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UPPING AVIATION'S ANTE

IATA director general and CEO, Alexandre de Juniac, targets heads of state in his lobbying campaign

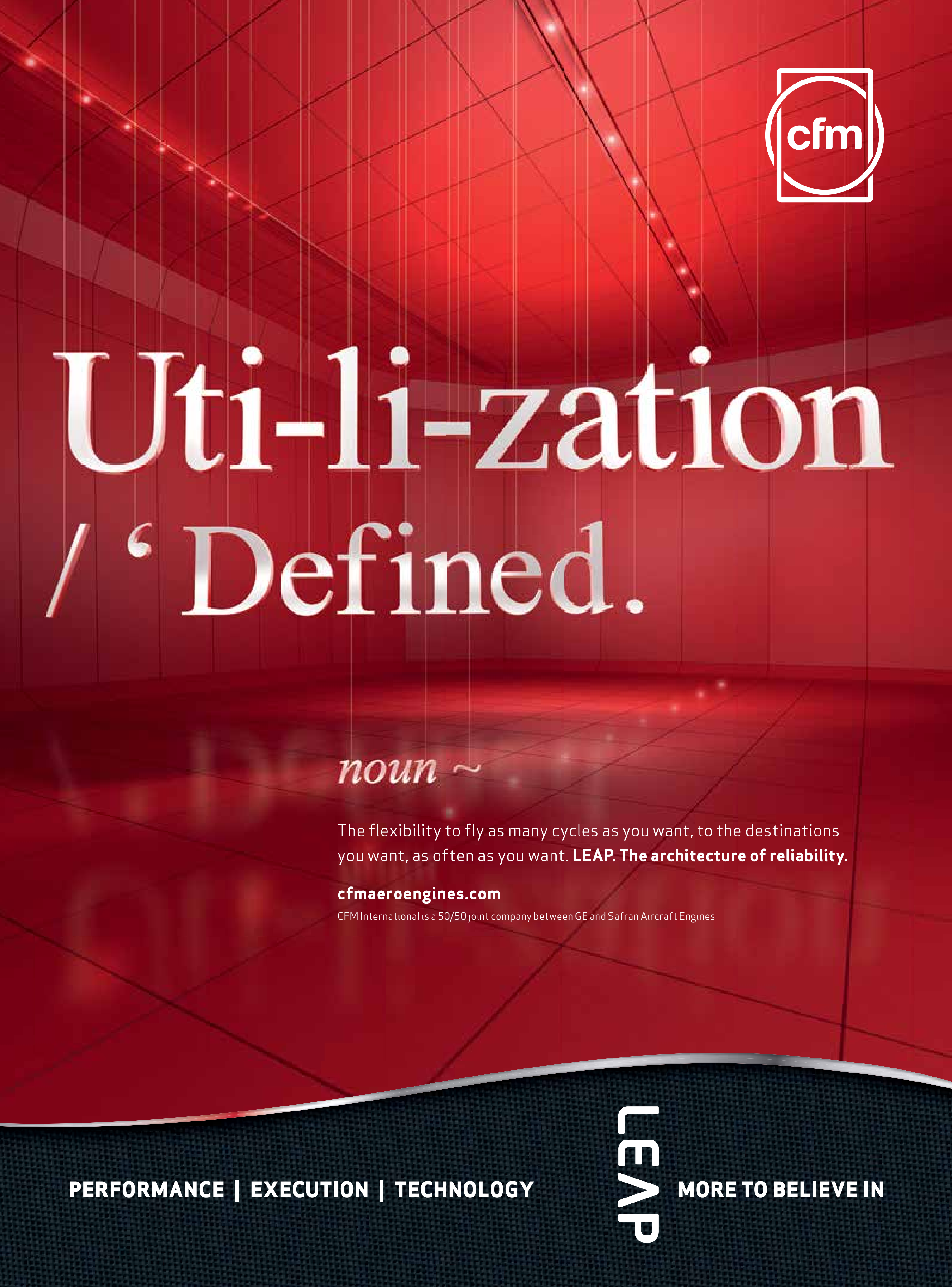
Orient aviation 23 YEARS

Malaysia Airlines plans 2019 IPO

Rolls-Royce bribery scandal centres on Asia

HNA Group buys into "Trump Corp."

Industry insight: India's airline growth explosion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COVER STORY

NOW'S THE PERFECT TIME
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777-300ER. A BETTER WAY TO FLY. The Boeing 777-300ER's unique combination of superior range, outstanding fuel efficiency and passenger-preferred comfort has created long-range success for carriers around the world. And with recent upgrades that further reduce costs and boost revenue, now's the perfect time to add to that success, in the air and on the bottom line. The 777-300ER makes every fleet a more profitable fleet. That's a better way to fly.
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Structural discipline works

Historically, when the global economy collapsed, airline profitability followed suit. As a result, again historically, airlines often have had to sell their product, the airline seat, at a loss.

Now, for the first time in the history of formal recorded airline statistics that has not happened. The shock of the oil spike of 2007, followed by the Global Financial Crisis of 2008, forced airlines to put in place the necessary structural reforms that rescued it from the fluctuations of global economic performance.

Since 2010 the world's economy has not performed well but the airline industry has improved its collective numbers. In 2017 a record has been set. The industry will have achieved its the eighth consecutive year of aggregate profitability.

While some airlines never learn from their mistakes – most commonly erroneous fleet planning and consequent price wars - many do, including airlines in the Asia-Pacific.

International Air Transport Association (IATA) chief economist, Brian Pearce, said at a recent IATA media briefing that the structural improvements taking place in the industry and the improved financial health of airlines have not only been about low oil prices.

Last year, jet fuel prices averaged US$52.10 a barrel. IATA forecasts that will increase to $64.90 barrel in 2017. With no hedging, higher jet kero costs will add almost $25 billion to airline costs for the 12 months, yet carriers' net profits are expected to fall by only $5 billion for the year.

Severe restructuring at many airlines, and other measures such as the densification of seats on aircraft and increasing ancillary revenue, are positioning carriers to better handle the many and varied shocks that come their way.

These improvements will endure, said IATA, even if low oil prices disappear. This reassuring news also reinforces the fact that in this new, digitally dominated world, industry restructuring is the necessary path to sustainable profits.

In 2017 and beyond, restructuring is no longer a three or five-year program. Change is now a constant in any business, not just airlines. And at airlines, those that don't adapt to the new world probably won't be around for much longer. ■

TOM BALLANTYNE
Chief Correspondent
Orient Aviation Media Group

Etihad Aviation Group's James Hogan moves on to finance

Etihad Aviation Group president and CEO, James Hogan, has announced he will leave the Abu Dhabi-headquartered airline and travel group for the investment world, along with the group's CFO, James Rigney.

A global search has commenced to replace Hogan, who plans to leave the group in the second half of this year. Rigney also plans to depart from the company at an unspecified date this year.

The Etihad Aviation Group board of directors announced the news on January 24 when they said Hogan "had first initiated the transition process last year with the formation in May of the Etihad Aviation Group, now a diversified global aviation and travel organization".

Etihad Aviation Group chairman, H.E. Mohamed Mubarak Fadhel Al Mazrouei, said: "we are very grateful to James. In just ten years, he has overseen the growth of the company from a 22 aircraft regional carrier into a 120 aircraft global airline and aviation group, with seven equity partnerships which together serve more than 120 million guests every year.

"Under his leadership, the company has provided new opportunities for thousands of Emiratis and has been a critical element in the remarkable progress of Abu Dhabi and the UAE. We look forward to James' continued association with Abu Dhabi in new ways."

Priorities for the business, said H.E. Mazrouei, were continuing a company-wide strategic review to ensure success in a challenging market.

"We must ensure the airline is the right size and the right shape. We must continue to improve cost efficiency, productivity and revenue. We must progress and adjust our airline equity partnerships even as we remain committed to the strategy."

Speaking in Dublin a day earlier, Hogan said five of the Etihad Aviation Group's seven airline equity investments already were delivering a return. "However, we faced greater challenges with airberlin and with Alitalia," he said.

"Both are operating in very competitive environments and need to address longstanding issues facing their businesses. I believe airberlin's strategy is now on track and Alitalia is finalizing a business plan to address its issues.

"We are committed to our equity partner strategy. It delivers a huge amount to our business. Some of these airlines need to react to the market pressures they face, and we are supportive of that process." ■

Airbus overcomes supplier obstacles?

At the time it seemed like a mountain too high to climb. With serious supplier issues for both engines and cabin interiors equipment delaying deliveries out of Airbus for its A320neo and A350, the European manufacturer looked more than unlikely to reach its revised November 2016 target of 670 aircraft delivered for the year.

Little wonder then that the president of Airbus commercial aircraft, Fabrice Bregier, was happy to announce the company's 2016 performance to the media last month.

The first half of the last year was "unusually difficult from a production perspective", Bregier said, but the manufacturer managed to speed up its output by the end of the year after suppliers fixed some of their problems. "Last year was one in which we managed not only to achieve our objectives but to surpass them," he said.

Airbus delivered a record 688 aircraft in 2016 compared with 635 in 2015; a result that exceeded the company's expectations. The output numbers were lifted by a rush of deliveries – 111 – in December,

Over in Seattle, rival Boeing delivered 748 planes during the year.

Airbus executives played down concerns the industry is facing a downturn after a long-running buying spree by Asian and Middle East carriers.

Despite these concerns, both Boeing and Airbus are not fazed by the prospect of fewer orders in 2017.

Airbus booked 731 net orders in 2016. It beat rival Boeing, but the order book for the year was nearly a third lower than in 2015 when clients ordered 1,036 aircraft. In Seattle, Boeing confirmed orders for 668 planes in 2016, a decline of 13% over 2015's net orders of 768 aircraft.

Airbus has a backlog of 6,874 planes, valued at $1,018 billion at list prices, to be delivered.

Boeing ended 2016 with orders to be delivered of more than 5,700 commercial aircraft. For both manufacturers, the planned deliveries are sufficient to keep their production lines busy for the next decade.

At an Airbus global web briefing last month, Bregier said Airbus expected to deliver more planes this year than in 2016, but would not be drawn on numbers. "We will continue to ramp up. As of today, we will be above 700 deliveries," he said.

Added John Leahy, Airbus' chief operating officer – customers: "Next year, we will increase production again. We are essentially sold out at this point, but that does not mean

Turbo accidents drag down safety record

Last year was a banner year for Asia-Pacific commercial airlines with no major accidents or fatalities. But the record was not exemplary for the region's turboprop fleet, which had three major accidents in 2016 that took 74 lives.

