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## DEALS OF THE YEAR

# Macquarie acquires top prize / 21

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## EDITOR'S LETTER

# All roads lead to Miami

The awards season is upon us, and the past year's innovative and groundbreaking deals show aviation in rude health.

It is apt that Miami is the location for the 36th Annual North America Airfinance Conference and Awards Dinner. The city, and the surrounding state, is unquestionably a centre of excellence for aviation expertise. According to Enterprise Florida, there are more than 2,000 aerospace companies located in the area, many of them closely related to the world of aircraft finance.

The large contingent from the world of aircraft finance that will be descending on the Ritz-Carlton South Beach have much to discuss, including several topics of specific interest to North America, such as assessing the competitiveness of its airlines and their financing needs in 2016.

Miami's role as one of the major world air traffic hubs looks set to get a further boost. The opening up of routes between the US and Cuba (*see US carriers to apply for Cuba slots, Airfinance Journal, March 2016, page 7*) has been welcomed by North American airlines, who are battling for their share of the 20 daily flights to Havana that are up for grabs. A large portion of these flights will no doubt be in and out of Miami.

The city's unrivaled links to Latin America are also likely to stand it in good stead if the recent predictions of various aircraft manufacturers are borne out.

Airbus's Global Market Forecast for Latin America, which the European manufacturer presented at Chile's Fidae Airshow in March, suggests the region will need 2,540 new passenger and freighter aircraft between 2015 and 2034. This demand includes 1,990 single-aisle and 550 widebody aircraft, worth an estimated \$330 billion.

Brazilian manufacturer Embraer also took the opportunity of the airshow to release its market outlook for Latin America, which forecasts that the region will take delivery of 720 new jets in the 70- to 130-seat segment over the next 20 years, representing 11% of the worldwide demand for the segment in the period.

So, with a pivotal position in both the US and Latin America, Miami is a fitting place to celebrate the best aircraft finance deals of the past year.

The quality and quantity of entries this year made the job of our judging panel very difficult.

We had the task of picking the best deal in each category with regard to a transaction's

innovation, its introduction of a new product or product combination, its role in attracting a new investor base, as well as its complexity in terms of the involvement of multiple parties, multiple jurisdictions and/or multiple tranches. A primary consideration in judging the merits of a deal was whether it had strategic significance in, for example, facilitating the entry of new participants in a market sector.

Deals were well regarded if they pushed the envelope in terms of loan-to-value, tenor, credit quality and other key metrics. The setting of new benchmarks such as lowered coupons was also a major consideration for the panel. Making judgments in retrospect can often neglect that a deal was done under strong time pressure, and several entries that already had strong claims for an award were bolstered by the speed with which they were closed. The size of a deal was, in principle, not a stand-alone criterion, but it is difficult to ignore, particularly when the sheer size of a deal makes it strategically important.

A clear theme running through this year's awards is one of growth and variety in capital markets issuance, with the increasing participation of non-US issuers. We saw numerous asset-backed securities and enhanced equipment trust certificates nominations, including a number of industry firsts.

In the more traditional markets, export credit was relatively muted but we still had some high-quality submissions. There were also impressive nominations for Italian, French and Japanese tax leases of different varieties. Bank market entries showed a continuing resurgence as they competed with capital markets for best execution for borrowers. There was strong competition in sale/leaseback and structured operating lease categories with a number of complex multitranche transactions.

There were also deals that transformed the market. This year's overall winner, Macquarie's acquisition of a portfolio from Awas, was such a deal but it had to beat off strong competition to win.

In addition to presenting the awards for deals, we are looking forward to celebrating the achievements of people and teams in the industry and to welcoming some special personalities to Miami. ▲

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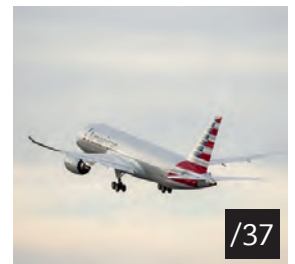
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## NEWS

## CLYDE & CO

The Global Aviation Law Firm



### ATR names Tramparulo as CFO

European turboprop manufacturer ATR has appointed Giovanni Tramparulo as its chief financial officer (CFO). He will be in

charge of financial controlling, accounting and treasury, sales financing, credit and risk management and internal control.

Tramparulo has a detailed knowledge of ATR, because he previously worked on the programme between 1992 and 2014 and was CFO between 2007 and 2010. He has been the sales finance adviser to the chief executive officer of Superjet International since 2012.

Tramparulo started his career in the aeronautical industry in 1985 at the treasury department of Aeritalia. In 1988, he moved to the headquarters of Alenia, where he was responsible for export finance and special projects.

### HFW confirms Singapore and Hong Kong partners

Holman Fenwick Willan (HFW) has announced two partner appointments from Berwin Leighton Paisner (BLP).

David Brotherton and Justin Sun, partners in BLP's Singapore and Hong Kong offices, will join HFW's Singapore office and Hong Kong office, respectively.

### May's day comes at American

American Airlines Group has promoted Devon May to senior vice-president finance.

May, who was previously vice-president of financial planning and analysis, will be additionally responsible for purchasing and insurance. These responsibilities were previously handled by Keith Bush, who has returned to Minneapolis to be closer to his

family, according to a statement.

May has spent most of the past decade in leadership roles in the finance department. He has worked on capital and operating budgets, long-range financial planning, forecasting systems, flight profitability and financial analysis.

### FPG adds two executives to Jolco team

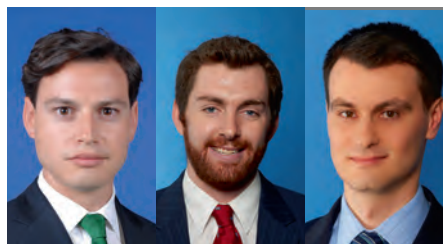
FPG, the Tokyo-based arranger of Japanese operating lease with call option (Jolco) equity, has brought in two new executives to work on Jolco transactions, according to a source.

Yuri Egawa joined FPG on February 22 as a deputy general manager. Egawa previously worked as a vice-president at Merrill Lynch Japan Securities.

Nahoko Nakamura joined FPG on March 1 as an assistant manager. Nakamura previously worked in the Development Bank of Japan's structured finance department.

The source says Egawa and Nakamura will work on Jolco transactions for aircraft, vessels and containers.

### Seabury promotes from within



Advisory and professional services firm Seabury Group has announced three executive promotions within its aviation consulting and corporate finance groups.

Stephan Krastev has been promoted to executive director of Seabury Merchant Banking. Since joining Seabury in 2002, Krastev has structured and executed a broad range of transactions for Seabury's proprietary aviation asset management initiatives.

Neal Wesson has been promoted to senior vice-president of Seabury Structured Finance. Wesson has worked on a wide range of transactions consisting of arranging and structuring debt, lease and private placement financings for commercial and business aircraft, engines and parts, restructurings and aircraft remarketing.

Alexis Fekete has been appointed executive director of Seabury Corporate Advisory & Aviation Investment Banking. Since joining Seabury in 2010, Fekete has been advising the company's aviation and aerospace business.



### AJW makes senior appointments

AJW Aviation, the aviation-support specialists, has recruited Thomas van de Wiel in the role of chief financial officer. He will

be based at AJW's corporate headquarters in the UK.

Christopher Whiteside, president, AJW Group, says: "This is a strategic position which demands a high degree of autonomy and decision making. Thomas will be the cornerstone of our new management structure and we welcome him to the group."

Van de Wiel was most recently finance director at Harsco Metals & Minerals. Before that, he spent four years as a director of financial planning and analysis at DHL.

The support specialist has also announced the appointment of Daniel Watson as its new chief commercial officer.

Watson will be responsible for AJW's sales, commercial tenders and proposals, and key account management.

He will report to Boris Wolstenholme, chief executive officer, AJW Aviation, and will work closely with Whiteside and the executive management team.

Watson joins the organization on April 11 and also will be based at AJW's UK headquarters.



## NEWS

## People


**Jebely joins Pillsbury**

Paul Jebely, the former global head of aviation finance at Clyde & Co, is set to lead Pillsbury's transportation finance group in Asia.

He will also play a key role in the establishment of a new office in Hong Kong once the firm has obtained a licence, according to an announcement from Pillsbury. The office will be Pillsbury's third in Asia, after Shanghai (set up in 2006) and Beijing (set up in 2014).

*Airfinance Journal* reported in February that Jebely had tendered his resignation as global head of aviation finance in Clyde & Co's Hong Kong office. He had held the position since October 2013.

*Airfinance Journal* understands that Jebely's Clyde & Co team, which consists of three associates and staff, is set to join him at Pillsbury. The associates are Luca Denora, Zara Prabhu and Sharon Nourani.

Speaking to *Airfinance Journal*, Jebely says he "could not be happier or more enthused" about the move.

**Ince & Co hires Briggs as partner**

Ince & Co has hired Tom Briggs as a partner for its Dubai office. Briggs advises on corporate, finance and commercial law matters, including M&A, primary and secondary fundraising, private equity, venture capital, joint ventures and project finance.

Before joining Ince & Co on March 13, Briggs spent 15 years at Charles Russell Speechlys. For the past three years, he was a partner and head of commercial/corporate in the firm's Bahrain office.

In 2008, he spent six months as acting general counsel to Gulf Air in Bahrain, leading a number of aircraft acquisitions, financings and leases.

Briggs' arrival means Ince & Co has three former airline general counsels working at the firm. Anna Anatolitu was general counsel to Air Arabia Group and Chris Walsh was group general counsel to the Emirates Group.

**Mesa Airlines COO to step down**

Paul Foley, the chief operating officer (COO) of Mesa Airlines, is to leave the carrier to become chief executive officer of Rectrix Aviation. Foley has served as executive vice-president and COO since 2008.

Rectrix Aviation is a US private jet charter service with its headquarters in Concorde, Massachusetts. Foley will oversee the aviation division and the launch of a scheduled commuter route between Hyannis and Nantucket, both in Massachusetts.

**Former Spirit CEO joins Wow Air's board**

Ben Baldanza, the former chief executive officer (CEO) of Spirit Airlines, has joined the board of directors at Icelandic low-cost carrier Wow Air.

Baldanza began his aviation career at American Airlines, and then worked with Northwest, Continental, Taca and US Airways, before joining Spirit in 2005. He stepped down from his position in January.

**Bourgade becomes AFC's chief executive**

Marc Bourgade has been appointed as the chief executive officer (CEO) of Dublin-based arranger Air Finance Company (AFC).

Douglas Brennan, the founder and previous CEO of AFC, will continue to serve as chairman and CEO of the Stellwagen Group of Companies, AFC's parent.

Bourgade will also join AFC's group executive committee.

Bourgade joins AFC from Natixis,

where he served as head of sectors and clients for aviation, exports and infrastructure.

**ATS appoints chief commercial officer**

Paul Dolan has joined Aviation Technical Services (ATS) as chief commercial officer (CCO).

As the company's first CCO, Dolan will oversee the commercial strategy at one of North America's largest maintenance, repair and overhaul organizations.

ATS employs more than 1,500 staff at its four US facilities.

**Jerez becomes Wizz Air CFO**

Wizz Air has hired Sonia Jerez as its new chief financial officer (CFO), effective from June 1.

Jerez is CFO at low-cost rival Vueling, a subsidiary of International Airlines Group (IAG). Jerez was also a member of the founding management team of Clickair and was its CFO from 2006 to 2008 when Clickair merged with Vueling.

**Siegel replaces Sisson at Awas**

Irish lessor Awas has named David Siegel as its new chief executive officer (CEO). This comes after former CEO Ray Sisson stepped down in June 2015.

Siegel is joining Awas in April, and will be based in the lessor's Dublin headquarters.

