new rules. For BA, failure to report the breach could attract a penalty of up to 4% of turnover. For a major airline, that would mean an invoice in the tens of millions of dollars.

"It applies to all companies offering services to European citizens. It includes many companies worldwide. Even if they don't operate within Europe they are bound by the requirements of GDPR. You could be any business," Association of Asia-Pacific Airlines director general, Andrew Herdman, told Orient Aviation last month.



"You could be a small business operating tours in a single Asian country with a website accessible to European citizens who are potential customers. Strictly speaking, you are liable. Whether you are in America or Asia, a lot of businesses have had to think very hard about compliance with GDPR and not just European businesses."

Global airline operations complicate compliance. Asia-Pacific carriers must detect and report breaches or suspected breaches of their databases under the EU GMPR rules. They also must be confident their partners worldwide have the same defences.

"You have to look at your relationships with all your suppliers and all your business partners because everything is interconnected. You are exchanging information. In terms of your contractual arrangements, you must determine your obligations as an enterprise are being met. You have to impose similar obligations on your suppliers, such as GDSs or other distribution channels with whom you are exchanging information," Herdman said.

"Another challenge is a global business like an airline faces different reporting obligations in the U.S., Europe or the jurisdiction in which you operate in Asia."

"How do you build your systems to be compliant with these different relationships? A lot of big U.S. companies were concerned about being compliant with GDPR because of the different approaches of U.S. and European authorities.

"In Asia, different countries are in different states of readiness. Singapore has reporting obligations and cyber security regulations. Korea and Japan are other examples. From our [AAPA] point of view we'd like as much standardization and harmonization as possible."

At a recent SITA Asia Pacific Air Transport IT Summit in Singapore, an airline survey revealed only 30% of respondents believed they were prepared to deal with cyber security threats. SITA said "the weakest point in the chain will be the one that impacts the industry".

A report by PwC said 85% of airline CEOs were concerned about cyber security, which was 24 percentage points higher than chief executives in other industries.

Earlier this year, the AAPA called on the region's aviation industry to co-operate in strengthening cyber security because expanding digital connectivity attracts hackers.

The association joined forces with the Qantas Group, Australia's Foreign Affairs Department, Singapore's Ministry of Transport and the Civil Aviation Authority of Singapore to strengthen cyber resilience. The first of four interactive workshops was held in Singapore in February with a second scheduled in Hong Kong



There's nothing to be gained by thinking you can strengthen your own systems and not worry about the rest of the ecosystem. Everything is inter-connected and we need to think in terms of making the overall ecosystem stronger and more resilient so that when there are breaches appropriate action is taken and you have co-ordination among different players

#### Andrew Herdman Association of Asia-Pacific Airlines director general

in November.

Last year, the general manager technology at Sydney Airport, Stuart Rattray, told delegates at the Australian Airports Association annual conference that "we all stand together in cyber security governments, airports, airlines, Airservices Australia and our supply chain. We are so connected through processes, people and customers, but also through IT. If one of us is under attack, we can think of ourselves as all being under attack."

He counselled against relying solely on IT teams to take care of cyber security and repeated the generally accepted rule that 80% of cyber risk was about people and 20% about the technology.

Herdman said the BA attack highlighted the fact airlines handled vast amounts of cash and payments for air travel every day of the week. It makes them appealing to fraudsters. "It is not yet known what form the BA attack took. It looks like the system was infiltrated where customer information was being captured, including credit card information. Obviously, everyone is interested in strengthening the barrier to that sort of infiltration." he said.

Herdman said he was aware of breaches of commercial systems, IT systems, airport information systems and networks. Normal IT hardware and system failures and power outages also are very disruptive.

It must not be forgotten that "in terms of cyber offensive activity, individual countries and government agencies are using cyber as an offensive tool. We have to be careful about this. It's not all criminal intent. There are concerns some governments are actively experimenting or actively using cyberattacks," he said.

"One of the big policy issues is the need to establish protocols for cyber war in the same way that it was done with nuclear disarmament and chemical, biological and radiological weapons. At the moment there are no ground rules. This needs to be addressed at governmentto-government and United Nations level."

While industry players from Boeing and Airbus to engine manufacturers and avionics providers agree building cybersecurity into systems at aircraft and product design level is essential, there are concerns about the security of the global air traffic management (ATM) systems. ATM is largely built around open standards and unencrypted systems. Without encryption, systems are vulnerable. This issue is being addressed by the ATM community.