Worldwide in 2016, there seven major accidents and 207 lives lost at jet carriers – a loss rate of one major accident for every four million flights – and a reduction in accidents of almost 60%.

However, western built commercial airline turboprop planes had five major accidents worldwide that took 80 lives in the same 12 months – a loss rate of one major accident per million flights.

The director general of the Association of Asia-Pacific Airlines, Andrew Herdman, said the safety record of turboprops in Asia had markedly improved following a heightened focus on specific risk factors and common operational challenges.

"The projected expansion of airlines in the Asia Pacific brings with it considerable challenges, including effective regulatory oversight that keeps pace with growth, recruitment and the training of skilled industry professionals," he said.

The International Civil Aviation Organisation (ICAO) has identified disparities in the implementation of safety standards and regulatory oversight worldwide, including Asia.

"Governments have a responsibility to make the necessary commitments and investment in resources to ensure effective oversight in full compliance with agreed ICAO standards, or face the very real threat of international sanctions, which some countries have already experienced," said Herdman. ■

Rolls-Royce bribery probe at THAI progressing

At press time, Thai Airways International (THAI) president, Charamporn Jotikasthira, said the airline's investigation into reported bribes paid by Rolls-Royce to THAI staff between 1999 and 2005 was progressing. In the meantime, THAI is preparing to sign a governance agreement to ensure that any party conducting business with THAI will not engage in any bribery with the airline's employees. See Rolls-Royce Asian bribery scandal page 10. ■

we can't increase our production, and we will next year and the year after," he said.

"We have to build what we already have orders for and not worry about getting new orders. I'm confident that we'll have a new record in deliveries in 2017. That doesn't mean that orders are going to be strong."

Nevertheless, both plane makers were buoyed by sales to Iran late last year after sanctions against the country were lifted. Boeing and Airbus each received orders for 100 planes from Tehran, each deal estimated to be worth at least US$11 billion.

Airbus delivered its first plane to Iran, an A320, last month. Boeing does not expect to begin deliveries until 2018.

Among other contracts Airbus signed in December was a $7.8 billion order from Indian LCC, GoAir, for 72 A320neo passenger jets. Another Indian LCC, SpiceJet announced the purchase of 100 B737-8 Max aircraft in one of Boeing's biggest orders from India.

As for the eternal question of the future of the A380, Airbus continues to stand by its very large aircraft. With sales almost non-existent – Boeing's B747-8 Intercontinental is suffering a similar fate – there is no sign of a new engine version, the A380neo.

In the meantime, Emirates Airline, which has 89 A380s in its fleet and another 53 of the type on order, is deferring delivery of six A380s from 2017 to 2018 and postponing acceptance of another six from 2018 to 2019. Last July, Airbus announced a cut in the A380 production rate to one a month from 2018 to reflect reduced demand.

Bregier said Emirates continued to challenge it for an A380 upgrade. "We have studied the possible evolution of the A380neo aircraft and we came to the conclusion that the time was not yet there to launch it. To do that we would need to inject some development cost and we would need to have a better environment from the market perspective, and also a clear return on investment," he said.

"Regarding Emirates, I am very grateful they are such a strong supporter of the A380 and that they are challenging us to say 'we want to buy more, we want the new version, we will be your big customer'. I believe this is a key to the future success of the A380 and future versions of this aircraft."

"We decided to keep what really made sense, which is to increase the seat count while keeping the big advantage of the A380, which is the quality as perceived by the passengers - the bars, the restrooms, the showers and all that. And this is what we are doing right now," Brégier said. ***By Tom Ballantyne*** ■

LUNCH WITH ORIENT AVIATION

Malaysia Airlines Berhad CEO and group managing director, Peter Bellew, told the 130 guests at the third **Lunch with Orient Aviation** in Hong Kong that the airline's path to profit was on track and that it planned to launch an initial public offering in early 2019. In 2016, Bellew said, the airline often flew its A380s from Kuala Lumpur to London with only 50-60 passengers onboard. But in the September-December quarter, London loads improved to 82% and hit 90% in December. "We made a profit last month (December) and we expect the last quarter of this year to break even or make a profit. Currently, I am projecting to make a profit across next year," he said. ■

Photos: Graham Uden

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BOEING

Asia-Pacific rocked by Rolls-Royce bribery scandal

By Tom Ballantyne

The news last month that global engine manufacturer, Rolls-Royce had admitted to bribing clients to secure orders, allegedly in Thailand, India, Indonesia, Malaysia and China among other countries worldwide, has sent shock waves through the region's airline industry.

In Bangkok, Thai Airways International (THAI) immediately set up two task forces to investigate the allegations. In Indonesia, the country's anti-corruption agency, the Corruption Eradication Commission (KPK) announced it was investigating the matter and named former Garuda Indonesia president-CEO, Emirsyah Satar, as a suspect in a bribery case. The KPK said in a statement he was suspected of accepting bribes related to the purchase of planes and engines from Airbus and Rolls-Royce.

Former banker Satar, who is highly regarded in the industry, headed Garuda from 2005 to 2014. He resigned from Garuda because heads of government controlled companies only are allowed to serve two five-year terms in any one position. He is now chairman of Indonesian conglomerate Lippo Group's e-commerce platform, MatahariMall.com.

Satar has vehemently denied any wrongdoing, but said the KPK had the authority to name him as a suspect and that he would respect the legal process. "As far as I know, when I was the CEO of

PT Garuda Indonesia, I had never done corrupt activities and I did not receive anything that was related to my position," he said.

THAI quickly launched full scale investigations into past jet engine purchases. The airline's president, Charamporn Jotikasthira, who took over in December 2014, said one task force would examine engine and maintenance procurement between 1991 and 2005 and would take appropriate action on the findings.

A second task force is investigating current procedures for engine procurement and maintenance to ensure they are sound and without any loopholes.

In a bombshell disclosure in January, Britain's Serious Fraud Office (SFO) settled with Rolls-Royce after the company admitted to engaging in 12 counts of corruption or failure to prevent bribery in seven countries. Among them were five Asian countries: Thailand, Indonesia, India, China and Malaysia. Russia and Nigeria also were named in the final findings.

Rolls-Royce apologized after it was found to have paid bribes, including a luxury car and millions of dollars in cash, to middlemen to secure orders. The Derby-based company made the admissions in the High Court in London last month after it was revealed the company had agreed to pay $828 million in penalties to settle the long-running investigation.

In a statement read out in court, Rolls-Royce said it "apologized unreservedly for the conduct which has been uncovered". The settlement was reached with investigators from three countries - the UK, U.S. and Brazil - who launched investigations five years ago into allegations the firm had hired middlemen to pay bribes to win contracts.

Rolls-Royce chief executive, Warren East, said the behaviour uncovered in the course of the SFO investigations and other authorities "is completely unacceptable and we apologize unreservedly for it. This was unworthy of everything which Rolls-Royce stands for, and that our people, customers, investors and partners rightly expect from us".

The British court heard that:

- In Thailand, the firm paid more than $36 million between 1991 and 2005 to agents to help it secure three separate contracts to supply Trent aero engines to Thai Airways International.
- In Indonesia, Rolls-Royce gave $2.25 million and a Rolls-Royce Silver Spirit car to an individual in exchange for a "favour to

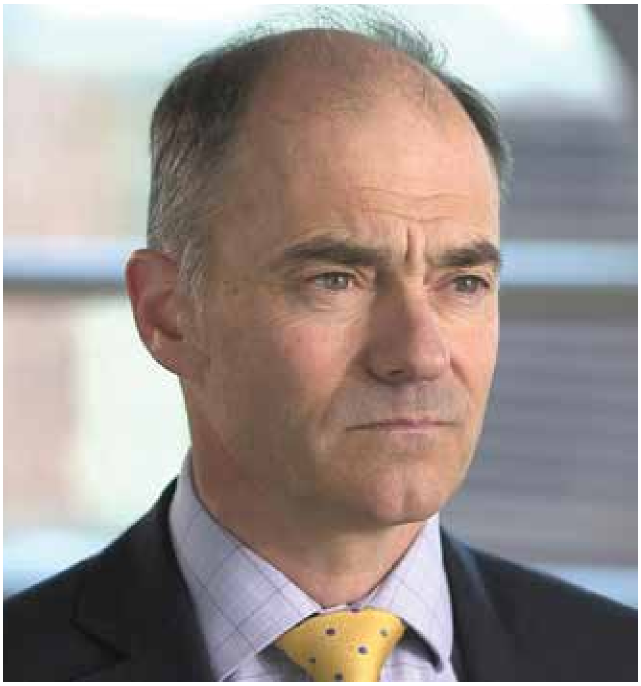
Rolls-Royce on a contract" for Trent aero engines to be provided to Garuda Indonesia. Separately, Rolls-Royce paid a representative from a rival bidder to deliberately submit an uncompetitive bid on a contract Rolls-Royce successfully secured.

- In India, where the use of agents to secure defence contracts is prohibited, Rolls-Royce disguised its use of middlemen as "general consulting services". The company also admitted paying to retrieve a leaked list of intermediaries after they were obtained by the Indian tax authorities.
- In China, Rolls-Royce failed to prevent bribery in relation to the extension of a £5 million ($6.2 million) cash credit to China Eastern Airlines in exchange for the purchase of engines for aircraft. Some of the funds paid were intended to be used for employees of CEA to attend a two-week MBA course at Columbia University, including what the court described as "four-star accommodation and lavish extracurricular activities".

In Bangkok. THAI announced one investigation would be headed by Pichait Riengvattanasuk, who is vice president of the carrier's Risk Management Department. There also would be a Corruption Investigation by a Special Task Force headed by an advisor in the Office of the President, Niruj Maneepun, to investigate Rolls-Royce allegations about THAI engine and maintenance procurement that would "take appropriate company or legal actions on the findings".

A Fraud Prevention Integrity Pact between THAI and engine procurement and maintenance companies is to be developed to ensure there is no bribery among THAI staff.

Thailand's Transport Minister, Arkhom Termpittayapaisith, said the inquiries had been given



The behaviour uncovered in the course of the Serious Fraud Office investigations and other authorities is completely unacceptable and we apologize unreservedly for it. This was unworthy of everything which Rolls-Royce stands for, and that our people, customers, investors and partners rightly expect from us

Warren East
Rolls-Royce chief executive

30 days to wrap up the bribery probe, which meant it would have to come up with results before the end of this month.

He said the panel must determine if THAI's acquisition process is transparent, how the current acquisition process differed from the previous process and who was involved the bribery that Rolls-Royce has admitted in the courts.