Siegel was most recently CEO of US carrier Frontier Airlines. Previously, Siegel held a number of senior positions in aviation, including CEO of XOJET and US Airways, and senior roles at Continental Airlines and Northwest Airlines. ▲



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LATAM EETC
- **North America Deal of the Year**  
Element ABS
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Cheung Kong Portfolio Acquisition
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- **Sale-Leaseback Deal of the Year**  
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- **Capital Markets-ABS Deal of the Year**  
BOC Aviation ABS
- **Capital Markets-EETC Deal of the Year**  
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## NEWS

# Airlines

### Fitch upgrades JetBlue



Fitch Ratings has upgraded JetBlue to BB- from B+ because of improved financial performance, according to an announcement from the ratings agency.

In its assessment, Fitch drew attention to “JetBlue’s improving credit metrics, consistent profitability, unit revenue outperformance compared to its peers in 2015, and its solid financial flexibility”. It also noted the airline’s debt reduction throughout the past year.

The airline has been paying down debt opportunistically in an effort to reduce its leverage. In October, the carrier redeemed \$22.5 million of 5.50% convertible notes due 2038.

In the past 12 months, improved operating conditions have led Fitch to upgrade the ratings of most of the major US carriers, including American Airlines, Southwest, United, Delta Airlines and Hawaiian Airlines.

### Congo Airways plans fleet expansion



Congo Airways, a start-up carrier based in the Democratic Republic of Congo, is set to close a deal to acquire two Q400s, said the carrier’s deputy chief executive officer.

Speaking to *Airfinance Journal* at the

Inaugural Africa Airfinance Conference in Cape Town, Jerome Maillet said the turboprops would be financed using a mixture of equity and debt. The turboprops are 2010 vintage and are due to deliver by the end of May.

The airline is looking to mandate up to two local banks to help fund the aircraft.

Congo Airways has a fleet of two A320s and plans to acquire another A320 this year.

To fund the three deliveries, the carrier has an \$80 million equity base and wants to raise \$15 million in debt, according to Maillet.

He said that from 2017, the airline wanted to go into leasing, by which time he hoped Congo would have ratified the Cape Town Convention. He added that in the next five years, he intended to operate 10 aircraft, including eight narrowbodies and the two Q400s.

The carrier flies nine routes in the Congo and wants to start operating internationally to Johannesburg and Angola from October 1.

### LAM in talks with Ex-Im for three 737-800s



LAM Mozambique Airlines is in talks with the Export-Import Bank of the United States (Ex-Im Bank) and Boeing about providing the financing for three new 737-800s, *Airfinance Journal* has learnt.

The first aircraft will deliver at the end of this year. The second delivers in 2017 and the third arrives in 2018.

The Mozambique-based airline has a fleet of seven aircraft, made up of Embraer models and 737-700s.

### FlySafair to replace four 737-400s



South African low-cost carrier FlySafair wants to phase out its fleet of four 737-400s, an airline source told *Airfinance Journal*.

The source said that FlySafair wanted to replace the 737-400s with either 737-800s or A320s, and that the carrier would like to lease the aircraft for 12 years each.

FlySafair has a fleet of four 737-400s and eight 737-800s, all on lease.

The carrier began operations in 2013 and flies domestic routes in South Africa.

### IndiGo becomes second A320neo operator



IndiGo, India’s largest airline by passenger numbers, has taken delivery of its first A320neo, becoming the second airline to operate the aircraft.

The aircraft is on lease from Goshawk Aviation. In August 2015, Goshawk Aviation signed an agreement with IndiGo for the sale/leaseback of five A320neo aircraft.

Lufthansa took delivery of the first A320neo in January, although Qatar Airways was originally scheduled to be the launch customer.

IndiGo is one of Airbus’s biggest customers for its A320 family, having ordered 530 aircraft in total, including 430 A320neos.



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## NEWS

# Airlines

### Gol renegotiates leases



Brazilian airline Gol has hired SkyWorks Capital to help it renegotiate lease agreements in an attempt to reduce capacity, the carrier has announced.

The specialized advisory firm will help the airline to change certain commercial terms of the leases to match current levels of demand and other market conditions, the statement added.

*Airfinance Journal* reported last year that the airline is taking various measures to reduce capacity, including delaying the delivery of some 737-800s.

The measures also include taking just four 737-800s from Boeing in 2016 and 2017, compared to the 15 originally planned for the period. The airline will also sublease 12 aircraft to foreign carriers during its low season in 2016, compared to seven aircraft sub-leased in 2015.

### Republic files for bankruptcy



Republic Airways, the regional airline which operates flights on behalf of US legacy carriers, has voluntarily filed for Chapter 11 reorganization.

The move is a strategic effort to adapt the business, after a pilot shortage forced the airline to ground aircraft and lose revenue. *Airfinance Journal* understood that by using

the Chapter 11 process, the carrier would be more able to cancel the leases for unprofitable aircraft without suffering financial penalties.

"We worked hard to avoid this step," said Bryan Bedford, Republic's chairman, president and chief executive officer, in a statement.

"Over the last several months, we've attempted to restructure the obligations on our out-of-favour aircraft – made so by a nationwide pilot shortage – and to increase our revenues. It's become clear that this process has reached an impasse and that any further delay

would unnecessarily waste valuable resources of the enterprise."

He added: "Our filing is a result of our loss of revenue during the past several quarters associated with grounding aircraft due to a lack of pilot resources, combined with the reality that our negotiating effort with key stakeholders shows no apparent prospect of a near-term resolution."

In a statement on its website, the airline said that it had sufficient assets and liquidity to meet its working capital and operating expenses during the restructuring process. ▲

### VIVA EYES AIRCRAFT OWNERSHIP

Mexican low-cost carrier VivaAerobus may choose to own more of its aircraft from 2018, according to Alan Bird, the airline's chief financial officer.

Speaking to *Airfinance Journal*, Bird said that as the airline begins to take delivery of the A320neos on its order book, it might choose to take some of them on its balance sheet. The carrier has recently used sale/leasebacks to finance much of its fleet.

Bird said: "The sale/leaseback market was very buoyant. We went out to lessors with specific requirements that we were looking for, with regards to the term, reserve rate, deposits, return conditions, etc, and we felt that the prices that were available in the marketplace for sale/leaseback [deals] meant that it was appropriate."

However, the carrier has owned some of its aircraft in the past and might choose to do so more often in the future, Bird added: "When the opportunity arose and the price was right, we did own some of our 737-300 fleet and, clearly, I'd love to take some of the Neos – it would be great to put some of those assets on balance sheet.

"Maybe as we move into 2018, 2019 and 2020, we might be looking to put some aircraft on balance sheet, either through ECA [export credit agency] funding, bonds, or other options that are available at that time. Capital markets are, of course, a possibility."

The airline placed an order for 52 A320-family aircraft in 2013. The order consisted of 40 A320neos and 12 A320ceos.



*Airfinance Journal* understands that the first Neos were scheduled for May or June, but have been delayed by a few months. According to Airbus's latest orders and deliveries report, nine out of the 12 A320ceos on order have already been delivered to the airline.

The 12 A320ceos will all be taken on eight-year sale/leaseback agreements. *Airfinance Journal* understands that Awas, SMBC and Avolon are each leasing four aircraft.

By the end of 2016, the carrier will also have taken delivery of two A320neos. The airline has signed sale/leaseback agreements to cover these deliveries, but Bird did not reveal the identity of the lessor.

Speaking about fleet age, Bird said: "We will move from a fleet of 737-300s with an average of about 20 years of age, to the middle of next year, when the average age of our fleet will be about three years."

He added: "So we'll have the youngest fleet of aircraft in Latin America and one of the youngest in the world. I can't think of an airline of significance with a fleet with an average age of three years." ▲

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## NEWS

## Manufacturers

**Africa is 'real opportunity' for OEMs**

Africa's projected growth in its aviation sector is "a real opportunity" for manufacturers, according to the vice-chairman of Seabury Advisory Group.

Giving a presentation at the Inaugural Africa Airfinance Conference in Cape Town, Michael Cox said: "There's been a 158% growth in narrowbodies, widebodies and regional aircraft on the continent from a relatively small base of 359 units to 925 today. That's also expected to grow another 130-plus percent over the next 18 years to 2034 – a real opportunity for the OEMs [original equipment manufacturers]."

Cox also highlighted the challenges Africa's aviation industry faced, including lack of open skies, weak infrastructure, management instabilities and geopolitical instabilities, such as recent atrocities in Ivory Coast.

He also mentioned increased competition from foreign carriers in Africa.

Cox added: "This continent is no different from Europe, Asia or Australia or recently North America with the Middle Eastern carriers' incursions. Most of the Middle Eastern carriers have made big incursions on this continent and a relatively new phenomenon is LCCs [low-cost carriers]."

**India will need 1,600 new aircraft in 20 years**

India will require more than 1,600 new passenger and freighter aircraft to help meet growth in demand in the 20 years

from 2015 to 2034, according to Airbus's latest global market forecast.

Valued at \$224 billion, these will include 1,230 new single-aisle aircraft and 380 widebody passenger and freighter models. By 2035, the number of Indian cities with over one million monthly air passengers would more than triple.

The forecast has been influenced by strong growth in passenger demand. Airbus says the Indian commercial aviation market is set to grow at 8.4% a year over the next 20 years, well above the world average of 4.6%. Domestic Indian traffic will grow more quickly at 9.3%, according to the European manufacturer.

Kiran Rao, Airbus executive vice-president, marketing and strategy, said: "Aviation in India has a bright future. As India's industrial might grows, along with it comes economic development, wealth generation and a rise in the number of regular and first-time flyers."

**First US-built Airbus takes flight**

The first Airbus aircraft produced at the European manufacturer's US facility has made its maiden flight. The A321 took off from Brookley in Mobile, Alabama, for a three-and-a-half-hour test flight.

The aircraft will go through final production before being delivered to JetBlue.

It was the second maiden flight of an Airbus product in March. The first A321neo powered by Pratt & Whitney's PurePower geared turbofan took to the air on March 9, after the debut of the CFM-powered version in February.

**Boeing 787-10 begins major assembly**

Major assembly of the first Boeing 787-10 is underway. Kawasaki Heavy Industries, Boeing's Japanese production partner, began work on a section of the fuselage on March 14, which Boeing says is two weeks ahead of schedule.

The 787-10, the largest member of the 787 family, will undergo final assembly at Boeing's production facility in North Charleston, South Carolina. Total 787 production for all models is planned to rise to 14 aircraft a month, with 787-9s and -8s being built in Everett, Washington State.

According to the manufacturer, the 787-10 has won 153 orders from nine customers, accounting for 13% of all 787 orders.

**Brégier: Chinese aviation will grow despite downturn**

The recent slowdown in the Chinese economy is unlikely to affect the country's aviation market, according to Airbus's chief executive officer.

Fabrice Brégier told reporters in Tianjin: "The economy is slowing down. This is true globally – this is not true for our market."

He added: "We believe over the next five years, plus 10% growth year-on-year in already the world's second-biggest mar-



## NEWS

## Manufacturers

ket is a very cautious assumption.”

Brégier was speaking at the opening of Airbus's completion and delivery centre for its widebody A330 aircraft in the Chinese city.

Asked whether Airbus would open an assembly facility for widebody jets in China, Brégier said: “We never say never. But so far we don't have a business case.”

Brégier also commented on China's airline market being dominated by narrowbody jets, saying he expected this to change over time.

“China has focused, rightly so, on single-aisles and will continue to procure a lot of single-aisles,” he said. “But I am sure they will be getting more widebodies.”

### Embraer hits 101 mark in 2015

Embraer delivered 101 commercial aircraft in 2015, 33 of which were handed over to customers in the final quarter of the year, according to a results statement issued by the Brazilian manufacturer.