Herdman pointed out that in the military arena, interfering with GPS signals and communications is part and parcel of defence. "What happens if those sorts of tactics are applied to civil aircraft?

"It's a like the question of how do we keep civil aircraft safe from military attack by missiles from the ground," he said.

"It's not our job to dodge the missiles. Do we need government to government dialogue on protocols? If state actors targeted the ATM system it could easily cause disruption and loss of confidence."

Hackers always seem to be a step ahead of their victims. Sydney Airport's Rattray said there were a number of tools and systems that detected attacks but it was important to know how to respond and recover.

"Don't assume you will ever

### INDUSTRY INSIGHT SPECIAL REPORT COUNTERING CYBER THREATS AT ASIA-PACIFIC AIRLINES

be fully protected with cyber security. Work through what to do when you are attacked. Its about continuity. It's about incident response plans and communication analysis." He also warned that cyber security is never done. It is a continual process of assessment, building and testing defenses and then doing it again. "This world around us is moving very, very quickly in this space. We have to continually assess and test and improve," he said.

"Realistically, a lot of industry discussion is about detecting, responding and recovering from breaches and attacks, which involves collaboration across multiple enterprises. It's like facing possible natural disasters. Its a question of supposing it happens then planning how to recover as quickly and effectively as possible. The goal is to get the system back up and running to maintain public confidence in the integrity of the system even if it's compromised," Herdman said.

The latest research into the level of cyber security maturity at airlines and airports indicates the subject is at the forefront of business planning. SITA said there are a very high levels of security awareness among airline staff (82%) and airport employees (85%).

Beyond cyber security protection, the industry is focused on threat detection and response management, SITA said. Chief information officers at 69% of airlines and 47% of airports are implementing security events and correlation monitoring. Security incident response management is being put in place at 77% of airlines and 60% of airports.

Earlier this year, SITA partnered with Airbus to address the air transport industry's distinct concerns and create a unique Cyber Security Aviation Security Operations Center (SOC). It acts like a cyber control tower with an integrated combination of processes, people and technology to detect, analyze, respond and report on cybersecurity incidents.

Head of Airbus Cyber Security, Markus Braedle, said, "The air transport industry has unique cyber security challenges because of the varied and increasing use of smart end points across a largely distributed infrastructure. Digital transformation is enabling the air transport industry to deliver better services to its customers, but raising its threat exposure."

improve operational efficiency.

"It is clear the will of the industry is to change the way we travel by improving efficiency and making the passenger journey as secure and seamless as possible. This requires a concerted and aligned drive and true collaboration," SITA CEO, Barbara Dalibard, said last month.

In a recent survey released by World Routes 2018, Asia-Pacific airports topped the table for the largest number of record breaking routes. "The research backs up forecasts that the Asia-Pacific will be the biggest driver of passenger demand in the next 20 years," brand director of Routes, Steven Small, said.

## Biometrics streamlining passenger journeys

ncreasing numbers of airlines and airports are embracing biometrics to smooth the passenger journey through the airport to their airline seats.

A leading global IT provider said last month that biometrics will be part of the evolution of self-service check -in at global airports from the beginning of the next decade. Over the next three years, 77% of airlines and 71% of airports are investing in major programs and/or research into biometric ID management, SITA said at its 2018 AirTransport IT Insights conference.

IT companies are delivering management solutions, including biometric systems, that eliminate the need for manual checks at airports and assist airlines and airports to comply with government and border security regulations. The most widely applied biometric systems are incorporated into self-service check-in kiosks. Worldwide, 41% of airports operate biometric clearance systems at check in kiosks which will increase to 74% by 2021, SITA said.

Within the same period, 59% of airports and 63% of airlines will be operating selfboarding gates using biometrics with identity proof such as passports. Blockchain is being adopted by about 40% of airlines and 36% of airports because it reduces the need for multiple identity checks.

Both airlines and airports are investing in Artificial Intelligence (AI) but it is being applied differently by the two industry sectors. Airlines are looking at the potential of AI as virtual agents and chatbots, with 85% of them intending to have incorporated it into their systems also by 2021. SITA said 79% of airports are using, or planning to use, AI for predictive analysis to







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