If the inquiry implicates any THAI executives or staff they must be prosecuted without exceptions, he said.

Garuda Indonesia issued a statement in response to the KPK's announcement which said the case was disconnected from the airline. "The management of national airline Garuda Indonesia wants to convey that the (alleged corruption) case has no relations with corporate activities, but is more an individual action," said the carrier's corporate communication vice president, Benny S. Butarbutar.

He said that as a public company, Garuda had mechanisms in all of its business activities, from the tight implementation of a good corporate governance system to transparency of information.

"The management of Garuda Indonesia will fully leave the complete investigation of the case to the KPK and will cooperate with the commission's investigators," he added.

A settlement between Rolls-Royce and the SFO on the allegations – called a deferred prosecution agreement – allowed the engine manufacturer to avoid prosecution in the U.S., the UK and Brazil although individual executives may be charged.

The SFO settlement required Rolls-Royce to admit wrongdoing, pay the fine and submit to other measures to monitor its conduct for a specific period. If it adheres to the terms of the agreement, it will not be prosecuted at the end of the agreed period.

Rolls-Royce said it would pay $613 million to the SFO, $169 million in penalties to the U.S. Department of Justice and $25 million to the Brazilian authorities. During the long-running investigation, more than 30 million documents relating to middlemen were examined by 70 investigators and more than 200 interviews of present and former Rolls-Royce employees were carried out. Arrests and searches were made in the UK and overseas.

Joint head of bribery and corruption at the SFO, Ben Morgan, told the Financial Times that a network of corrupt middlemen that operated on behalf of Rolls-Royce and other companies was put together "not just in aerospace or energy sectors, but in other cases".

"You start to look at how the web reaches out into other companies. We don't think we have caught the one bad apple here at all. Other companies should be concerned. Boards have a decision to make – do they continue to hide bad conduct or, like Rolls-Royce did, do they have the integrity to confront it," Morgan said. ■

HNA romances "Trump Corp" as shopping spree accelerates

By Dominic Lalk

There is no end to HNA Group's desire for global assets despite reported gearing of close to 150% and borrowing costs estimated at an annual eight per cent a year.

One of the group's latest targets is a majority holding in SkyBridge Capital, the investment firm founded by Donald Trump adviser, Don Anthony Scaramucci. SkyBridge's offerings include various hedge fund products, customized separate account portfolios and "sophisticated alternative" hedge fund advisory services. It managed or advised approximately $12 billion in assets as of November 2016.

While the deal could provide a useful link to the new White House, HNA Capital's equity in SkyBridge also will help HNA expand its nascent financial empire of asset management, life insurance, peer-to-peer lending and, importantly, aircraft leasing.

"Our investment in SkyBridge is an important step in HNA Capital's strategy to build a global asset management business," said Guang Yang, CEO of HNA Capital U.S.

In an interview with the Financial Times in January, HNA's chairman, Feng Cheng, who founded the empire 24 years ago, said the group's shopping spree would "of course" continue in 2017.

"With such a good opportunity now in M&A, if we're provided with the chance of global good-quality assets that benefit our core business,


of course we have to do M&A," said Chen. "Otherwise it's a lost opportunity."

A Lufthansa air transport management graduate and an MBA in air transport from Maastricht university in the Netherlands, Chen told the Financial Times: "The more money the Chinese have, the more they go all around the world. Any country that does not have Chinese tourists has a problem." He added aviation development was the only realistic means to achieve it.

HNA Group and its numerous subsidies kicked off 2017 with the $460 million purchase of New Zealand's largest non-bank lender, asset finance firm UDC. It said the purchase promised significant growth opportunities in Australia and New Zealand and would create synergies in its leasing business.

At the same time, HNA tripled the size of its Hong Kong headquarters not long after it had agreed to pay an above the market price of $1.84 billion for two residential sites at Hong Kong's former Kai Tak Airport. At press time, the group secured a third Kai Tak site, for US$713.5 million.

The group has bought Ingram Micro Inc., the world's biggest computer and software distributor for $6 billion and spent another $6.5 billion for 25% of Hilton Worldwide Holdings Inc. Late last year, HNA acquired Carlson Hotels (Radisson, Radisson Blu, Park Inn, etc.) and paid for 51% of Rezidor Hotels.

Also in 2016, HNA became the sole owner of lessor, Avolon Holdings, for $7.6 billion, which made Avolon the fourth largest lessor in the world. With the agreement to acquire CIT Group's aircraft portfolio in October for $10 billion, HNA is now the world's number three aircraft lessor. Chen Feng said he aimed to overtake GE Capital Aviation Services and AerCap Holdings to become the biggest lessor on the planet.

Earlier last year, in May, the group bought part of Virgin Australia Holdings Ltd and four months later took equity in Azul Linhas Aéreas Brasileiras SA, Brazil's third-largest airline. In between times it swept up ground handler, Swissport International, and Swiss airline caterer, Gategroup Holding AG.

Former Civil Aviation Administration of China and World Bank official Feng launched Hainan Airlines in 1993 with two aircraft and registered capital of 10 million yuan ($1.45 million). The airline, named after its island home base off southern China, found friends in the right places and quickly developed the airline and its related businesses.

Its big breakthrough-accompanied by global headlines – came in 1995 when legendary U.S. investor, George Soros, used his hedge fund, American Aviation LLC, to invest $25 million in the

> Orient Aviation understands Hainan Airlines is in advanced negotiations to acquire slots at London's Heathrow Airport after applying for traffic rights for three times a week Chengdu-London and also three times a week Shenzhen-London flights flying either A330 or B787 aircraft

young airline. It was unheard of at the time for a foreigner to risk an investment on the Mainland, let alone with such a young business as Hainan Airlines.

The carrier added Bombardier Learjet 55 private jet operations to its portfolio and by 1998 had become the first Mainland airline to acquire equity in an airport when it purchased 25% of Haikou Meilan International Airport.

Twenty two years on, Hainan Airlines and its parent, the 17-year-old HNA Group, are hell-bent on becoming the largest aviation group in the world. With more than $100 billion in assets, the group exceeds Boeing's market valuation.

In 2014, HNA was number 464 on the Fortune 500 list of the world's largest companies by revenue. It has more assets than any U.S. carrier and is bigger than Europe's market leaders Deutsche Lufthansa AG and International Airlines Group (IAG) combined. Last year, it leapt to number 353 on the Fortune 500 List and has its sights set on a top ten ranking within the next decade.

Orient Aviation understands Hainan Airlines is in advanced negotiations to acquire slots at London's Heathrow Airport after applying for traffic rights for three times a week Chengdu-London and also three times a week Shenzhen-London flights, flying either A330 or B787 aircraft. Its airlines already operate to Berlin, Brussels, Budapest, Prague, Manchester, Moscow, St. Petersburg, Paris, Rome, Zagreb, Copenhagen and Madrid. All it needs is a good grip on the Star Alliance hubs in Frankfurt, Munich, Vienna, Zurich and Stockholm.

Industry insiders also speculate that HNA might add a global distribution system (GDS) to its portfolio this year, even if it means going head-to-head with China's state-owned monopoly GDS, TravelSky Technology Ltd.

At $19.2 billion, Amadeus might prove too big even for HNA, but Dallas-headquartered Sabre Corp. at $7.1 billion might be persuaded to sell for a premium. In late December, HNA signed its first deal with Sabre, when it bought the technology solutions provider's AirVision Planning & Scheduling and AirCentre demand forecast and scheduling tools. Separately, HNA is rumoured to be interested in German logistics giant, DHL, and railway colossus, Deutsche Bahn.

As of January 2017, HNA Group carriers had a fleet of more than 1,300 aircraft, serving more than 1,000 routes and nearly 280 cities. It operates and manages Hainan Airlines, Tianjin Airlines, Beijing Capital Airlines, Deer Jet, Lucky Air, West Air, Fuzhou Airlines, Urumqi Air, Air Chang'an, Beibu Gulf Airlines, Yangtze River Express, Guilin Airlines, GX Airlines, Grand China Air, HK Express and Hong Kong Airlines.

Kunming-headquartered Lucky Air, a domestic and international low-cost carrier, announced in December that it was in the final stages of setting up a new budget airline out of Chengdu. The new carrier will be called Shenniao Airlines, translated as "sacred bird airlines". Lucky Air will hold 35% of the carrier, with Yunnan Xiangpeng Investment Co. and Chengdu Communications Investment Group Co. holding 45% and 20%, respectively. With a start-up capital of $436 million, Shenniao will be the ninth airline to set up in Chengdu.

In 2017, HNA's airlines plan to play a bigger role in advancing Xi Jinping's Belt and Road Initiative, according to Huang Qijun, deputy CEO, president of investments and board director. "We will launch more routes connecting China with the Belt and Road countries, help our counterparts build and manage airports to improve local transportation services, and introduce high-end tourism routes with distinguished Silk Road features," Huang said.

Both full-service and low-cost HNA carriers have announced significant schedule additions for 2017, notably with links from the Mainland to Europe, Central and Western Asia, the Indian Ocean and South and Southeast Asia. ■

HNA Group close to sealing German airport purchase

At press time, Mainland China's HNA Group was reported by Hong Kong media to be in the final stages of negotiations for the acquisition of 24-hour loss-making Hahn Airport, a former western Germany military airport that is now a secondary cargo and LCC facility. News agency Reuters said ADC, a German company, is HNA Group's partner in the negotiations.

The two provincial states that own the airport, Rhineland-Palatinate (82.5%) and Hesse (17.5%), have been involved in the disposal of the airport sale, which had attracted two other bids apart from ADC/HNA Group.

After auditors reviewed the three offers, Rhineland-Palatinate decided to enter into finale negotiations with ADC/HNA Group, said Reuters.

The negotiations are the second attempt by the airport's owners to sell the airport. Last year, Shanghai Yiqian Trading Company agreed to buy the airport, which has Ryanair and Wizz Air as clients, for US$14 million. The deal collapsed when the Mainland aviation and logistics group failed to make any payments to the Rhineland-Palantinate and Hesse government owners.

Hahn airport opened for civilian operations in 1993. It reached its high water mark in operations and income in 2007 when it handled four million passengers. In its latest set of reported figures, for 2015, Hahn airport processed 2.7 million passengers for the year, but it made a loss of almost $18 million for the 12-month period.

ENDING THE PROFIT ROLLER COASTER?

Airlines have benefitted from billions of dollars in unexpected bottom line relief since the oil price collapsed in 2015. Has the impact of bargain basement oil overshadowed another significant industry development – sustainable annual profits?