It achieved another milestone during the fourth quarter with delivery of the 1,200th E-Jet. The aircraft, an E195, was received by Azul Linhas Aéreas Brasileiras.

Company-wide revenues reached almost \$2.1 billion in the fourth quarter and \$5.9 billion for the whole year, falling within Embraer's previously issued 2015 revenue guidance range. The earnings before interest, taxes, depreciation and amortization margin met the guidance range of 12.6% to 13.6% for the year, but only by excluding provisions related to the Chapter 11 filing of Republic Airways Holdings.

Republic Airways, a regional airline that operates flights on behalf of US legacy carriers, voluntarily filed for Chapter 11 reorganization at the end of February.

Embraer's guidance for 2016 is for net revenues of \$6 billion to \$6.4 billion. This includes expected deliveries of 105 to 110 commercial E-Jets. ▲

### MRO NEWS

#### Lufthansa Technik announces profit increase



Lufthansa Technik increased its turnover and profit in 2015. Presenting the annual results in Hamburg, chairman Johannes Bussmann said sales revenues grew by 17.6% to about €5.1 billion (\$5.7 billion).

The company achieved a 20% increase in its adjusted earnings before interest and taxes, which rose to €454 million.

Revenues from outside the Lufthansa Group grew more strongly than income from within the group. Business from external airlines was worth €3.3 billion compared to €1.8 billion from companies in the group. There was nonetheless growth in internal revenues, mainly because of the largest modification programme in Lufthansa's history.

The maintenance, repair and overhaul organization's strong performance was significantly aided by trends in the euro/US dollar exchange rate and other one-off factors.

Constanze Hufenbecher, the company's chief financial officer, cautioned that such strong growth was not expected in 2016.

She said: “Lufthansa Technik has a solid financial foundation. But we have benefited as well from effects which were out of our control, such as the dollar rate. It will therefore be a challenge to continue delivering such results.”

#### Boeing launches 737-800 converted freighter

Boeing has launched a programme to convert passenger 737-800s to freighters. The US manufacturer says it has up to 55 orders and commitments for the 737-800 Boeing Converted Freighter (BCF) from seven customers.

Stan Deal, senior vice-president, commercial aviation services, Boeing Commercial Airplanes, said: “While the recovery of the global cargo market has been slow, we see demand for freighters, such as the 737-800BCF, that will carry express cargo on domestic routes.”

Deal added: “Over the next 20 years, Boeing forecasts customers will need more than 1,000 converted freighters the size of the 737, with China's domestic air-freight carriers accounting for nearly one-third of the total market.”

Aeronautical Engineers (AEI) has an established 737-800 conversion programme. The specialist conversion company formally launched its 737-800SF (Special Freighter) in October 2014, and expects to receive its FAA Supplemental Type Certification in 2017.

When asked by *Airfinance Journal* for his views on the launch of a competing programme, Robert Convey, senior vice-president, sales and marketing, AEI, said: “AEI congratulates Boeing on the launch of their 737-800BCF and welcomes them into the world of narrowbody conversions. With 400-plus 737-800SF conversions forecast, AEI knew there would be competitors, and having the company that built the aircraft launch a conversion programme is in a way validation of the 737-800's potential as a converted freighter.” ▲



## NEWS

# Financiers

### NAC to acquire Jetscape



Nordic Aviation Capital (NAC), the world's largest turboprop aircraft lessor, is acquiring Jetscape Aviation Group.

The deal will see NAC expand into the regional jet arena, bringing 28 owned Embraer E-Jets, commitments for 11 E-Jets and a further 18 of the type under management into its aircraft portfolio.

"This is a significant strategic development for NAC, and we are pleased to diversify with the addition of an exceptional deal-focused, customer-centric organization with highly experienced management and dedicated staff. Jetscape's solid reputation in regional jet leasing can only enhance the strong brand which NAC already enjoys in the turboprop sector," said NAC chairman Martin Møller.

"We are delighted to bring Jetscape into NAC. Joining forces with them gives us an expanded geographical reach and, most importantly, a firm financial platform to further develop regional aircraft leasing activity," said Jetscape chief executive officer John Evans.

Airfinance Fleet Analyst estimates the current market value of the owned and managed Jetscape fleet to be about \$803 million. The equivalent figure for NAC is about \$3.24 billion.

### SMTB sets sights on US market

Japanese bank Sumitomo Mitsui Trust Bank (SMTB) is looking across the Pacific towards the US for future aircraft finance opportunities.

Mikio Iida, head of the bank's asset finance team, told *Airfinance Journal* in an interview at the bank's Tokyo office that SMTB is "beefing up" its business with top airlines in Asia, Europe and the Middle East, while at the same

time trying to expand its business field into the US.

"We are still in the mode of expansion so we should find a new area," said Iida. "Adding the new area is a good way to diversify our portfolio as well. We would like to contribute to our customers' business by taking a well-balanced approach."

In an interview in April 2015, Iida told *Airfinance Journal* that the bank was trying to increase its exposure to leasing companies. In this year's interview, he reiterated this point, saying that the bank was looking at the lessor market, as well as portfolio financings.

### Calc posts almost \$50m profit

China Aircraft Leasing Group Holdings (Calc) has posted a net profit of HKD380.2 million (\$49.34 million) for the year ended December 31. This compares to a net profit of HKD302.8 million for the same period in 2014.

The Hong Kong lessor also posted revenues of HKD1.5 billion for 2015, compared with HKD1.1 billion for 2014.

Calc said in a statement that its board had declared a final dividend of HKD0.18 a share, bringing the total dividend for 2015 to HKD0.22 a share.

### Burnham Sterling confirms Avianca placement

Investment bank Burnham Sterling has revealed it closed a \$308 million privately placed enhanced aviation investment vehicle (EAIV) transaction for Avianca at the end of 2015.

The EAIV is similar to a conventional enhanced equipment trust certificate (EETC) deal, but investors are expected to hold their notes until maturity. Burnham Sterling arranged a similar deal for Avianca in 2014, in a \$153 million issuance.

The \$308 million 2015 deal is secured against eight aircraft (six A320-family jets and two 787s). The last of the eight aircraft delivered in December.

*Airfinance Journal* reported in March 2015

that Avianca was evaluating bids from parties wishing to arrange a private placement for eight aircraft delivering that year.

Burnham Sterling won the mandate and acted as lead arranger and sole bookrunner on the deal. The notes were placed with six institutional investors in the US, Europe and Asia, according to the announcement.

"This is Avianca's second transaction using Burnham Sterling's EAIV structure," said Diana Calixto, Avianca's treasurer. "We thoroughly evaluated and tested EAIV against competing products and execution alternatives, including EETCs. We are very pleased with the pricing, terms and simplicity achieved by Burnham Sterling through EAIV and receiving financing consistent with the terms agreed months in advance of closing. We were especially impressed with the new institutional investor relationships Burnham Sterling created."

Michael Morgan, executive managing director at Burnham Sterling, said: "Every investor in the Burnham EAIV financings closed by Avianca was a first-time investor for the airline, expanding the breadth and depth of their investor universe."

He added: "We are particularly pleased that our EAIV structure allowed Avianca to access the US and Korean institutional investor market."

The EAIV accounted for 65% of Avianca's fleet financing requirements for 2015.

### ACG announces Hong Kong joint venture

Aviation Capital Group (ACG) has taken a 20% stake in a new leasing joint venture with two Hong Kong partners.

The new platform is 40% owned by Chow Tai Fook Enterprises and 40% owned by NWS Holdings.

It will focus on the buying, selling and leasing of "aircraft similar to aircraft types as currently comprise ACG's owned fleet", the lessor wrote.

ACG's fleet of about 390 aircraft mostly consists of popular, in-production narrowbodies, predominantly from the A320- and 737-family of aircraft. ▲



## NEWS

## Financiers

## LEASES IN BRIEF

**Okay Airways gets 737-800 from Gecas**

Okay Airways has taken delivery of a new 737-800 on lease from Gecas.

The Chinese carrier operates a fleet of more than 30 aircraft from its base in Tianjin, providing scheduled cargo and passenger service to domestic and international destinations.

**Go2Sky receives first 737NG**

Slovakian ACMI specialist Go2Sky has taken delivery of a 2000-vintage 737-800. The aircraft is the operator's first next-generation (NG) 737 model.

ISIS Aviation Services arranged the lease.

Airfinance Fleet Analyst indicates that CIT Aerospace is the owner of the aircraft.

**Flybe to operate ATR 72-600 for SAS**

British regional airline Flybe has taken delivery of a fourth ATR 72-600 from Singapore-based lessor Avation.

The aircraft is new and will be operated by Flybe on behalf of, and in the livery of, Scandinavian Airlines (SAS) under a wet-lease operational contract arrangement. The lease duration is six years, with an unspecified extension option.

The aircraft is from Avation's own order book with ATR, according to a source.

**Batik Air gets 737-800**

Indonesian carrier Batik Air has taken delivery of one 737-800 from Avolon. The aircraft was delivered on February 25 on a 12-year operating lease.

Transportation Partners, the captive lessor of Batik Air's parent company Lion Group, did the legal work for the deal through its internal legal team.

**Bocomm delivers 777-300ER to Aeroflot**

Aeroflot has agreed a lease agreement for two 777-300ERs with Bocomm Leasing, according to a source.

The first aircraft of the deal delivered on March 22; the second is expected later this year.

The tenor of the leases is 12 years.

**Ex-Air Berlin 737-800 set for Eastar Jet**

Eastar Jet is to take one used 737-800 on lease from MC Aviation Partners (MCAP), according to an announcement from the lessor.

According to Airfinance Fleet Analyst, the 2006-vintage aircraft was originally owned and operated by Air Berlin. MCAP bought the aircraft in December 2011, and continued to lease it to Air Berlin.

**Alliance Air agrees to three ATR 72-600s**

Alliance Air has agreed to lease three new ATR 72-600s from Irish lessor Elix Aviation Capital, *Airfinance Journal* has learnt.

Sources on the deal state the aircraft will be on lease for 12 years.

In-house counsel represented Elix Aviation

Capital on the deal. Clifford Chance and in-house counsel represented Alliance Air.

**VIM Airlines in 777-200ER deal with MCAP**

Russia's VIM Airlines will lease one 777-200ER from MC Aviation Partners (MCAP), according to an announcement from the lessor. The used aircraft is powered by Rolls-Royce Trent engines.

*Airfinance Journal* understands the aircraft was previously on lease to Malaysia Airlines.

Airfinance Fleet Analyst indicates that there is only one 777-200ER in the lessor's portfolio. This aircraft is a 1998-vintage aircraft powered by Trent 892s.

**Garuda Indonesia gets ATR 72-600**

Garuda Indonesia has taken delivery of one new ATR 72-600 on lease from Nordic Aviation Capital.

**Brussels Airlines receives A330-300**

Brussels Airlines has received one A330-300 on lease from Awas, according to a statement from the Irish lessor.

*Airfinance Journal* understands the A330 is a former Singapore Airlines aircraft and is six years old.

This is the first leasing deal Brussels Airlines has done with Awas. ▲

## NEWS

## Deals

**British Airways closes 787-9 Jolco**

British Airways closed a Japanese operating lease with call option (Jolco) financing for one 787-9 in March, *Airfinance Journal* has learnt.

SMBC and Mitsubishi UFJ Trust & Banking are providing the debt. Century Tokyo Leasing Corporation and Fuyo General Lease are providing the equity.

The aircraft delivered on March 16.

**Air India signs \$155m PDP financing for 777s**

Air India has signed a \$155 million loan for predelivery payments (PDPs) for three 777-300ERs, according to India's Economic Times.

The aircraft are expected to deliver between January and March 2018.

In November, the Indian carrier agreed to sell nine of its 21 Dreamliners to an undisclosed Singaporean lessor.