Tom Ballantyne reports

Airlines worldwide reached a cyclical peak in 2016 when they collectively reported profits of $35.6 billion for the 12-month period, the International Air Transport Association (IATA) said in December.

The results will not be as impressive this year, but they will remain in profitable territory. Airlines will have "a soft landing" in 2017, with forecast global airline profits to decline to $29.8 billion, the association said.

Global carriers have now reported eight successive years of aggregate profitability in an industry notorious for its rapid swings between profits and losses.

What has changed? IATA chief economist, Brian Pearce, said fuel is obviously an important factor in the formula, but added that until recently, every time the global economy collapsed airline profitability also collapsed.

"Typically, this cycle seemed to worsen as we moved into the early 2000s. But the trend seems to have altered since the Global Financial Crisis (GFC) in 2008, which had followed a big spike in the oil price. These two events delivered a shock to the industry," Pearce said.

"We have seen an improving trend in financial health from that time. Since 2010 the global economy has not performed very well yet the airline industry has improved its financial performance. Structural improvements are taking place. It's not just about the fall in fuel prices in the last 18 months."

In an industry that has hundreds of carriers operating world-wide, clearly some carriers will be more profitable than others, including in the Asia-Pacific, but this sequence of sustained profitability appeared to be one of the most significant industry trends to emerge in decades, said IATA.

At present, airlines are receiving better returns on their investments in their businesses and are identifying sustainable defences against volatile economic conditions, said IATA. North American carriers dominate the positive industry totals with the majority of them generating above cost of capital returns. Some airlines in the Asia-Pacific and in Europe also are reporting high returns, but the profits picture is more mixed in both regions. Forecasts for 2017 predict Asia-Pacific airline profits would decline 13.7% this year, to $6.3 billion.

Analysts said there was broad evidence that carriers were ironing out the financial highs and lows of their fiscal performance. Thai Airways International, Garuda Indonesia, Japan Airlines, Malaysia Airlines, Qantas Airways and most recently Cathay Pacific Airways, are making great leaps forward in aircraft technology and responses to changing passenger demands.

Pearce said the strongest evidence of airline structural change was the gap between load factors achieved and break even load factors that drive ROIC (Return On Invested Capital). In 2008, the gap between break even and achieved load factor was marginal at only 1%-2%, he said.

Today, the break even load factor is around 62% and the load factor achieved by airlines is approximately 67%. "Clearly, the 2015 fall in jet fuel prices pushed break even loads down sharply and that boosted ROIC, said Pearce.

"Equally, the gap emerged several years earlier than the fall off in the cost of oil. So the improving trend in airline profitability is not just low fuel prices. The industry changed after the 2008 oil price spike and the GFC, with a steep rise in asset utilization or load factors, which was a combination of consolidation, fleet retirement and behavioral change.

"We saw that gap widen as airlines focused on more efficient utilization of their capacity and assets," he said.

A second indicator of structural change driving profitability and ROIC, he said, was evident from operating margins and revenue/investment capital (capital productivity).

"Operating margins in the last three years have climbed and are expected to fall largely because of fuel prices. But an important component of the trend in improved ROIC has been the amount of revenue airlines can generate per dollar of capital invested since 2009," said Pearce.

"Since the GFC, it is evident from the densification of seats on aircraft, but more importantly from the addition of ancillary revenues. IATA's work on the NDC (New Distribution Capability) has been a key enabling standard that has allowed airlines to expand this revenue stream. It's a trend improvement that will be around even if low oil prices go away."

Oil averaged $44.6 per barrel of Brent crude last year and IATA forecasts it will increase to $55 in 2017. This will push jet fuel prices from $52.1 per barrel in 2016 to $64.9 per barrel in 2017. In mid-January, the price per barrel of jet fuel was $66.30.

Fuel is calculated to be 18.7% of the industry's costs this year, which is significantly below the recent peak of 33.2% in 2012-2013. With no hedging, an increased fuel price would add almost $25 billion to airline costs, yet IATA predicted net airline profits will fall by only $5 billion in 2017.

"Of course fuel prices have been important," said Pearce. "We've recently seen quite a sharp oil price rise after the OPEC (Organization of the Petroleum Exporting Countries) agreed to cut production.

"You can see OPEC producers' spare capacity is at an all-time low. The market was developing to a point where there was under investment in oil that was building up to a potential future supply crunch. Why not higher? Essentially, the market is still over-supplied. The amount of oil floating around is still at record highs."

The Economy Forecast Agency (EFA), which specializes in long-range financial market forecasts for corporate clients, believed crude oil prices will range from $59 to $62 a barrel by year end and from $65 to $75 a barrel in 2018.

For airlines, this means their fuel bills will rise and that the fuel hedging arrangements carriers have in place will decide how successfully individual carriers manage the cost increase.

Last month, European and Chinese traders shipped a record 22 million barrels of crude oil from the North Sea and Azerbaijan to Asia to plug any gaps in the supply chain

> We have seen an improving trend in airline financial health from 2008. Since 2010 the global economy has not performed very well yet the airline industry has improved its financial performance. Structural improvements are taking place in the industry. It's not just about the fall in fuel prices in the last 18 months

Brian Pearce
International Air Transport Association chief economist

following the OPEC production cuts.

More than 11 million barrels of North Sea Forties crude either have been offloaded or are on their way to Asia where they will join a record 11 million barrels of Azeri crude oil from Azerbaijan that is already being stored in the region, Reuters oil trade flows data reveals.

Seeing an opportunity to sell North Sea oil profitably in arbitrage deals to Asia, seven supertankers were chartered by commodity traders Vitol and Mercuria, Europe's Royal Dutch Shell and China's refiner Unipec to offload the European crude to China and South Korea. "Asia needs the oil, Europe has it. The OPEC cut has raised prices and that makes it profitable to send European oil to Asia," said one senior trader.

Oil and structural changes apart, in the next 12 months capacity expansion is expected to slow to 5.6%, from 6.2% in 2016. Capacity growth will continue to outstrip demand, which will lower the global passenger load factor to 79.8%, from 80.2% last year.

Nevertheless, industry revenues are expected to rise slightly, to $49.4 billion, although this figure is well below annual revenue reported from 2010-2014.

Trading conditions remained challenging, IATA said, but connectivity continued to set new records. The global association forecasts that this year almost four billion travelers, up from 3.77 billion passengers in 2016, and 55.7 million tonnes of cargo (53.9 million tonnes in 2016) will be transported by the world's airlines.

Almost one per cent of global GDP, of $769 billion, is spent on air transport. The outlook for 2017 is one of more creation of value, not just for investors, but also for consumers with much of that growth coming from the connections that air transport makes between cities, Pearce said.

In 2016, airlines made about 700 new unique city pair connections, which took the total above 18,000 for the first time.

These structural changes are making a significant difference to airline profitability, but airlines can't become complacent and lose their appetite for continuing change, said IATA. In real terms, airfares fell 12% in 2016 and are expected to decline further this year. Adding to airlines' collective cost base in 2017 will be more than $120 billion in various taxes imposed by governments. ■

Nervous oil market persists

Iraqi oil minister Jabar Ali al-Luaibi, speaking at the Atlantic Council Global Energy Forum in Abu Dhabi last month, said Iraq wanted prices at around $65 a barrel. At the same gathering, Saudi Arabia energy minister, Khalid al-Falih, said his country had reduced its oil production to its lowest level in two years.

Saudi Arabia is the world's largest oil exporter and is leading OPEC's drive to eradicate a global glut and to prop up oil prices. Its output has fallen below 10 million barrels per day, which is a deeper cut than promised in a recent deal between OPEC and non-OPEC producers. Such production levels were last seen in February 2015, when Riyadh steeply increased production to cripple U.S. shale oil producers. In the process it orchestrated a prolonged oil price crash.

Falih said: "We have been moving towards rebalancing the markets for some time. Even better, the pace of rebalancing will be accelerated by recent production agreements within OPEC and outside. I have confidence in these agreements to bring stability to the global markets."

He added: "We are not in the business of managing prices. We will leave it to the market to determine the price. We wish for the market to be less volatile, but the reality today is it is a nervous market."

Governments neglecting responsibilities to airline passengers

Unruly passenger incidents, a serious problem for airlines, are rising sharply, accelerating industry demands for governments to adopt global standards to punish inflight offenders.

Tom Ballantyne reports

The world's airlines want nations to adopt a tougher global punishment protocol to curtail a rise in unruly passenger incidents.

The International Air Transport Association (IATA) said from 2007 to 2015 there was one reported air rage incident for every 1,683 flights, or 49,084 incidents over the seven-year period.

But in 2015 unruly onboard incidents ballooned to one in every 1,205 flights with 11,000 reports made for the 12 months.

IATA's senior vice president for members and external relations, Paul Steele, said none of the incidents should be considered trivial "because any incident that could potentially endanger the safety of an aircraft is something you have to take seriously".

Steele said 53% of IATA members surveyed said unruly passengers had increased in the last five years. In the last 12 months, 40% of airlines had to divert a flight because a passenger was disruptive. Unruly passengers are one of the top three safety issues of concern for cabin crew, IATA said.

A majority of the incidents are classified as Level 1, which typically involved passengers either being verbally aggressive or failing to follow crew instructions.

In the last 12 months, 40% of airlines had to divert a flight because a passenger was disruptive, said IATA's Paul Steele

Usually cabin crew can de-escalate these situations.

Another 11% of cases are Level 2, where passengers are physically aggressive with crew or passengers and/or are damaging the aircraft. Twenty three per cent of reported cases are passengers who are drunk or affected by drugs. Most of these passengers either are intoxicated before they board their flights or they drink onboard from their own supply without the knowledge of the crew.

"There is a trend in society where people think 'I need to satisfy my own needs immediately and do what I want to do now'," said Steele. "But this is happening in a safety-controlled environment. Maybe, as airlines, we need to do a better job in explaining why these rules exist. They are there to protect passengers. Passengers need to observe these rules otherwise they endanger themselves and others."

Worldwide, nations vary widely in their approach to disruptive passengers. In some countries, legal jurisdiction needs to clarified so police can remove offending passengers after an aircraft lands and charge them for their alleged offences. New Zealand has a much better approach. Airport police can issue on-the-spot fines to unruly passengers. "Having a deterrent like that will reduce the number of cases,'' Steele said. "We want penalties available to governments, law enforcement agencies and airlines to deter this kind of behavior."

IATA has been campaigning for all countries to ratify the Montreal Protocol 2014 (MP14). It would close the jurisdictional gaps that exist between nations when dealing with unruly passengers.

Twenty two countries must ratify the treaty to bring it into force, but only eight have done so. Thirty others have signed up but they have not ratified the treaty. Many other countries, including China, India and Singapore, are undertaking the legislative process required for signing up.

"Our members have told us that in 60% of cases, the reason unruly passengers are not prosecuted is because of lack of jurisdiction. It happens when an aircraft is flying from one country to another, but the unruly incident occurred in airspace above a third country," said Steele.

"MP14 will clarify what constitutes an offence and will reinforce the right of airlines to seek recovery of the significant costs they incur from unruly passengers under international law."

IATA also wants to educate airport operators and restaurant, bar and duty free operators about preventing unlawful passenger behavior in flight. "In the UK we've seen excellent local programs that have reduced unruly passenger incidents. They include Monarch Airlines' targeting of pre-flight binge drinking at London Gatwick airport in 2014. It reduced disruptive incidents on flights to Ibiza by 50%," Steele said. ■

TransAsia collapse resets aviation in turbulent Taiwan

By Dominic Lalk

In the week leading to the Chinese Lunar New Year last month, Taiwan's Civil Aeronautics Administration (CAA) reassigned routes operated by defunct TransAsia Airways to its former rivals.

Fierce competition among China Airlines (CAL), EVA Airways and their respective subsidiaries prompted the CAA to include a caveat to the reassignment: airlines awarded lucrative cross-strait routes must add largely unprofitable links to Taiwan's outlying Kinmen and Penghu Islands as part of their deals.

EVA Air and CAL's Mandarin Airlines were handed TransAsia's bread-and-butter Songshan-Shanghai Pudong flights, while EVA's UNI Air was assigned Taoyuan-Pudong. Songshan is Taipei's capacity-restricted downtown airport. Taoyuan is its national hub airport, some 40kms west of the capital.

CAL also was given the Taichung-Pudong trunk route, which Far Eastern Air Transport will operate between Songshan and Fuzhou. CAL's low-cost offshoot, Tigerair Taiwan, will fly between Taoyuan and Wuxi.

The CAA said routes between the two capital city airports, Kaohsiung and the Kinmen and Penghu Islands will be jointly serviced by Far Eastern, Mandarin Airlines and UNI Air. Unprofitable Taichung-Hualien and Songshan-Hualien flights were reassigned to Mandarin Airlines and UNI Air, respectively.

On January 12, TransAsia's shareholders voted to officially dissolve Taiwan's oldest private airline, which was founded in 1951, because of heavy debts and widening losses. TransAsia and its approximately 1,800 unionized workers have not been able to reach an agreement for compensation since the airline's unexpected closure on November 22.

Former TransAsia chairman, Vincent Lin, has proposed employee compensation, immediately rejected by staff, of two months' salary and a US$317 one-off bonus. The union's demands for a better deal have not been met.

Despite TransAsia's shutdown, Far Eastern Air Transport, which holds more than 10% in the airline, has re-affirmed its interest in a takeover of the failed carrier. Far Eastern chairman, 'turnaround king' Fenno Chang, said his company could still take over TransAsia if it received approval from the airline's creditor banks and the courts, in which case the shareholders vote would be disregarded.

In December, Chang said he was "80% certain we will be able to take over TransAsia", following advanced discussions with lenders and other relevant parties, but when asked about a mooted Far Eastern bid, TransAsia's largest creditor bank, Mega International Commercial Bank, said the banks wanted to secure a buyer for the airline's aircraft to offload debt.

Mega International said TransAsia owed it more than NT$11 billion ($345 million), money most easily recovered by TransAsia aircraft. TransAsia operated a fleet of eight A320s, 11 A321s, four A330s and 13 ATRs, although it only owns 11 planes, including two A330-300s and five A320ceos.

Lin said 30 to 40 potential buyers have shown interest in the aircraft, with some wanting all 11 planes, while others are seeking to purchase one aircraft each. The sales agreements are expected to be signed following the Lunar New Year with the aircraft delivered in March or April, he said.

TransAsia's Airbus orders will most likely be cancelled, attracting penalties and adding to its debt pile, although Airbus Singapore said the carrier's outstanding orders "remain in the order book" for now.

Airbus won't need to look far for airlines willing to take over the delivery slots for six A321neos starting this year, but the search for suitors for four A330-800neos from 2018 might prove more difficult as A330neo sales have been slower than expected.

Airbus has received 214 A330neo orders to February, with 84 of them from Asia-Pacific carriers: AirAsia X (66), Garuda Indonesia (14) and the four planes confirmed by TransAsia and reported to be ordered for "not more" than $480 million in 2014.

Four months ago CAL, EVA, their Mandarin Airlines and UNI Air offshoots, Far Eastern, Tigerair Taiwan, V Air and TransAsia served Taiwan and its population of 24 million people. The latter two are now history and Tigerair's Taiwan unit has been fully folded into the CAL Group. This effectively leaves Taiwan in the hands of its two heavyweight carriers, CAL and EVA. Even if TransAsia is revived by Far Eastern, it will be a significantly smaller operation focused on cross-strait traffic. ■

UPPING

Blooded in political and aerospace battles, International Air Transport Association director general,

International Air Transport Association (IATA) boss, Alexandre de Juniac, belies appearances. Chatting with Orient Aviation in his office overlooking Geneva International Airport's runway in December he appeared to be the epitome of patrician authority. But appearances, as is so often the case, can be misleading.

The newest and seventh director general and CEO of IATA may be the product of a privileged upbringing and education, but when it comes to aviation the 54-year-old former chairman

AVIATION'S ANTE

Alexandre de Juniac, intends to take the case for understanding aviation's contribution to the global economy to heads of state as global travel and trade become ever more entwined.

Tom Ballantyne reports from Geneva

of Air France KLM has fire in his belly about the industry and its importance to the global economy.

'IATA has to be fast, fast, fast. IATA should pave the way, lead the race, be at the forefront of all the evolutions if we want to represent and serve the industry. Otherwise we will lag behind and we will bring no value," he said.

"Promoting the business of freedom could be an approach that talks to politicians at a high level by telling them freedom is an important issue, especially when we are facing protectionist rhetoric," he said.

De Juniac is talking about the industry's concern that some countries are backing away from Open Skies and returning to heightened protection of home carriers. Like his predecessorm Tony Tyler, de Juniac would not identify specific spats, including the widely reported rift between U.S. and Gulf airlines as the carriers involved are IATA members. But he holds strong views on the subject.

"We think protectionist measures intended to raise the number of barriers to goods being exchanged or for people to move across borders are a big mistake. It's a big mistake for our industry, obviously. But it's a big mistake for the global economy. It is something that will erode freedom. If we think that we fight for a cause, which is the business of freedom, and I am strongly convinced that we are fighting for this cause, any measure that restricts the movement of goods or aviation is a threat to freedom."

He said it is still early days, he told Orient Aviation in January, for the Trump administration. "We have not seen the specifics of his policies and their impact on aviation, but he has identified three areas we are monitoring closely – building infrastructure, securing borders and pulling back on trade," he said.

"I don't think anybody will disagree with the need to improve U.S. air transport infrastructure. The air traffic management system is in desperate need of modernization. And some key airports – such as New York – need major overhauls.

"As well, there has been a huge effort to have more effective border security in the U.S. and globally with new technologies. We hope any upgrading of security will include a benefit to passengers as a result of the vast amount of information that is available to border control in advance of a passenger arriving at the border checkpoint."

"The last point, pulling back on trade, is the most worrying. Where the skies have been opened, we have seen demand grow with social and economic benefits to all parties. I hope that the Trump administration will recognize this in its approach. But it is too early to make any predictions on how that might play out in the context of specific agreements."

Since de Juniac took over in September, he has visited every continent except Australia and Antarctica. He said governments such as Singapore and the Gulf states understand aviation is vitally important to their economies, others do not. "They don't see the consequences of the decisions they make. We have to repeat and probably say it differently to explain to governments the value of aviation," he said.

"We must extend the scope of our lobbying beyond the

De Juniac opposes privatization of airport infrastructure

"After twenty years of privatization in many parts of the world – Australia being one of them by the way – very frequently privatization has led to uncontrolled local monopolies and very often they are not sufficiently regulated. As a result, the costs the airlines pay and therefore the passengers pay have significantly increased after airports have been privatized," he said.

De Juniac pointed to Singapore, where the government had considered placing the biggest expansion of Changi Airport, including the multi-billion dollar new Terminal 5, into private hands.

"It changed its mind and the cost will be shared between the government, the Changi Airport Group and other private stakeholders. "The Singaporean government was looking ahead at its long-term plan or vision. It was explained to me that because of the cost of the project, they could not put it on the shoulders of the private sector. They had to share it."

Equipped for the job

With a noble lineage stretching back generations – an ancestor fought in the Napoleonic Wars – and an elite education at France's Ecole Polytechnique de Paris and Ecole Nationale de l'Administration under his belt, it is hardly surprising that Alexandre de Juniac has been chosen as the seventh director general and CEO of the International Air Transport Association.

He has three decades of broad aviation experience and public service experience that have range from senior roles in the French government and the aerospace group, Thales, to chairman and CEO of Air France and then chairman and CEO of Air France-KLM.

De Juniac began his career in the French civil service in 1988, at the Conseil d'Etat (State Council). He progressed to the Department of Budget in 1993 but two years later he moved to the private sector where he took a management job with the French aerospace conglomerate, Thompson-CSF, later renamed Thales.

After 14 years with Thales, which took in painful periods of restructuring, de Juniac returned to French government service as chief of staff to the then minister of economy, employment, industry and employment, Christine Lagarde. In June last year, Lagarde was confirmed for a second five year term as head of the International Monetary Fund.

In 2011, de Juniac was appointed CEO and chairman of Air France, an airline that was collapsing in on itself following the 2008 Global Financial Crisis. At the time, French newspaper Le Parisien, wrote that de Juniac was "parachuted to the top of a company on the verge of a nervous breakdown" and he faced "a perilous mission".

Air France was in a tail spin, haemorrhaging cash and passengers. It had reported four years of increasingly heavy losses, was overstaffed and had a crippling cost base that made it vulnerable to low-cost competitors.

In the 2009-2010 fiscal year, the airline posted an unprecedented loss of $1.65 billion.Tragically, that news was followed by the loss of an Air France plane and all 228 passengers and crew on a flight from Rio de Janeiro to Paris.

De Juniac, who had never worked at an airline, was tasked with saving the business at a carrier where staff was hostile to structural change and the jobless figures were escalating.

By the time he left Air France-KLM for IATA, de Juniac had been credited with returning the airline to profitability and had moved up to CEO and chairman of Air France-KLM.