**FPG and FPG Amentum acquire Tui 737-800**

Financial Products Group (FPG) and FPG Amentum have acquired one 737-800 to place in a Japanese operating lease structure (Jol).

*Airfinance Journal* understands the tenor of the Jol is 7.25 years.

The 2013-vintage aircraft was acquired from an affiliate of CDB Leasing and is on lease to Tui Airlines Belgium.

BNP Paribas acted as the debt arranger, lender, hedge provider, facility agent and security trustee.

White & Case acted for FPG, Clifford Chance acted for BNP Paribas, Dentons acted for Tui and Stephenson Harwood acted for CDB Leasing.

**Aircastle prices \$500m notes**

Aircastle has priced \$500 million of senior notes due 2023 with a coupon of 5.000%, the lessor announced on March 21. The original target for the issuance was \$400 million.

The lessor will use the net proceeds for general corporate purposes, which may include the purchase of aircraft or refinancing of existing debt.

Deutsche Bank Securities, BNP Paribas Securities, Citigroup Global Markets, Crédit Agricole Securities, Goldman Sachs, JP Morgan Securities, Mitsubishi UFJ Securities and RBC Capital Markets are acting as joint book-running managers for the offering.

In a filing about the notes to the US Securities and Exchange Commission, Aircastle stated it was also seeking the agreement of lenders to modify a separate revolving credit facility, hoping to boost the volume of the facility from \$600 million to \$675 million.

Aircastle was also aiming to increase the maturity of the facility from 2019 to 2020.

**Awac closes long-term financing of A320**

Irish lessor Awac has closed the long-term financing of one A320 on lease to Aegean Airlines.

The transaction was arranged by Crédit Agricole Corporate and Investment Bank.

*Airfinance Journal* understands it is the last of three A320s the lessor has on lease to the Greek airline.

**Calc receives China Ex-Im support for A320**

China Aircraft Leasing Group Holdings (Calc) has received support from the Export-Import Bank of China for an A320 on lease to Air India, the company has announced.

The deal closed on March 7, for a total of \$41 million.

A Calc spokesman has confirmed that Export-Import Bank of China is the sole lender of the loan.

**Emirates finances A380 with sale/leaseback**

Dubai-based carrier Emirates has closed a 10-year structured sale/leaseback deal for one 2013-vintage A380.

Aviation Finance Company (AFC) arranged the mandate with Emirates and the investment from Dubai Islamic Bank (DIB). German investment firm EMP arranged the purchase of the aircraft and arranged the structured financing for its own Irish special purpose vehicle (SPV) lessor that purchased the aircraft.

The financing for the Irish SPV lessor consists of a full pay out Islamic facility in an Ijarah Lease structure provided by DIB. The equity was issued through profit participation notes from EMP's Irish head lessor to EMP and a German institutional investor. Seraph Aviation Management provided lease manage-





## NEWS

## Deals

ment services to the lessor.

*Airfinance Journal* understands Pillsbury acted for Emirates, Bird & Bird acted for the lessor and Clifford Chance acted for the debt.

Emirates will take delivery of 36 aircraft throughout the next financial year, beginning this month.

### Fly Leasing closes \$385m facility

Fly Leasing has closed a \$385 million aircraft acquisition facility, according to an announcement from the lessor.

The blind pool facility has a three-year revolving period followed by a three-year term. It will carry an interest rate of 200 basis points above Libor during the revolving period.

Lenders include Commonwealth Bank of Australia (New York branch), Bank of Tokyo-Mitsubishi UFJ, New York Life Insurance Company and National Australia Bank. Bank of Australia will also act as administrative agent for the facility.

### Accipiter closes \$1.2bn financing

Dublin-based lessor Accipiter, a unit of Cheung Kong Holdings, has closed a \$1.2 billion refinancing with 11 banks for portfolios of aircraft purchased from three lessors in 2014.

According to a filing to the Hong Kong Stock Exchange, Cheung Kong purchased 21 aircraft from Gecas for about \$816 million between August and November 2014. It also purchased 10 aircraft from BOC Aviation for \$492 million and 14 aircraft from Jackson Square Aviation for \$584.2 million.

The company paid for the aircraft with cash because of its high cash reserves. The \$1.2 billion facility will refinance these aircraft.

The facility was oversubscribed by a group of 11 banks: BNP Paribas, Bank of China, Bank of Tokyo Mitsubishi, Crédit Agricole Corporate and Investment Bank (CA-CIB), Citi, Commonwealth Bank of Australia, DBS Bank, Deutsche Bank, Natixis, HSBC and Sumitomo Mitsui Trust Bank.

## DELIVERIES IN BRIEF

### Air Europa receives first 787

Air Europa has taken delivery of its first 787-8 on lease from SMBC Aviation Capital, according to an announcement from the lessor.

The aircraft is the first from a five-aircraft sale/leaseback deal with the lessor. The next two deliveries are scheduled for June and August; the remaining two will deliver in December.

### Singapore Airlines takes first A350 XWB



Singapore Airlines has taken delivery of its first A350-900 XWB.

The aircraft was delivered in Toulouse, France, and makes the Singaporean flag carrier the fifth operator of the new Airbus variant.

After an initial period flying on regional services to Kuala Lumpur and Jakarta, the aircraft will be deployed on long-haul flights from May, starting with Amsterdam and then Düsseldorf, according to a statement from Airbus.

The airline has ordered 67 A350-900s in total, which will be operated on long-range flights, as well as on selected regional services.

The A350 XWB will join an existing Airbus fleet at Singapore Airlines that comprises 19 A380s and 29 A330-300s.

### Air Canada receives Q400



Air Canada has taken delivery of a Dash 8-Q400 on lease from Nordic Aviation Capital, according to an announcement from the lessor.

According to Airfinance Fleet Analyst, the aircraft is 2007 vintage and was previously operated by Republic Airlines.

### China Eastern takes first 737NG from CDB Leasing

China Eastern Airlines has taken delivery of the first 737-800NG from CDB Leasing's order book for 30 of the aircraft type, according to manufacturer Boeing.

Based in Shenzhen, CDB Leasing operates as a subsidiary of China Development Bank. The company has registered capital of Rmb9.5 billion (\$1.5 billion) and, at the end of 2015, had a fleet of 191 aircraft.

### Norwegian takes first 787-9 on lease

Norwegian has taken delivery of its first 787-9 on operating lease.

*Airfinance Journal* understands the aircraft is on lease from MG Aviation for 12 years.

The carrier will take a further three 787-9s on operating lease this year. ▲



## NEWS

## Deals

CA-CIB and Natixis are acting as debt coordinators. CA-CIB is acting as the facility agent and security trustee and BNP Paribas is the hedge counterparty.

Milbank, Tweed, Hadley & McCloy represented Accipiter and Clifford Chance represented the mandated lead arrangers.

### Scoot moves towards external financing



Scoot, a low-cost subsidiary of SIA Group, is looking to tap the banking and leasing market for external financing for its Boeing 787 deliveries and will issue a request for proposals (RFP) this year.

This would be the first time the airline has tapped the external aircraft financing market. Until now, it has financed all of its aircraft using loans and equity from its parent.

Long Jian Ng, Scoot's head of finance, told *Airfinance Journal* in an interview at Changi Airport in Singapore that Scoot reached out to lenders in the first quarter of 2015 with a request for information to assess the market.

"Responses have been positive and we are planning for an RFP in mid-2016," he said.

Ng added that various financing methods were proposed, including sale/leaseback, finance lease, Japanese operating lease with call option, Ex-Im Bank and commercial debt.

"Scoot will assess these from both a cost and risk perspective, along with tax implications and the benefits of parting with ownership that is required of certain structures," he said.

"We expect the response to our coming RFP to be enthusiastic and we are receptive to new bidders, as long as quotes and terms are favourable to Scoot," added Ng.

The airline has a fleet of 10 787s, with 10 more scheduled for delivery before mid-2019. ▲

## SECONDARY MARKET NEWS

### Japan Air Commuter retires Q400



Japan Air Commuter has retired one of its Q400 aircraft, according to a source. C&L Aviation Group has purchased the aircraft.

*Airfinance Journal* understands the delivery date is yet to be fixed.

### Southwest receives two 737-700s

Southwest Airlines has received two 2005-vintage 737-700s on lease from FPG Amentum, according to an announcement from the Dublin-based lessor:

The aircraft are owned by FPG Amentum's investor customer Global Aircraft Fund 1.

*Airfinance Journal* understands the aircraft are on 14-year leases.

Stephanie Sanford, senior vice-president aircraft trading of FPG Amentum, said: "We are delighted to welcome Southwest as a new lessee customer. The aircraft have previously been on lease to Transaero, but thanks to extensive preparation, the repossession from Transaero went very smoothly and we have been quite pleased with the level of interest that we found in the secondary market."

### Amazon to lease 20 767 freighters

Amazon Fulfillment Services, an affiliate of Amazon.com, has announced an agreement with Air Transport Services Group (ATSG) for the lease of 20 767 cargo aircraft.

The leases are for between five and seven years.

ATSG is a holding company that provides air

cargo services to a range of companies. ATSG's airline subsidiaries, ABX Air and Air Transport International, will operate the aircraft under a five-year agreement.

Amazon will use the aircraft to create an air cargo network to support its US customers.

### Allegiant buys A319-100

Sunrise Asset Management, a subsidiary of Allegiant Travel Company, has purchased one A319-100 from Cassiopeia Leasing, a special purpose company managed by Fuyo General Lease.

The sale was arranged by Aircraft Leasing & Management (ALM), according to an announcement. ALM also arranged the redelivery of the aircraft and its transition to Allegiant Air.

The aircraft was previously operated by easyJet. It is part of the Fuyo General Lease portfolio managed by ALM.

*Airfinance Journal* understands the Tokyo office of law firm Squire Patton Boggs represented the seller.

### Air Libya leases 737-500

African carrier Air Libya will lease one 737-500 from UAE lessor Aerovista, *Airfinance Journal* has learnt.

A source on the deal told *Airfinance Journal* that the aircraft was on a medium-term lease. The jet's vintage is 1996, according to *Airfinance Fleet Analyst*.

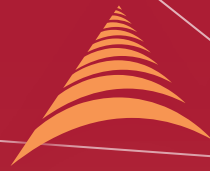
The Libyan carrier has a fleet of two RJ100s, one B146-200 and one 737-200.

### Icelandair buys 757

Icelandair has bought a used 757 from US lessor Castlelake, according to sources on the deal.

The aircraft, which is 1996 vintage, was previously operated by American Airlines.

*Airfinance Journal* understands the aircraft has been delivered, but is to undergo heavy maintenance and an interior change before beginning operations in May. ▲



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## ISTAT AMERICAS 2016: EXCLUSIVE INTERVIEW

# Learning on the job

In his first interview since becoming the lessor's chief executive officer, Alec Burger exclusively talks to *Airfinance Journal* at the sidelines of the International Society of Transport Aircraft Trading (Istat) conference in Phoenix, Arizona.

Alec Burger took over as chief executive officer (CEO) of Gecas at the start of this year. He inherited a leasing platform that owns about 1,900 aircraft, on lease to more than 270 customers in over 75 countries. A 25-year veteran at General Electric (GE), Burger is more than familiar with the company. He spent 15 years as president and CEO of GE Capital Real Estate, and has also served in a range of leadership positions, both in the US and in England, for the group's equipment leasing business.

But his new role has involved a fair amount of swatting up. Aviation finance is notoriously inaccessible to those unfamiliar with the assets, or with the intimidating range of acronyms and initials favoured by financiers.

Brushing up on the technical knowledge is a serious challenge. Burger jokes he has had the opportunity to learn thanks to a lot of long flights, and with the aid of a cheat sheet drawn up by the lessor.