It was not the first time he had led an aerospace restructuring. Before he returned to government in 2009, he had restructured Thales, a flagship French company that manufactures electrical systems for the aerospace and transportation industries.

Thales was a mirror image of the job de Juniac took on at Air France. The company suffered from bloated overheads, excess staff, uncompetitive products and consequently heavy losses. Within a couple of years he had fixed all four.

Little wonder then that he has settled into the top job at IATA so quickly. He said the prospect of thousands of hours in the air, pushing the causes of airlines around the world does not faze him.

"I am not very sensitive to jetlag and I sleep quite well in planes," he said. "I prefer short trips with a full agenda to over long trips without a full agenda. It's also interesting to go from one place to another and meet the key people."

As for leisure time, he intends to enjoy all that Geneva offers. "You can go to the mountains to ski. I do sailing and music and read novels.I was in a band for 10 years, rock and roll, jazz and pop music, playing piano and vocals," he said.

Musicianship is becoming something of a tradition among IATA bosses. His predecessor, Tony Tyler, plays guitar and the harmonica.

In fact, Tyler brought his harmonica to dinner before he left Geneva and "and we improvised something", said de Juniac.

limit of the various transportation ministries or departments. We should speak to finance and probably industry ministers and to the prime minister or head of state. We have the authority and we have the legitimacy. We are viewed as an important body so we shouldn't be shy," he said.

"Perhaps our contribution, our documents, are not clear or precise enough to convince the top levels of government of the importance of aviation. We have to keep repeating the message, but also its about changing the formula and explaining the negative influence of economic measures on aviation, economic growth and prosperity.

"We should show examples that lower charges and taxes and have increased dramatically the number of passengers. Or we have increased charges that have led to a drop in passenger numbers."

De Juniac is acutely aware of the challenges ahead for the industry. One that never goes away is infrastructure, particularly airports. "My view is we are heading for an infrastructure crisis because of a lack of political will, a lack of long-term planning and probably a fragile assessment about what has to be handled," he said.

"It is a constant battle to persuade governments to understand the industry's infrastructure requirements. We expect nearly four billion travelers in 2017. In 2035, we expect 7.2 billion. It is growth that will bring net economic benefits to the world's economies but only if infrastructure development can keep pace. In the Asia-Pacific by 2035, we estimate that the region could see 72 million jobs and US$1.3 trillion in GDP from the air transport sector."

De Juniac holds the same views on air traffic management (ATM). "We have problems in the Gulf and in China. We have a U.S. Nextgen system that is not working as well. They have to plan in advance for the increase in traffic.

Cross-border ATM issues in Asia are "terrible" and are preventing the system from operating properly. There also are social constraints because governments are terrified about losing control.

"Having said that, there are some interesting developments in Asia, including co-operation between Hong Kong and Singapore. It's a start. We have to advocate to governments and push, push, push. We also have to be transparent by putting the data on the table and explaining the problems, taking public opinion as a witness. We must point to bottlenecks and explain the reasons for them."

Preventing increased taxes and charges are major battlefields for IATA. De Juniac did not hesitate to reel off a string of raised charges by what he calls "short-sighted" governments:

Australia plans to increase its passenger movement charge to US$43.60. The Maldives, totally dependent on tourism, are planning to add $25 to its "airport development fee"' even though none of the money would be spent on the airport. Germany is adding up to 52 cents per passenger to its departure tax. It already collects more than $1 billion a year.

Norway introduced a new passenger tax with another increase planned for 2017 and Sweden is considering a tax of up to $47 per passenger. The UK continues to increase its Air Passenger Duty (Air Passenger Duty) in line with inflation, despite evidence that it costs the UK economy $19.8 billion. Combined increases in passenger fees in the UAE and Qatar are putting at risk the Gulf's amazing success story by adding $700 million in new costs to the industry.

"In December, IATA announced airlines globally were expected to earn $35.6 billion in 2016, a record profit, even if slightly less than originally forecast. "This strong performance on profitability will extend into 2017. Even though we expect conditions to be more difficult, we see a soft landing safely in profitable territory.

"A net profit of $29.8 billion in 2017 will mean eight years in the black for the industry. And it will be the third year in row where the return on invested capital (7.9%) will exceed the cost of capital (6.9%). At least we make a margin now, but we should do better. We are only making 5% of our revenue as profit."

With 18,000 direct routes and average fares cheaper by about 60% (in real terms) compared with 1995 levels, travel is a better deal than ever, he said.

"But performance across the industry is not uniform. The benefits of an improved industry structure are keeping airlines in North America at the top of the profitability league. But with a net profit margin in that region projected to be 8.5%, it is only a 'normal' return to investors.

"For a truly healthy industry we should be seeing similar levels across the industry. So there is a lot of work still to do," he said. Are there too many airlines fighting for too few passengers, asked Orient Aviation. de Juniac replied: "There are too many seats."

Cargo, said the IATA boss, is recovering, but not fast. We are not at the level of 2008 but we are approaching that level. The industry has shifted from non-specialized transportation of goods to a more specialized focus on high level products such as pharmaceuticals. It also is an industry that is moving from full freighters to bellies.

"We should better use e-commerce to address that but it's a different logistic model. It is stupid to demand that an item carried from Taiwan to Hong Kong needs 33 pages of documents. In the end, cargo spends more time being processed than being moved."

Another priority, in tandem with the cornerstone of improving safety, is security. "Flying is secure. I fly with confidence and you should too. But there are risks and challenges -insider threats, landside exposure at airports, overflight of conflict zones and cyber security.

He said a recent UN Security Council Resolution reminded governments that keeping aviation secure is integral to a state's responsibility for national security. "Governments can and must do more - upping their game on intelligence gathering and sharing vital information among themselves and with industry. It's the only way terrorists can be kept away from airports and aircraft.

"Industry has a role. My previous employer, Air France, was specifically mentioned on ISIS websites. So I have thought long and hard about security. And you will see IATA becoming more active in this space." ■

Asia-Pacific air freight spike spurs hopes of recovery

Air freight demand is picking up in the Asia-Pacific, but while the recovery is encouraging, airlines are concerned governments and the air cargo industry are impeding the recovery because of a collective failure to embrace e-freight technology.

Tom Ballantyne reports

After years of depressed demand, cargo volumes at Asia-Pacific airlines have returned to levels last achieved in the post-global financial crisis bounce-back of 2010, the International Air Transport Association reported last month.

Its latest air freight statistics, for November 2016, revealed air cargo business grew more than 6% for the month compared with 4% in the same period in 2015.

The data, said global freight tonne kilometers (FTKs), rose 6.8% in November compared to the year-earlier period. It was a slight slowdown from annual expansion of 8.4% in October 2016 - the fastest pace of air cargo growth in 18 months - and was more than 2.5 times the average annual monthly growth rate of 2.6% for the decade.

"Air cargo enjoyed a strong peak season in November and there are encouraging signs this growth will continue into 2017; particularly with the shipment of high value consumer electronics and their component parts," said IATA director general and CEO, Alexandre de Juniac.

"But the trend in world trade remains stagnant. It is critically important for the air cargo industry to continue to improve its value offering by implementing modern customer-centric processes."

Underpinning optimism about recovering regional air freight demand was research published in December by global consultancy, MarketLine, which emphasized the importance of the Asia-Pacific and the Gulf to a healthy air freight sector.

Global air freight would expand to 2021, primarily driven by the Asia-Pacific and the Middle East, it said. "With an under developed internal market, opportunity for growth also is possible, particularly in larger countries like China and India."

MarketLine analyst, Paul Todd, said the world's air cargo business is forecast to increase by 3.2% in the five years to 2021, to reach a value of $118.7 billion. The expansion would be supported by increased infrastructure in the Asia-Pacific and the advantages and cross-relations between freight modes. New technology in the industry will increase volumes at a steady rate, he said.

In January, the Association of Asia Pacific Airlines (AAPA) said Asia-Pacific international air cargo demand climbed 5.3% in November, underpinned by broad based expansion in export orders. Combined with a 3.2% increase in offered freight capacity, the average international freight load factor for Asia-Pacific airlines grew 1.4 percentage points to a 2016 monthly high of 66.9%, it said.

AAPA director general, Andrew Herdman, said: "the region's carriers have seen a modest but progressive recovery in international air cargo demand this year, with growth of 1.2% for the first eleven months of 2016. Air cargo markets picked up modestly during the course of the year, but rates remain highly competitive,which reflected soft global trade conditions.

The upturn in air freight coincided with increased silicon materials shipments used in high value consumer electronics and an apparent turnaround in new export orders. A shift to air cargo after the August collapse of South Korea's Hanjin Shipping Company may have contributed to the upturn, said IATA.

De Juniac said structural market shifts, particularly strong growth in cross-border e-commerce and pharmaceutical business, are contributing to the stronger performance. Preparation for the increasing popularity of sales such as Black Friday and Cyber Monday contributed to improved demand, he said.

"The drivers of stronger growth are sending a major signal for change to the air cargo industry. Whether it is e-commerce or the trade in pharmaceuticals, shippers are demanding more than paper processes can support. The shift to e-freight is more critical than ever," he said.

Industry must shift to e-freight to expand

The practical industry modernization priorities include:

- Facilitation of electronic processing, through electronic Air Waybills (e-AWB) and e-freight
- Implementation by governments of "single window" processing - ultimately enabling submission of all regulatory documents for trade via one channel
- Coordinated border agency procedures to reduce duplicative controls
- Implementation of risk management controls at borders to combat illicit activities and facilitate compliant traders
- The implementation of processes to approve release of shipments in advance of their actual arrival

IATA has released a study that identified a quantitative link between a country's air cargo connectivity and its participation in global trade. Conducted by Developing Trade Consultants on behalf of the airline association, it found a 1% increase in air cargo connectivity was associated with a 6.3% increase in a country's total trade.

"Air cargo is critical in supporting the global trading system. In 2015, airlines transported 52.2 million metric tons of goods, which represented about 35% of global trade by value. It is equivalent to US$5.6 trillion of goods annually or $15.3 billion worth of goods every day," said IATA chief economist, Brian Pearce, at a December briefing in Geneva.

"Now we have quantitative evidence of the important link between air cargo connectivity and trade competitiveness. It's in the economic interest of governments to promote and implement policies for the efficient facilitation of air cargo," he said.

Pearce said countries can improve air cargo connectivity by ratifying and implementing the 1999 Montreal Convention that enables nations to adopt e-freight. They also should apply the World Trade Organization (WTO) Trade Facilitation Agreement and World Customs Organization's (WCO) revised Kyoto Convention to introduce smart border solutions.

Governments have the important role of implementing global standards and agreements to facilitate trade and make it possible for airlines to modernize processes, said IATA.

Said Glyn Hughes, IATA's global head of cargo: "In turn, the industry needs to embrace these opportunities to improve competitiveness and provide customers with enhanced shipping quality, service and better predictability." ■

TRAINING

IATA introduces virtual reality to MRO training

To tackle the limitations of operational training for ground staff, the International Air Transport Association (IATA) has developed a virtual reality training program.

It is a major breakthrough in ground staff training and Orient Aviation experienced it first hand in Geneva recently. Wearing a virtual reality headset, a user of RampVR is transported to an airport tarmac where he or she can walk around an aircraft, inspect it for damage, view the position of ground equipment and identify foreign objects on the tarmac that could damage taxiing aircraft.

IATA's product manager airport and ground operations, Dimitrios Sanos, said because practical training is complex and costly, ground staff operational training is theoretical and typically conducted in the classroom.

But by using the plug and play RampVR program, which combined virtual reality hardware and software specifically for an enhanced training experience, trainees are immersed in their working environment. Sanos said the virtual reality program also reduced the need for extensive training on the airport apron.

IATA's system accurately replicates the airport ramp to a level that is indistinguishable from the real world. It can generate random errors or damage on various aircraft types that a student, on a walk round of the plane, can identify. It also simulates various conditions such as day, night and fog.

The system offers airlines and other users selected modules pre-loaded to perform training. Instructors and IATA can provide on-site support and training for new RampVR users.

RampVR eliminates the need for security pass clearances for trainees, removes the risk of injury during training, allows responses to abnormal ramp incidents to be incorporated in introductory training and provides more flexible training schedules. ■

India's airline explosion

Indian airlines are hopeful India's new civil aviation policy will eliminate some of the inequalities the industry has end used for several decades.

Tom Ballantyne reports

India's airlines, shackled for years by high charges, double taxes at both national and provincial levels and high domestic fuel duties finally could be cut free from India's past punitive civil aviation policies.

The Indian government late last year approved a long awaited National Civil Aviation Policy, which it said would lower the cost of flying and operating costs at the nation's airlines.

But critics believed the government has been less courageous in formulating the country's first formal civil aviation strategy in a country that is forecast to become the third largest airline market in the world.

Estimated to be worth US$16 billion this year, the Federation of Indian Chambers of Commerce and Industry (FICCI) and consultancy, KPMG has said that by 2020 only the U.S. and China will have more passengers flying every year than India.

The forecast brings forward the International Air Transport Association's (IATA) prediction for India aviation expansion. It said India would become the world's third largest aviation market in 2026.

"This is possible due to a host of factors, including increased competition, low-cost carriers, modern and expanding airports, improved technology at both air side and city side operations, foreign direct investment (FDI) and increased emphasis on regional connectivity," said the report.

Last year, India's domestic air traffic rose by more than 20%. The latest IATA figures, for November 2017, reported that domestic air traffic grew 22.3% for the month compared with China's monthly expansion of 14.9%. India's international traffic rose by close to 10%.

The CAPA consultancy said Indian domestic air traffic will exceed 100 million passengers this year compared with 81 million passengers in 2015. Indian airlines recorded a collective operating profit of $1.29 billion in the 2016 fiscal year, a far cry from the rivers of red ink in their past annual reports.

Last August, the country's largest domestic carrier, IndiGo, celebrated its ninth birthday by confirming an order for 205 A320neo aircraft. The carrier's president, Aditya Ghosh, said the purchase "further reaffirms IndiGo's commitment to the long-term development of affordable air transportation in India and overseas". In 2005, IndiGo ordered 100 A320s. It is now a customer for 530 of the type.

In January, another Indian LCC, SpiceJet, ordered 100 B737 MAX aircraft, with options on another 50, in a deal estimated at $22 billion at list prices. SpiceJet has a fleet of 40 airplanes.

Also in January, budget airline, GoAir, firmed up an order for 72 A320neo as it prepared to expand its network on international routes. Owned by the Wadia group, it has committed to 144 A320neos. It accepted the first of the type last June and now has 23 of the aircraft in its fleet.

At Air India, the Indian government announced that the flag carrier would almost double its fleet in the next four years with the purchase of more than 100 new jets.

"Over the next 20 years, Boeing forecasts India will need 1,740 new airplanes worth $240 billion," said the U.S. planemaker's senior vice president, Asia Pacific and India sales, Dinesh Keskar. "India's economy and the country's potential for air travel growth - both for leisure and business - continued to be strong. We remain confident in the Indian commercial aerospace market."

The key to the forecast success of Indian aerospace is prime minister, Narendra Modi's new aviation policy. Announced last year, the Civil Aviation Policy overhauled rules dating back to the 1930s. It contains measures that should lower the cost of flying in India and boost the country's air connectivity.

The long-awaited reforms will bring down airfares on many under-served regional routes, particularly those located far from India's major metropolises, the government said.

In a boost for domestic carriers, amendments to the 5/20 rule were included in the aviation policy overhaul. The now defunct rule required airlines to operate for five years and have a 20 plane fleet before they could fly internationally.

The revised policy requires

airlines to have 20 aircraft in their fleets to launch international services but they no longer need to operate for five years before can fly abroad.

The new rule benefits younger airlines such as AirAsia India and Air Vistara. More established carriers, such as IndiGo and Jet Airways, who have had to fester for five years before they could expand their networks beyond domestic services, complained in vain that the revised rule had introduced an uneven playing field to the industry.

The major domestic airlines also are unhappy about the fact that they will be taxed to subsidize flights by smaller airlines to unprofitable regional destinations.

Narendra Modi insisted in a tweet that the new aviation policy gave impetus to affordability, regional connectivity, safety and infrastructure, which was vital for 'Transforming India'. "It will transform the sector and greatly benefit passengers," he said.

International Air Transport Association director general and CEO, Alexandre de Juniac, said in Delhi last October that the country's air transport sector is contributing to the country's social and economic development through eight million jobs and $72 billion in GDP.

"I know the air transport industry here has been through particularly tough times. It is good to see many Indian airlines posting profits. But the sector is still in loss territory in terms of net profits and has many challenges," he said.

"The debt burden is massive. Regulations are onerous. Taxes and charges are high. There is uncertainty in the business environment. The good news is that demand is strong. The domestic market has been expanding at an annualized growth rate of 20% or better for 20 successive months.

"The quality of domestic connectivity is clearly improving. Compared with last year, flight frequency is nine per cent higher and airport pairs—or routes served—have grown by seven per cent. In real numbers, the 120 million passengers travelling on routes to, from and within India will more than double to 278 million."

De Juniac added this "potential will not be realized without a supportive policy framework. So I congratulate Minister Raju, Secretary Choubey and all who helped in framing India's first civil aviation policy," he said.

"It contains some very encouraging elements. These include developments on open skies, code-sharing, self-handling and foreign direct investment (FDI). On the latter, India has actually jumped the queue to become one of the most progressive nations in the world by allowing 100% FDI in airlines.

"The policy also contains areas where we have concerns such as the mandating of hybrid till for regulation of airports and the plans for a levy to cross-subsidize regional flights."

Many analysts argue that despite some improvement, operating costs still represent a major threat to Indian aviation. High fuel import taxes meant that about 50% of an Indian airline's costs go towards fuel while a pilot shortage has pushed cockpit salaries to global levels.

Critical issues for Indian airlines

* Pilot shortages, especially experienced captains
* Airlines required to subsidize unprofitable routes
* Government insistence on operating airports without sufficient passenger demand
* Updating airports nation-wide to cope with domestic air traffic expansion
* Ongoing reductions in fuel taxes paid by airlines

India head of aerospace and defence at global consultancy KPMG, Amber Dubey, said recently that most of the large cost overheads in Indian aviation - fuel, leases, maintenance, airport charges and interest rates - are among the highest in the world.

"There are shortages of commanders. Bringing in expat pilots is costly and time-consuming. Overall, the Indian market is one of the world's costliest and toughest for airline operators."

India's airlines are banking on rapid growth and higher passenger numbers to alleviate the industry's endemic high costs. India's expanding middle class increasingly is opting for air travel over the traditional train.

Until now in India, air travel is mostly confined to the urban third of the population and is still out of reach for hundreds of millions of travelers in India. Experts believed the country's aviation sector has vast untapped potential, with only 100 million of India's 1.2 billion people taking an airline flight last year. India's rickety aviation infrastructure also could hold back forecast growth as only 90 of the country's more than 460 airports are operational, they said.

But it is not all bad news. Airbus is investing $40 million in a pilot and maintenance training center in Delhi that is scheduled to open by year end. It also has signed an agreement with Karnataka-based Aequs Aerospace, an aircraft component manufacturer, to supply more than 100,000 titanium machined parts for its A320 new engine option (NEO) aircraft.

Tata Advanced Systems (TASL) and Boeing have committed to a joint venture centre of excellence for manufacturing aerostructures, initially for Apache helicopters, but intended for collaboration on integrated systems development opportunities in the long term.

Other aerospace projects include an MRO joint venture where Rolls-Royce and auto components maker, Bharat Forge Ltd (BFL), that will supply critical and high integrity forged and machined components for a range of aero engines.

The government has taken a number of initiatives to help reduce airline costs including the removal of customs and excise duty exemptions for tools and tool-kits used in MRO processes.

The Directorate General of Civil Aviation (DGCA), India's aviation regulator, signed an agreement with the United States Technical Development Agency (USTDA) for India Aviation Safety Technical Assistance Phase II, aimed at bringing in systemic improvements to operation, airworthiness and licensing.

Overall, there is little doubt that India's airline sector has huge potential and that growth will continue at a high rate for many years. But also it is agreed that to properly capture the potential of this market, the government must reduce industry taxes. Airlines must do their bit too by pulling back from the vicious price wars of recent years. ■

Air India still "sick" says chairman Lohani

When Ashwani Lohani, the chairman and managing director of state-owned Air India, spoke to the media in Delhi last month, he was asked if he still would call the carrier a sick company.

"Yes I would," he said. "I will call it sick as long as we don't meet our total expenditure from our revenue.

"I have said that on a year-to-year basis we will make it profitable. This is in my hands. What is not in my hands is the 50,000 crore (USA$7.5 billion) debt we have. If we don't find a solution to that, then God only knows."

At the same briefing he said neither Jet Airways or the Gulf carriers were the biggest threats to Air India. "My biggest threat is debt, not Jet. Remove that and we will beat everyone hollow," he said.