He says: "I think you have to be a little patient. People think that you come in and you have to be an expert overnight – and you don't. One of the huge benefits that I have is I do have a global team with incredible domain knowledge. I feel like I have learned a fair amount. I still have a lot to learn, but it's going to take six, nine, 12 months before I feel completely comfortable."

He points to the expertise and international presence of his team. "This is a very experienced team that is incredibly global. One of the things that struck me early days is, in terms of where we have offices around the world, the diversity that we have in the business," he says.

### The year ahead

So now that things are more settled, what are Burger's plans for the next 12 months?

He thinks the lessor is well positioned to take on the year ahead. "I think when you look at our base you have a long-term order book that we have in place, and we feel very comfortable about that mix," says Burger.

He adds: "For 2016, the base plan is that we are going to continue to sell some assets. But, more importantly, we are going to originate, and protect what have struck me as some really positive long-term relationships in the industry. And here is where I see a similarity between the commercial real estate business that I came from: we're really not an opportunistic transaction business; we're a long-term relationship player in the industry."

Burger points out that, thanks to Gecas' scale,



the lessor can offer a wide range of solutions for its airline partners. It likes to act as a one-stop shop for its long-term customers in a way that smaller lessors would struggle to do.

Last August, for example, Gecas closed a \$390 million deal with partner Lion Air, in a mix of operating leases and senior secured debt financing (provided via Gecas' PK AirFinance unit). The deal included the lease of three 737-800s, three A320-200s, as well as debt financing for six new ATR 72s. Few companies would have the ability to cover three asset types in this way.

Asked which assets represent the best opportunities for lessors, Burger mentions the large number of single-aisle aircraft in Gecas' portfolio. He says: "Our portfolio is heavily driven towards narrowbodies. From a portfolio diversity perspective, if you're asking me today, with everything else being equal, I would rather take more narrowbodies. But I think, in general, there's no hard-and-fast rule."

Speaking about Gecas' relationship with manufacturers, he adds: "We're not afraid of orders. In a world where there is undersupply, I think we would always entertain more orders. The only thing that is going to remain sacrosanct to our business model is that the orders would be GE-powered. We're not going to deviate from that. But based on where we view the position of our engine business, I'd actually view that as a positive."



“For 2016, the base plan is that we are going to continue to sell some assets. But, more importantly, we are going to originate, and protect what have struck me as some really positive long-term relationships in the industry.”

**Different jurisdictions**

The scale of Gecas’ operation means it can also help airline partners when they suffer from a drop in demand, and are forced to reduce capacity, adds Burger.

“Some of the airlines that are having a tougher go of it today are in Latin America. That’s because the exchange rate has been brutal to these commodity-driven economies. So we’re spending our time figuring out how to help some of our friends down there. Some of it is looking at how we can redistribute capacity from them to other regions.”

He adds: “That, in my view, is where our scale and global reach can really help.”

Speaking about another difficult jurisdiction, Russia, Burger says that Gecas is going to be “cautious” but still active.

“The GE commitment to Russia is still strong. I think there are some very good operators in Russia, some of which we have really good long-term relationships with. So I think we’re going to be cautious, but I think it’s a market that we want to find a way to continue to support,” he says.

Burger has taken the reigns just as a number of opportunities are cropping up worldwide. In January, Iranian officials signed an agreement with Airbus for almost 120 aircraft, causing lessors and financiers to take note of the country and its key credits. Similarly, the relaxation of restrictions between Cuba and the US mean that new routes have been created between these two countries, leading to increased capacity and more opportunities for airlines and lessors.

Speaking about these new opportunities, Burger says that Gecas is “taking a very serious look”.

He adds: “We’re going to study it. The penetration rate of aircraft to population is incredibly low, in both Iran and Cuba, so it makes sense for us to see if there’s a viable role for us. Our team is looking at it as we speak.”

Burger stresses that these new markets account for just a fraction of the world’s growth.

“There are so many opportunities on a global basis, given the growth that exists in this industry,” he says. “However, as a big global player you cannot ignore when markets like Iran open up.”

Just two months into the job, and still familiarizing himself with the industry, Burger has a lot of work to do. As Gecas continues to sell assets, with new regions opening up, and with exchange rates causing headaches for some of its leasing partners, there is plenty to keep him busy. ▲

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## NEWS ANALYSIS

# MAS treads lightly around Jolco creditors

The restructuring Malaysian flag carrier is unlikely to receive lease concessions from the Japanese market, reports Michael Allen.

The Japanese operating lease (Jol)/Japanese operating lease with call option (Jolco) market is made up of a close-knit community of professionals who communicate regularly and share information – if you upset one, you risk upsetting them all.

With the Jol/Jolco structures offering some of the most competitive pricings in the market, Malaysia Airlines, which is undergoing a major restructuring, would be unwise to do anything that would damage the trust of the Japanese market as it negotiates with creditors for concessions on lease rentals.

In November, *Airfinance Journal* reported that Malaysia Airlines had approached creditors to ask them for concessions on lease rentals and loan repayments.

The airline is undergoing a restructuring after financial difficulties exacerbated by two accidents last year in which more than 530 people died and which resulted in the total hull loss of two of its 777-200 aircraft.

As part of the restructuring, the airline is reducing its fleet and optimizing routes. In July 2015, *Airfinance Journal* reported that Malaysia Airlines had delayed its planned September 1 2015 fleet decision and instead asked creditors to consent to an interim sub-lease agreement, whereby the old company, Malaysian Airline System (MAS), would sub-lease all its aircraft to a newly created company, Malaysia Airlines Berhad (MAB). MAB received its air operator certificate on August 28 2015.

The carrier had intended to make a decision on which aircraft to transfer to MAB and which to return to creditors by September 1 this year. Now, the entire fleet will be sub-leased to MAB from

MAS and operated by this new entity for a period of six to 12 months, with the possibility of extending the sub-lease. This gives Malaysia Airlines more time to decide on which aircraft to keep and which to return. At least three lessors – Aircastle, Pembroke (Standard Chartered) and Novus – have already taken back 777-200 aircraft.

Sources say that out of all of its creditors, Malaysia Airlines is likely to be treading the most carefully around Jol/Jolco creditors, as well as the export credit agencies (ECAs).

“I think MAS understood that the ECAs, along with the Japanese investors, are the last class of party that you want to be nasty with,” says one source with exposure to MAS.

“They [Malaysia Airlines] are still keeping their cards a bit close to their chest,” added the source. “At the same time, we have not felt they are putting the knife under the drawers of the Japanese investors. There’s hope that the good sense prevails in this country and they will understand that these are not the



types of creditors you want to mess with.”

One senior executive at a major Japanese equity provider *Airfinance Journal* spoke to said that it would not accept any negotiation from MAS, claiming the airline asked for the lease rental to be reduced to a rate below the fair market value.

“They [the airline] asked but we declined. It’s almost impossible to restructure [a Jolco],” said the executive, who added: “All of the equity underwriters have taken the same position. If they terminate the lease, we will repossess the aircraft and they will never come back to the Japanese market.”

The executive said that Japanese equity providers have been discussing together how to form a united front in negotiations with Malaysia Airlines.

Asked whether the equity provider would consider doing business with Malaysia Airlines again, the executive said: “Once the financial situation is recovered, we will reconsider – as long as the Malaysian government supports MAS.” ▲

## MALAYSIA AIRLINES TARGETS MORE A350S

Malaysia Airlines is considering ordering additional A350-900 aircraft for its long-haul fleet renewal.

According to Airfinance Fleet Analyst, the airline has four A350-900s on order from US lessor Air Lease Corporation. The order was made in February 2013. ▲





## DEALS OF THE YEAR 2015

# A year of transformation

The *Airfinance Journal* Editorial Team presents the highlights of the winning entries for the 2015 awards, which saw airlines, banks and their advisers at their innovative best.

### OVERALL DEAL OF THE YEAR 2015

#### Macquarie's Awas portfolio acquisition and financing

On March 3 2015, Macquarie AirFinance entered into a \$3.04 billion, three-year non-recourse secured bank loan facility to fund the acquisition of up to 92 aircraft from Awas with a portfolio value of about \$4 billion. The deal was a landmark transaction, doubling the size of Macquarie's aviation portfolio and propelling the company into the top 10 aircraft lessor rankings, globally.

Macquarie mandated Citi, BNP Paribas and Wells Fargo as lead arrangers and underwriting banks. Awas retained Goldman Sachs and Deutsche Bank as advisers on the transaction, while Macquarie used internal resources.

The aircraft are young Boeing and Airbus models that had an average age of two years at the time of the deal. The aircraft were on lease to 41 airlines with an average remaining term of 6.5 years. The majority of the jets are A320-200s and 737-800s, and the

remainder consists of A330 widebodies. The portfolio went under the name of Skyfin.

At the time of the deal, Macquarie Group confirmed that its capital requirement for the transaction would be A\$600 million (\$470 million). The company said it planned to raise A\$500 million to finance the acquisition and fund the rest with its existing capital.

It successfully raised the A\$500 million through an institutional placement. The issuance involved the sale of 6.8 million new ordinary shares at A\$73.5 each.

The deal provides significant benefits both to the seller and the buyer of the portfolio. For Macquarie, the portfolio complements its existing aircraft leasing portfolio and diversifies its client base. Sources on the deal suggest that Macquarie will benefit almost immediately in terms of return on equity and earnings per share.

For Awas, the deal allows it to realize the value of the young aircraft in the portfolio and to focus its business on mid-life aircraft. It is a win-win transaction addressing both parties' strategic needs.



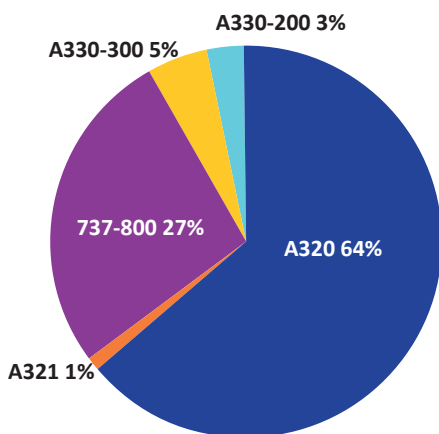
The non-recourse debt financing is for a three-year tenor only, because Macquarie plans to refinance on attractive terms using different financing structures.

*Airfinance Journal* understands that more than 80% of the portfolio was transferred by the end of 2015. The exact value of the transferred portfolio is yet to be finalized, because individual aircraft remain the subject of discussion, but the deal is in any case believed to be the largest transaction of its kind in 2015.

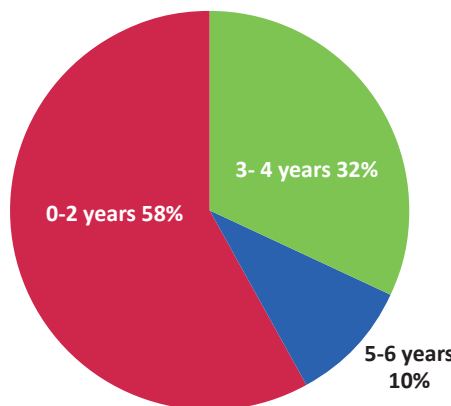
The deal was complex, not least because of the involvement of multiple owners and lessees in various legal jurisdictions with a variety of tax implications.