There are signs India's flag carrier is reducing its massive debt. It ended 2016 with an operating profit of $15.3 million after several years of poor performance. However, it has had help along the way. In 2012, India's government said it would spend $4.3 billion to bail out the carrier, financial support that is being meted out to the airline in stages. To date, bailout funds of $3 billion have been injected into the carrier. Subsidies aside, Lohani said a lower fuel price was the number one contributor to Air India's improved operating performance.

Lohani has never been shy about the airline's past poor performance. He has publicly laid much of the blame for the national airline's woes on the merger of Air India and domestic carrier, Indian Airlines. "A merger that really never happened, which in the process resulted in a chaotic situation, is at the back of all ills we are witness to," he posted in a hard-hitting blog last year.

Lohani also believes there is too much competition in India and that this situation has resulted in higher costs and declining yields. "You can't do much about it. You can fly the aircraft more and fill seats as much as possible," he said. "Our yields have fallen by 7%, and domestic yields are down by 15%-16%.

"But our revenues have risen by 3%. So, we have made a 10% impact on revenue through efficiency. We increased utilization of our fleet. For example, we introduced four international flights last year."

Air India operates 107 aircraft including 22 A319-100s, 24 A320-200s and 20 A321-200. The first of 14 A320neos will arrive at the carrier this month. Its fleet also includes five B747-400s, three B777-200LRs, 12 B777-300ERs and 21 B787-8 Dreamliners. Three more B777-300ERs will be delivered between January and March 2018 and six B787s will begin arriving at the airline from August.

One criticism that has long been aimed at Air India is it overstaffing, a claim Lohani dismisses.He pointed out that a freeze on recruitment was imposed 18 years ago when staff numbers were extremely high. "The problem of a huge staff count isn't there anymore. That is an incorrect perception. We banned recruitments 18 years ago. At that time the staff count was higher. The perception has remained but today we are short of staff. We have started recruiting pilots and cabin crew, but haven't started hiring in other categories such as commercial staff, personnel and finance. We would like to recruit 200 people immediately in the non-operational departments. The overall requirement number is much larger."

Another possibility on the horizon is that Air India may buy back some B787s it did sale and leaseback deals on. Lohani doesn't think sale and lease back has worked well for the carrier. He argues that leasing of planes is a very costly proposition, although it does have the advantage of not having to pay upfront. "But the amount which a company pays regularly (the lease rental) is much higher than what it would have to pay had it purchased the aircraft by taking a loan.

The premium on selling planes to lessors is not much, just a couple of million dollars. The lease cost of one Boeing Dreamliner 787 plane is $1 million a month. For a year, for 21 Dreamliners, it's Rs 1,800 crore ($251 million). If I had purchased, my outgoing in terms of interest costs on loans would have been Rs 1,000 crore ($139.4 million). Going forward, I would definitely do outright purchase of planes."

As for the debt, a debt restructuring proposal is "still in the works" and Air India is also looking at the possibility of LIC (listed investment company) involvement.

French engine maker buys troubled Zodiac

In January, **Philippe Petitcolin**, the 64-year-old **CEO** of French aircraft engine manufacturer, **Safran SA**, signed off on a Euros 8.5 billion (US$9.125 billion) deal for French aircraft cabin manufacturer, **Zodiac Aerospace SA**, creating in the process Europe's largest aerospace supplier.

Seven years ago it was not so successful. In 2010, it made overtures to purchase the company but backed away from a bid in the face of a hostile reaction to the offer from Zodiac's board.

Safran, formed from the merger of **Snecma Engines** and security group, **Sagem**, in 2005 is one of Europe's most successful manufacturing companies. It produces, in a joint venture with the U.S.'s GE, the CFM engine, the biggest selling aircraft engine in the world.

At press time, it is calculated the merger will produce Euros 200 million in near-term savings. It also will facilitate Zodiac's recovery from a three-year period of missed deadlines and production of below standard aircraft cabin equipment, particularly the lavatories ordered by initial customers of the new A350 aircraft.

Airbus and Boeing are pressing suppliers for discounts for aircraft cabin equipment in response to airline customer pressure for deeper discounts on aircraft purchases.

Earlier this month, **Airbus COO** and **president Airbus Commercial Aircraft, Fabrice Bregier**, said the problems at Zodiac had eased in the final three months of last year. Zodiac has developed new seat shells at its U.S. manufacturing plant and has re-designed its lavatory suites.

Safran's acquisition of Zodiac follows the decision three months ago by **Rockwell Collins Inc.** to buy Zodiac rival, **B/E Aerospace**, for US$6.4 billion plus $1.9 billion in debt. North American B/E Aerospace is the largest aircraft cabin interiors manufacturer in the world. ■

IFS promises better disruption management at airlines

Airlines are in constant search of more efficient fleet utilization, maintenance and fuel applications. **British company, IFS**, has a new operations solution it says will take the guess work out of airline fleet disruption management.

When an aircraft has to be withdrawn from service for any number of different reasons, the process of finding the appropriate replacement has to be completed manually by an airline's operation's planning team. Issues to be taken into account include available aircraft and their locations, maintenance schedules, efficient fuel utilization and the suitability of available aircraft for the route.

Global enterprise applications company, IFS, said it can make life easier in these circumstances with its new 24/7 tail planning and maintenance allocation program, Optimisation and Assignment Solution.

IFS's Dubai-based solutions manager, Andrew Stimpson, said the new IFS product, which has several competitors in the market, decides the aircraft best suited to fly on a route by using technology to manage the scores of constraints that must be considered.

Examples of constraints would be an airfield that is not physically capable of accepting an A380. Another would be an airplane with a broken Auxiliary Power Unit (APU) that would need an airport with ground support. A legal constraint could be a regulator's demand that every aircraft must be certified and approved before it can fly to the designated destination.

"The difficulty is the sheer volume of constraints to be processed to put the appropriate and most fuel efficient aircraft on a route," said Stimpson.

IFS said its tail planning solution can be a key decision-making support system for airlines by delivering a recovery plan when airlines experience a flight disruption. Its data system provides operations staff with essential flight readiness information, MRO schedules, line maintenance, suitability of aircraft for airport landings and take-off and maximum fuel utilization . At many carriers, these processes are lengthy because they are performed manually and not with IT management systems.

Just how expensive is the solution? IFS would only say it would "be attractive for the customer". "Big airlines obviously extract more benefit from it," said Stimpson. "We would say around 40 aircraft is probably the point where doing this job manually is not really feasible."

The IFS scheduling engine "works on a dynamic scheduling basis which means it can sit there constantly occupied when problems are occurring, accepting changes to constraint data and only changing that part of the schedule which is impacted. That's really powerful for two reasons: if you have had grounding for 20 hours and it will impact a certain sub-fleet type, the IFS system does not start from scratch so we come up with a solution much more quickly. Secondly, the IFS solution can minimize schedule changes, which in turn reduces schedule disruptions, both immediately and further down the line." ■

Airbus expands Silicon Valley data mining partnership

Silicon Valley data mining company, **Palantir**, and **Airbus**, have agreed to a multi-billion dollar partnership intended to accelerate production of A350 aircraft and also save the aircraft manufacturer hundreds of millions of dollars, the **Financial Times** reported last month.

Palantir, established two decades ago as a security company, is reported to have been working with Airbus for 18 months. The partnership recently has expanded to eight projects across four countries including final assembly of the A350, the newspaper said.

Airbus CEO Tom Enders said the manufacturer used Palantir's technology to enable its engineers to respond more rapidly to production problems and also to improve output processes.

Keeping the A350 program, which has suffered delays because of missed delivery deadlines and the failed performance of furnished cabin equipment, "largely on track" would save Airbus a significant amount of money, he said.

"In these ramp ups, you can easily overspend by hundreds of millions of dollars. Our airline customers are benefitting because they get aeroplanes faster, without delays and with better quality and operational availability," Enders said. ■

Japan Air Commuter launches new era with ATR

Japan Air Commuter (JAC) became an new ATR airline with the delivery of the first of nine ATR 42-600s to the **Japan Airlines** (JAL) subsidiary last month. JAC, 60% owned by JAL, signed its first commitment for ATR aircraft in mid-2015 after the airline determined its fleet modernization strategy. The aircraft will fly on trunk routes and also to island and small community destinations in its network.

All Japanese airlines are expanding and/or renewing their fleets as tourists to Japan are forecast to reach 40 million a year by 2020, the year of the Olympic Games in Tokyo.

Based in Kagoshima, Kyushu, JAC was established in 1983 by JAL and the 12 municipalities of the Amami islands in western Japan. It has 19 aircraft and operates 97 flights a day to 23 destinations. ■

SITA appoints global leaders in Singapore

Air transport provider, **SITA**, has promoted **Sumesh Patel** to SITA president Asia-Pacific. Patel, who will remain based in Singapore, was formerly SITA's vice president business management Asia Pacific. He holds an MBA from the National University of Singapore.

His predecessor, Canadian **Ilya Gutlin**, who also will remain in Singapore, is SITA's new **global president air travel solutions**. He began his career at Ernst and Young before he joined SITA as a financial controller. He graduated in commerce from Canada's McGill University and has completed an INSEAD executive leadership program.

SITA CEO, Barbara Dalibard, said in a statement: "The Asia Pacific has a strong role in the development of the air transport industry as airlines and airports look to technology to support the region's fast growth." ■

IN BRIEF

AIRLINES

China Airlines and Japan Airlines strengthen co-operation

Taiwan's **China Airlines** and **Japan Airlines** signed a Memorandum of Understanding last month to expand their passenger and cargo strategic co-operation. The two airlines will expand their code-share agreement to include all routes they operate between Taiwan and Japan. The partnership, which will commence mid this month, will expand from 28 flights a week between Songshan and Haneda to as much as 240 flights a week depending on seasonal demand.

MRO

Booming parcel business boosts Ameco

New contracts for the **Rolls-Royce RBG211s** that the power Chinese parcel freight carriers, **SF Express** and **China Postal Airlines**, have increased Ameco's revenue from the engine's type by 50%, the joint venture MRO reported last month. Also SF Airlines has signed to 10-year agreement to maintain the airline's fleet of RB211s. The Rolls-Royce engines power SF Airlines' B757 aircraft.

New Lufthansa Logistik boss

On January 1, industrial engineer **Andreas Tielmann** (47), succeeded **Dr. Christian Langer as CEO** of **Lufthansa Technik Logistik** Services. The new CEO of the Lufthansa Technik subsidiary has been with the group for 19 years, working as a project manager, business development leader and product development. Since 2012, he led the Aircraft Systems Product Division, where he was responsible for landing gear and engine casings.

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