The size and complexity of the transaction and the clear benefits to both parties were key factors in the awarding of Deal of the Year 2015 to Macquarie's acquisition and financing of Awas's Skyfin portfolio. ▲

COLLATERAL MIX



AGE MIX



### OVERALL DEAL OF THE YEAR

**Borrower:** Macquarie AirFinance

**Structure:** Sale of aircraft portfolio and associated non-recourse secured loan facility

**Currency/amount:** Portfolio value about \$4 billion, loan facility \$3.04 billion

**Assets:** Portfolio of up to 92 aircraft with leases attached

**Lawyers (and role):** Clifford Chance (counsel to Macquarie financiers), Vedder Price (counsel to Macquarie), Milbank Tweed (counsel to Awas)

**Banks (and role):** Citi, Wells Fargo, BNP Paribas (mandated lead arrangers – loan facility)

**Advisers (and role):** Goldman Sachs, Deutsche Bank (financial advisers to Awas)

**Date mandated:** Preliminary discussions held October 2014

**Date closed:** March 4 2015

“Income-generating investments backed by A380 aircraft and an outstanding lessee like Emirates continue to prove very interesting to UK institutional investors in the current low-yield environment.”

Mark Lapidus, chief executive officer, Amedeo

## EDITOR'S DEAL OF THE YEAR

### Amedeo Air Four Plus



In May 2015, Amedeo listed a new Guernsey-based aircraft acquisition and leasing investment company called Amedeo Air Four Plus (AA4+) on the London Stock Exchange (LSE) specialist fund market.

Nimrod Capital, Amedeo's partner in the UK institutional and discretionary investor market, acted as the placing agent for AA4+ and is the long-term corporate and shareholder adviser.

AA4+ raised \$202 million in equity and \$800 million in commercial loan facilities, provided by a bank syndicate led by Westpac and Qatar National Bank.

In addition to the eye-catching size of the deal, there were a number of factors that attracted the judging panel. The structure brings new sources of funds to the aircraft finance sector. In addition to the equity raised via the LSE listing, Amedeo managed to attract new lenders, including junior financiers Qatar National Bank, Commercial Bank International and China Construction Bank.

The financing of widebody aircraft, in particular the A380, has been challenging in the recent market environment, and the ability to raise such a significant fund for assets that have less liquidity than single-aisle aircraft is significant.

Amedeo holds a strategic investment of 5% of AA4+ share capital and acts as

the company's long-term asset manager. Air Four Plus is planning on expanding its pool of assets in the widebody space significantly over the next five years. Its most recent placement was for a further 53 million new shares at a March issue price of 101p a share.

Mark Lapidus, chief executive officer, Amedeo, says: “The LSE listing of Amedeo Air Four Plus enhances Amedeo's ability to execute transactions in the capital-intensive, large widebody aircraft space and allows us to deploy additional capital, alongside our own, for our ordered A380 aircraft, manage any new customer concentrations within our portfolio and expand the scope of our activities to support both new aircraft acquisitions and, in time, potential secondary market opportunities.”

“Income-generating investments backed by A380 aircraft and an outstanding lessee like Emirates continue to prove very interesting to UK institutional investors in the current low-yield environment.” ▲

## EDITOR'S DEAL OF THE YEAR

**Borrower:** Amedeo Air Four Plus Limited (AA4+)

**Structure:** Operating leasing and sale/leaseback

**Currency/amount:** Senior loan \$640 million, junior loan \$150 million, equity raise £202 million (\$292 million)

**Assets:** Four A380s on lease to Emirates for 12 years

**Lawyers (and role):** Herbert Smith Freehills (advisers to AA4+), Milbank, Tweed, Hadley & McCloy (board of directors), Norton Rose Fulbright (Amedeo), Pillsbury (Emirates)

**Banks (and role):** Westpac, Sumitomo Mitsui Trust, Doha, Qatar National, CBI, China Construction (senior and junior lenders)

**Advisers (and role):** Amedeo (long-term asset manager and co-investor), Nimrod Capital (placement agent and shareholder adviser), Pillsbury Winthrop Shaw Pittman (Emirates)

**Date mandated:** First-quarter 2015

**Date signed:** First-quarter 2015

**Date closed:** May 13 2015

## INNOVATIVE DEAL OF THE YEAR

### EA Partners' \$700 million bond



The year's most innovative deal was Etihad's \$700 million platform financing to raise five-year unsecured debt for members of its equity alliance in September. The financing was arranged on an unsecured basis, despite the fact that some of the obligors are weak credits.

The structure involved the issue of fixed-rate notes by an orphan special purpose vehicle, EA Partners IBV, the proceeds of which have been on-lent to the six airline partners – Etihad, Alitalia, airberlin, Jet Airways, Air Serbia and Air Seychelles – and Etihad subsidiary, Etihad Aviation Services (EAS).

The notes carry an overall coupon of 6.875%, which was determined by blending the approximate interest cost of the six airline partners. Each obligor paid a different coupon individually, reflective of their individual credit risk.

Goldman Sachs International, ADS Securities and boutique merchant bank Anoa Capital acted as joint lead book-running managers for the offering. Ashurst represented the managers on the deal, while Paul Hastings Europe and Loyans & Loeff represented the issuer (EA Partners) and Freshfields Bruckhaus Deringer represented the obligors (the airlines and EAS).

“It's a unique structure that acts as a centralized funding vehicle, and the next natural step in the strategic tie out within the equity alliance partners,” said Nader Al Salim, executive director, investment banking division, Goldman Sachs.

“It enables all airlines to access the capital markets in a transparent and ef-





“Etihad had the choice of either leaving its equity partners to fend for themselves and source its own funding or trying to pull the capital together.”

ficient way. It allows investors to capture multiple airline risk as opposed to a single entity exposure,” added Al Salim.

Etihad had the choice of either leaving its equity partners to fend for themselves and source its own funding or trying to pull the capital together.

Ricky Thirion, group treasurer, Etihad Airways, explains why.

“It was important for each of the entities to be able to establish a footprint in the capital markets and access unsecured funding directly without Etihad support. Etihad was prepared to participate at a cost that is higher than its standalone borrowing cost in order to facilitate this out-

come. Etihad participation also reinforced the strategic linkage and shared vision for investors.”

But closing a deal as intricate as this one was not without its challenges.

“Marketing a new structure always takes more time and also marketing a more complex structure similarly requires additional time with investors,” Thirion told *Airfinance Journal*.

“Market conditions in the debt capital market deteriorated significantly in Q3 2015 when the deal was about to be launched and we had to be able to move quickly and pick a small window within which to launch and close the transaction.” ▲

#### INNOVATIVE DEAL OF THE YEAR

**Borrower:** EA Partners IBV (EAP)

**Structure:** Collateralized loan obligation

**Currency/amount:** \$700 million

**Assets:** Capital expenditure and investment in fleet

**Lawyers (and role):** Ashurst (for deal managers), Paul Hastings Europe and Loyans & Loeff (for EA Partners), Freshfields Bruckhaus Deringer (for airlines and EAS)

**Banks (and role):** Goldman Sachs, ADS Securities, Anoa Capital (joint lead bookrunning managers)

**Advisers (and role):** Banks as above

**Date mandated:** January 29 2015

**Date signed:** September 16 2015

**Date closed:** September 28 2015

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“The portfolio is unique for recent aircraft ABS deals because 55% of the portfolio by value is accounted for by widebody aircraft.”

## EUROPEAN DEAL OF THE YEAR

### Deucalion (DVB) AB



Deucalion, DVB Bank's aviation investment fund, closed a \$667 million debut securitization on February 20 2015 using an Irish special purpose vehicle, AIM Aviation Finance (subsequently renamed DCAL 2015-1).

The asset-backed security (ABS) supported a portfolio sale of a fleet of 20, mostly Airbus, aircraft on lease to 13 operators. DVB continues as the manager of the aircraft in the portfolio. The deal supported the sale of 90% of the equity of the portfolio to an undisclosed private equity fund.

The deal had a number of features that attracted the judging panel. The securitization was oversubscribed and marked the first lessor ABS deal to use a 144A bond format to back an aircraft portfolio sale post the financial crisis.

The ABS achieved the lowest coupon for any lessor ABS since the 2008 crisis. The 14-year ABS was split between three note classes.

The \$545 million class-A notes achieved a coupon of 4.25%, while the \$84 million class-B notes had a coupon of 5.12%. The \$38 million class-C notes carried a coupon of 8.5%.

The portfolio is unique for recent aircraft ABS deals because 55% of the portfolio by value is accounted for by widebody aircraft.

At the time of going to press, the issue remained the best-priced aircraft ABS since the financial crisis.

Other considerations of the judging panel were that the deal led the way for a

number of 144A transactions during the rest of 2015 and the sale of the E-Note allowed a true portfolio sale for DVB.

Stephan Sayre, managing director of DVB's aviation investment management team, said: "While the sale of assets is normal course of business for our investment management business, the 144A placement of the debt and majority sale of the equity is a landmark transaction for DVB and testimony to the strength, depth and quality of the whole DVB aviation platform, which has been comprehensively endorsed by rating agencies and institutional investors alike. We expect to become a repeat issuer in this asset class." ▲

### EUROPEAN DEAL OF THE YEAR

**Borrower:** DVB (DCAL 2015-1)

**Structure:** 144A ABS transaction

**Currency/amount:** \$667 million

**Assets:** 20 commercial aircraft

**Lawyers (and role):** Clifford Chance (legal counsel to DVB), Pillsbury Winthrop Shaw Pittman (lead arrangers)

**Banks (and role):**

**144A bond placement**

BNP Paribas (sole structuring agent), BNP Paribas, Goldman Sachs, DVB (joint bookrunners)

**Equity placement**

BNP Paribas (sole structuring and placement agent), DVB (liquidity facility provider to bond holders). DVB's aviation asset management is servicer of aircraft portfolio

**Ratings agencies:** S&P and KBRA

**Date closed:** February 20 2015

## AFRICA DEAL OF THE YEAR

### Comair Ex-Im rand financing of four 737-800s



The Africa Deal of the Year goes to South African low-cost carrier Comair, which closed a financing guaranteed by the Export-Import Bank of the United States (Ex-Im Bank) for four new 737-800s. After issuing a request for proposal in March to finance the aircraft, the deal was ratified by the US Congress on June 25 2015.

Johannesburg-based Nedbank provided the financing for the transaction, amounting to R2.15 billion (\$137.2 million). Ex-Im Bank provided a guarantee on 85% of the financing, covering all of the senior debt. Investec acted as lead adviser and arranger for Comair, and provided financing for the pre-delivery payments for the aircraft.

James Geldenhuys, head of aircraft finance at Nedbank, says: "While it can be said that the deal was won on Nedbank's long-standing relationship with Comair, combined with the competitiveness of our offer, it has much to do with international perceptions of our local currency that both the airline and US-Exim were willing to agree to a rand-financed transaction of this size."

The rand-guaranteed Ex-Im Bank facility enabled Comair to match its loan repayments with its rand revenue streams, mitigating foreign currency risk in the facility.

Vedder Price represented Ex-Im Bank, while Clyde and Co represented Nedbank. South African law firm Edward Nathan Sonnenbergs and Maples & Calder (Ireland) acted as legal counsel for Comair. Johannesburg-based law firm Webber



“The 10-year deal achieved several firsts. It was the first sukuk bond guaranteed by the UK export credit agency (ECA) and the largest capital markets offering in aviation involving an ECA.”

Wentzel acted as South African counsel to Ex-Im Bank and Nedbank locally.

The first three Boeing jets delivered in August 2015, October 2015 and February 2016. The fourth will deliver in November 2016.

The timing of the deal was critical – Comair needed to secure a final commitment from US Ex-Im before its authorization lapsed.

“Through coordination with US Ex-Im, the renewal of Comair’s preliminary commitment was timed to ensure that once the board of directors voted unanimously to refer the Comair transaction to Congress for final approval, there was sufficient time remaining for the required 35-day notification period and before US Ex-Im’s authority to conduct new business ultimately lapsed,” David Minty, head of Africa Aviation Finance at Investec Bank, tells *Airfinance Journal*.

The transaction successfully demonstrated the critical role local regional banks could play in international aviation and export credit financing.

Miguel Santos, Boeing Commercial Airplanes director international sales for Africa, says: “The deal can only have positive implications for the South African air travel industry as a whole and, in the long term, will hopefully deliver positive and sustainable economic and employment creation spin-offs.” ▲

#### AFRICA DEAL OF THE YEAR

**Borrower:** Comair Limited

**Structure:** US Export-Import Bank-guaranteed rand funding

**Currency/amount:** R2.15 billion (\$137.2 million)

**Assets:** General corporate purposes, including aircraft financing four 737-800s

**Lawyers (and role):** Vedder Price (counsel to Ex-Im Bank), Clyde & Co (counsel to Nedbank), Edward Nathan Sonnenbergs (counsel to Comair), Maples & Calder (Irish counsel to Comair), Webber Wentzel (SA counsel to Ex-Im Bank and Nedbank)

**Banks (and role):** Nedbank (senior Ex-Im Bank lender)

**Advisers (and role):** Investec Bank (lead adviser and arranger to Comair)

**Export credit agency:** US Export-Import Bank

**Date mandated:** Undisclosed

**Date signed:** Undisclosed

**Date closed:** May 2015/November 2015

#### MIDDLE EAST DEAL OF THE YEAR

##### Emirates sukuk



Emirates’ \$913 million UK Export Finance (Ukef)-guaranteed sukuk bond set a precedent in both the Middle Eastern and the export credit markets.

“The combining of the Islamic investors and a UK guarantee had never been done before,” Huzafa Awaz, treasury manager, aircraft financing at Emirates, tells *Airfinance Journal*. “You have investors investing in Ukef paper who have never invested in an Islamic format and never for a sukuk. That effectively brought us a bigger investor base, which we wanted.”

The 10-year deal achieved several firsts. It was the first sukuk bond guaranteed by the UK export credit agency (ECA) and the largest capital markets offering in aviation involving an ECA. The deal also marked the first time a sukuk structure had been used to pre-fund the acquisition of aircraft.

The proceeds of the issuance were used to fund four new A380s on finance lease with Emirates.

The certificates priced on March 25 2015, achieving a low coupon of 2.471%, equivalent to 90 basis points over mid-swaps. The bond met high demand, attracting orders exceeding \$3.2 billion and being 3.6 times oversubscribed.

Citigroup, HSBC, JP Morgan and National Bank of Abu Dhabi acted as joint structuring agents and joint lead managers. Abu Dhabi Islamic Bank, Dubai Islamic Bank, Emirates NBD and Standard Chartered acted as joint lead managers and NCB Capital Company acted as co-lead manager.

The notes had more than 45 global institutional investors, with about 39% of the certificates distributed to the Middle East and Asia, 32% to Europe and 29% to the US.

Law firm Norton Rose Fulbright advised Emirates on the sukuk. Clifford Chance advised the managers and Citibank as delegate, ECA security trustee and ECA facility agent. Allen & Overy and Hogan Lovells advised Ukef.

The airline and the arrangers had to match up the requirements of the Islamic investors and ECA investors.

“Ukef’s requirements were different from what the Islamic investors wanted on the typical issues like cross-default,” says Ayaz.

He adds: “It is an innovative structure where we would make Islamic investors buy ATKMs [available tonne-kilometres], get the money up front and when the aircraft actually gets delivered, they return back the ATKMs and then they effectively have the aircraft as the asset, which is a unique combination of structures to get to where we wanted.” ▲

#### MIDDLE EAST DEAL OF THE YEAR

**Borrower:** Emirates

**Structure:** Export credit agency-backed sukuk

**Currency/amount:** \$913 million

**Assets:** Four Airbus A380

**Lawyers (and role):** Norton Rose Fulbright (for Emirates), Allen & Overy, Hogan Lovells (for Ukef), Clifford Chance (for joint structuring agents and joint lead managers)

**Banks (and role):** Citigroup, HSBC, JP Morgan, National Bank of Abu Dhabi (joint structuring agents and joint lead managers), Abu Dhabi Islamic, Dubai Islamic, Emirates NBD Capital, Standard Chartered (joint lead managers), NCB Capital (co-lead manager)

**Export credit agency:** Ukef

**Date mandated:** November 11 2014

**Date signed:** March 31 2015

**Date closed:** March 31 2015



“The deal also overcame a number of legal hurdles. It was the first EETC to combine two jurisdictions, because of Latam’s status in Brazil and Chile.”

## LATIN AMERICA DEAL OF THE YEAR

### Latam’s inaugural EETC

Latam Airlines’ inaugural enhanced equipment trust certificate (EETC) has scooped the South America award. This deal is the first EETC issuance from Latin America, and one of just a handful of non-US EETC issuances.

The deal also overcame a number of legal hurdles. It was the first EETC to combine two jurisdictions, because of Latam’s status in Brazil and Chile.

Although Brazil implemented the Cape Town Convention in 2013, the fact that Chile did not have this protection in place meant investors had to be educated about the legal regimes.

The structure was used to finance the delivery of 17 new aircraft: 11 A321s, four 787-9s and two A350s. Because of investor demand, the deal was upsized to \$1.02 billion from its original target of \$644 million.

Although the deal was the first Latin American EETC issuance, banks had been pitching the EETC to Latam for two years prior to the deal, sources tell *Airfinance Journal*.

Andrés del Valle, senior director of corporate finance, Latam Airlines, explains that the airline group chose the EETC because it wanted to diversify its sources of financing.

“We really wanted to diversify our funding sources and we estimated that the traditional funding sources would not be able to serve all the investment we needed for the future,” he said.

Latam underwent a seven-day road show in which it visited Santiago, Los Angeles, Chicago, Boston, New York and London. On closing, the structure had attracted 60 investors from five different continents – the most globally diverse range of investors for an EETC.

Del Valle notes that the main challenge of the deal was educating investors about the jurisdictional risks.

“It took a lot of education,” he said.



“When meeting with investors, if a meeting was an hour long then we would spend around 30 minutes explaining the legal regimes in Chile and Brazil.”

So can the market expect more EETC issuances from Latam?

Del Valle added: “Maybe not today, but definitely in the future. That is something that is definitely in our plans. It is on the shelf.” ▲

## LATIN AMERICA DEAL OF THE YEAR

**Borrower:** Latam Airlines Group

**Structure:** EETC

**Currency/amount:** \$1.02 billion total: A tranche \$845.2 million at 4.20%; B tranche \$114.2 million at \$175.6 million at 4.50%

**Loan-to-value:** A tranche 59.1%, B tranche 71.2%

**Assets financed:** 17 aircraft

**Lawyers (and role):** Clifford Chance, Greenberg Traurig, Pinheiro, Maples and Calder (for Latam), Milbank, Pinheiro Neto Advogados (for Citigroup), TozziniFreire Advogados (for Standard & Poor’s), Pillsbury (for Natixis)

**Banks (and role):** Citigroup Global Markets (sole structuring agent, global coordinator and lead bookrunner), Deutsche Bank, JP Morgan and Natixis (joint bookrunners)

## NORTH AMERICA DEAL OF THE YEAR

### Element’s \$1.21 billion ABS



Element Financial wins this category for its June asset-backed security (ABS) issuance, which was the largest and most widely syndicated aircraft ABS deal since 2007.

The deal has scooped the North American award for its size, complexity and its significance for Element, which is using the deal to consolidate this stage of its growth in the aircraft leasing market.

“Despite the hurdles, the deal closed with tight spreads in line with other recent ABS issuances.”

Secured against 49 aircraft, the deal is Element’s inaugural issuance. The equipment finance company had negotiated the purchase of aircraft totalling \$1.6 billion in early 2015, from parties managed by BBAM, and executed this issuance simultaneously. In a first for the industry, the equity from the deal was also syndicated to multiple co-investors.



## “The origins of the deal lie in a memorandum of understanding signed between UK Export Finance, HSBC and China Southern in 2014.”

Element will use the ABS deal to build its exposure to the sector further. *Airfinance Journal* understands that the company also expects to issue a similar deal in mid-2016.

Element has retained BBAM as the manager of the 49 aircraft in the collateral pool. *Airfinance Journal* believes that 33 of the aircraft were previously owned by Fly Leasing, which will use the proceeds from the sale to invest in in-production aircraft.

The deal also achieved oversubscription across all three tranches, despite being issued in turbulent market conditions. During the marketing process, the 10-year US Treasury rate hit its highest point in the year, because of volatility related to the imminent rate hike. Yet despite this, the deal attracted orders from 27 unique investors, including many which were new to the commercial aviation sector.

Despite the hurdles, the deal closed with tight spreads in line with other recent ABS issuances.

Several financiers also have noted the diversified collateral pool on the deal. The operators consist of 38 lessees in 26 countries, with 64% of the initial leases operated by flag carriers. ▲

### NORTH AMERICA DEAL OF THE YEAR

**Borrower/issuer:** ECAF 1

**Structure:** ABS

**Currency/amount:** \$1.21 billion total: A1 tranche of \$459.3 million at 3.47%; A2 tranche of \$590.6 million at 4.94%; B1 tranche of \$160 million

**Loan-to-value:** A1 66.77%, A2 66.77%, B1 76.95%

**Assets financed:** 49 aircraft

**Lawyers (and role):** Clifford Chance LLP, Holland & Knight – Counsel to BBAM; Vedder Price, Milbank – Counsel to Element; Vedder Price (Issuer’s counsel), Matheson (Irish counsel), Maples (Cayman counsel); Hughes Hubbard – Counsel to underwriters

**Banks (and role):** Deutsche Bank (lead left); BNP Paribas, Citi (joint bookrunners); BAML, Barclays, JP Morgan and RBC (co-managers); BNP (liquidity facility provider).

**Advisors (and role):** BBAM (servicer), Wilmington Trust (cash manager/security trustee).

### CHINA DEAL OF THE YEAR

#### China Southern Airlines’ \$100 million ECA-backed offshore renminbi A330 financing

China Southern Airlines closed a \$100 million (renminbi equivalent) export credit agency-backed offshore renminbi-denominated financing for one A330-300 on June 12 2015.

The origins of the deal lie in a memorandum of understanding signed between UK Export Finance (Ukef), HSBC and China Southern in 2014. The idea was to help British exporters gain access to the Chinese aircraft market and to benefit Chinese buyers by providing them with loans in their local currency.

William Ho, manager partner of William KK Ho & Co., told *Airfinance Journal* that one of the challenges was finding a suitable hedging instrument for the deal.

“In a typical ECA financing, China Southern would need an option to convert floating interest rate to fixed interest rate,” he said.

“When a deal was closed last year, the market in Hong Kong did not have suitable hedging instruments for converting floating rate renminbi to fixed rate renminbi. As the legal counsel to China Southern, we tried our best to include an interest rate conversion mechanism. That was a challenge to all the parties, but it was done.”

Ho added that the deal set a precedent for Chinese airlines’ cross border renminbi aircraft financing.

“If any Chinese airline took out a US dollar loan, if the renminbi devalues, it means the airline would need to use up more of its renminbi income to service the US dollar loan,” he said.

“Thus a Chinese airline would want to do more renminbi financing to hedge against any future devaluation of the renminbi. Most of the renminbi financings are done and still are done within China without any export credit backing. This deal sets a precedent.”

Paul YS Wong, HSBC’s managing director, asset finance, capital financing, global banking and markets, told *Airfinance Journal* that the deal provided a natural hedge for the airline.



He said: “At the time, the airline – and the market generally – thought the renminbi was going to go up and so it’s difficult for them to borrow a currency that’s going to appreciate. However, we explained to them that they needed to look at their revenue composition and how much of that is in renminbi and their financing cost. Up till that point, the major Chinese airlines were borrowing in US dollars, so once the renminbi starts depreciating it’s going to have a major impact on their balance sheet and profit and loss.” ▲

### CHINA DEAL OF THE YEAR

**Entity:** China Southern Airlines

**Currency/amount:** \$100 million (equivalent renminbi denominated)

**Assets financed:** One new A330-300

**Lawyers (and role):** Norton Rose Fulbright Paris (lead counsel for export credit agencies and bank), William KK Ho & Co (lead counsel for China Southern Airlines), Run Ming Law Offices (PRC counsel)

**Banks (and role):** HSBC

**Export credit agency:** European export credit agencies (Coface, Euler Hermes and Ukef) fronted by Ukef

**Date mandated:** April 8 2015

**Date signed:** June 4 2015

**Date closed:** June 12 2015

## “These transactions set off a wave of activity in the aircraft leasing sector in Asia.”

### ASIA-PACIFIC DEAL OF THE YEAR

#### Cheung Kong/Accipiter’s acquisition of aircraft portfolios from Gecas and BOC Aviation

Cheung Kong Holdings, through its subsidiary Accipiter Holdings Limited, closed two portfolio purchases – one from Gecas and one from BOC Aviation – for a total of 31 aircraft.

The purchase from BOC Aviation was signed on November 4 2014 and closed in the first and second half of 2015. The 10 aircraft comprised A320, 737-800, A330-300, 737-700, 737-900ER and 777-300ER models with an average age of 4.1 years. The aircraft are leased to eight different airlines with an average remaining lease term of 6.3 years. The acquisition price was \$492 million, subject to customary adjustments.

The purchase from Gecas was signed on August 25 2014 and closed in the first and second half of 2015. The 18 aircraft comprised A320-200, 737-800 and 737-900ER models with an average age of 3.1 years. The aircraft were leased to nine different commercial airlines with an average remaining lease term of 6.5 years.

Three additional aircraft – 737-800s – were under beneficial interest sale with an average age of 4.4 years and average remaining lease term of 8.9 years. The acquisition price was \$816 million subject to customary adjustments. This included \$714.8 million for conditional sale and purchase aircraft, as well as \$101.2 million for beneficial interest sale aircraft.

Commenting on the deal, BNP Paribas said: “These transactions set off a wave of activity in the aircraft leasing sector in Asia and, as a result of a prominent Asian investor entering the sector, there is greater awareness amongst Asian investors with respect to aircraft as an alternative investment class.”

Paul Sheridan, Accipiter’s senior vice-president of risk and capital markets, told *Airfinance Journal*: “As a seed portfolio, it’s a high-quality portfolio and the kind of portfolio you wouldn’t be able to create as a start-up portfolio through sale and leasebacks.”

He added: “It’s got a very even mix of Boeing and Airbus. In the leasing world, that can sometimes be difficult to achieve, to get a good number of 737 and A320s. We’ve got some of the top names in the low-cost world and full-service carriers as well, such as airlines like Vueling and American [Airlines]. These are very well run airlines.”

At the end of February, Accipiter closed a \$1.2 billion refinancing with 11 banks for these aircraft, as well as for 14 aircraft purchased from Jackson Square Aviation.

“The aircraft are on generally quite long-term leasing, so it makes sense to raise some new debt against them and secure the equity return,” said Sheridan.

Nicolas Parrot, managing director, co-head transportation sector, investment banking Asia-Pacific, BNP Paribas, told *Airfinance Journal*: “Cheung Kong wanted to enter the market initially without the market being aware of it. They didn’t want to move the market. They wanted to be a little bit hidden, I would say, so they could take a position without the market being aware of it. The idea is that they were afraid that if they announced their plan to the market they would not get the best price. Obviously, at one point in time they had to make the announcement to the stock market.”

“They did put some bids on other portfolios and sale/leasebacks. That’s also something very interesting that makes them quite different from the other players in the market: they don’t have the equity burning their pockets like some other players.”

“Rather, Cheung Kong can take their time. They want to be in there for the long term, so they don’t want to have a situation where they are forced to deploy the equity in a way where they have to buy some expensive assets.” ▲



**Li Ka Shing, owner of Cheung Kong**

#### ASIA-PACIFIC DEAL OF THE YEAR

**Entity:** Cheung Kong Holdings (CKH) through Accipiter Holdings Limited

**Currency/amount:** \$1.3 billion

**Assets financed:** 31 aircraft

**Lawyers (and role):** Not supplied

**Banks (and role):** BNP Paribas (sole financial adviser to CKH)

**Advisers (and role):** BNP Paribas (sole financial adviser to CKH)

**Date mandated:** October 2013

**Date signed:** August 25 2014 (Gecas) and November 4 2014 (BOC Aviation)

**Date closed:** Title transfer of aircraft and financial closing occurred in first and second quarters 2015



## “NAC has built up its fleet to become the largest owner and lessor of both ATR and Bombardier turboprop aircraft in the world.”

### EQUITY DEAL OF THE YEAR

#### IndiGo IPO



At the end of October 2015, Indian budget airline IndiGo raised Rs30.2 billion (\$464 million) through an initial public offering (IPO).

InterGlobe, IndiGo's parent company, received orders for about 183.5 million shares, or 6.1 times the number of shares on offer, according to data from National Stock Exchange.

IndiGo is India's largest passenger airline with a 37.4% market share of domestic pas-

senger volume (as at August 2015) and is the seventh-largest low-cost carrier globally in terms of seat capacity.

The issue, which was led by Citi, had a number of key highlights that made it stand out to the judging panel.

*Airfinance Journal* believes the issue is the largest private airline IPO, in terms of implied market capitalization. It was also the largest IPO for an Indian company in the three years before its issue. Demand from institutional investors, which accounted for 50% of the issue, was the highest for an Indian IPO in the preceding five years. The issue included the largest anchor tranche in an Indian IPO. The funds raised were earmarked for general corporate purposes, including the acquisition of aircraft.

Although not mentioned specifically in the deal summary that was submitted for the awards, IndiGo firmed up its order for 250 A320neos in August, the largest order in Airbus's

history, bringing its total backlog to 430.

Citi acted as lead left bank, anchoring the Securities and Exchange Board of India process. The bank was also responsible for the international marketing of the IPO.

*Airfinance Journal* understands JP Morgan, Barclays, Kotak Mahindra Capital Company and UBS Securities were also involved on the deal. ▲

#### EQUITY DEAL OF THE YEAR

**Issuer:** IndiGo

**Structure:** Initial public offering

**Currency/amount:** \$464 million

**Security:** Primary and secondary sale of shares

**Lawyers (and role):** Not submitted

**Banks (and role):** Citi (left lead bank and international coordination), JP Morgan, Barclays, Kotak Mahindra Capital Company, UBS Securities, Morgan Stanley

**Date closed:** Offer ended October 29 2015

### M&A DEAL OF THE YEAR

#### EQT acquisition of NAC stake

On August 5 2015, EQT VI, a fund controlled by private equity group EQT, announced it had agreed to acquire a majority stake of Danish lessor Nordic Aviation Capital (NAC) in a deal that valued the leasing company at \$3.3 billion.

Martin Møller, founder and chairman of NAC, said: “For us, both the timing and EQT as a new partner is perfect. We see great opportunities for NAC and can benefit from EQT's extensive experience of developing successful companies.”

The deal ensures that Møller continues as chairman of the lessor, remaining a significant shareholder and contributing about 50% of the capital.

Kirkbi Invest, an investor in EQT VI, will also co-invest in NAC.

NAC has built up its fleet to become the largest owner and lessor of both ATR and Bom-



bardier turboprop aircraft in the world. NAC also has a large fleet of regional jets, including CRJ900s and CRJ1000s. Airline customers include LOT, Air Berlin, HOP!, Flybe, Etihad Regional and Air Nostrum.

The deal caught the attention of the judging panel by the sheer scale of the value built up by Møller in the not so glamorous, but obviously profitable turboprop and regional jet segment of the market.

EQT is a pan-European private equity group with about €22 billion (\$25 billion) in

raised capital. Morten Hummelose, partner and head of the EQT Partners equity team, said: “We believe that NAC fits well with EQT's industrial approach of supporting companies to reach their full potential, and are excited to partner with Martin Møller going forward.”

Clifford Chance, Rothschild, Ernst & Young and PwC advised NAC. Goldman Sachs, Freshfields, Accura, IBA and PwC advised EQT VI. ▲

#### M&A DEAL OF THE YEAR

**Entity:** Nordic Aviation Capital

**Entity:** EQT

**Assets:** \$3.3 billion valuation

**Lawyers (and role):** Freshfields (EQT), Clifford Chance (NAC)

**Banks (and role):** Goldman Sachs (financial adviser to EQT)

**Advisers (and role):** Rothschild, Ernst & Young, PwC (NAC), Accura, IBA and PwC (EQT)

**Date closed:** August 5 2015



## “EMP tapped Islamic and European financing for the purchase of the new widebody, which was then leased to Emirates from delivery in December 2015 for 12 years.”

### USED AIRCRAFT DEAL OF THE YEAR

#### Korean Air

At the end of 2015, DVB closed a \$160 million financing of 10 aircraft for Korean Air Lines, seven of which were widebodies. The aircraft pool had an average age of 16 years, with the oldest aircraft dating from 1998.

The financing faced the dual challenge of involving older, less liquid assets and the necessity to complete the transaction quickly. The mandate was awarded in November with a requirement to close the deal by the end of the year.

DVB was able to raise the funds within the tight closing timeline, thanks in part to its internal expertise on aircraft assets, which allowed it to reassure fellow lenders on the security of the aircraft in question. Very few banks have the interest and capability to finance aircraft of such (average) vintage, given the much greater uncertainty and volatility of aircraft value. Many bank lending policies prohibit the financing of



equipment of such an advanced age.

In this case, the other lenders included Nedbank, Crédit Industriel et Commercial and Showa Leasing. The financing was completed in less than 30 business days. It was a very good outcome because DVB and the fellow lenders were able to close the deal for Korean Air Lines within a short timeframe and before the end of 2015. The deal was a refinancing and the loan was drawn down in a single advance on the same day.

DVB commented on the deal: “The financing involved 10 used aircraft, including 777-300, 737-800 and A330-300 aircraft. The aircraft pool has

an average age of 16 years, with the oldest aircraft of 1998 vintage. DVB were able to share our understanding of the business and expertise on used aircraft with fellow lenders. Very few banks have the interest, and capability to finance aircraft of such (average) vintage, given the much greater uncertainty and volatility of aircraft value.” ▲

### USED AIRCRAFT DEAL OF THE YEAR

**Borrower/issuer:** Korean Airlines

**Structure:** Finance lease (head lease – sub-lease structure)

**Currency/amount:** \$160 million

**Assets financed:** Two 777-300s, three 737-800s, five A330-300s

**Lawyers (and role):** Clifford Chance (English and New York counsel), Kim & Chang (Korean counsel)

**Banks (and role):** DVB Bank (lead arranger and underwriter), NBSA, Crédit Industriel et Commercial, Showa Leasing

**Date mandated:** November 13 2015

**Date signed:** December 17 2015

**Date closed:** December 23 2015

### SALE/LEASEBACK DEAL OF THE YEAR

#### Emirates/EMP/AFC A380

Emirates’ structured sale/leaseback broke new boundaries in the leasing market in 2015. Working in conjunction with German arranger EMP Structured Assets and Irish aircraft financier Aviation Finance Company (AFC), the Gulf carrier found a new form of financing for its flagship asset, the A380.

EMP tapped Islamic and European financing for the purchase of the new widebody, which was then leased to Emirates from delivery in December 2015 for 12 years. The deal included a traditional senior loan provided by DekaBank, a pari-passu senior tranche from Dubai Islamic Bank (DIB) and a 40% Islamic mezzanine tranche from DIB that uses a Murabaha commodities facility to maintain compliance with Islamic law.

The overall loan amounts to about 95% of the total value of the aircraft. The remaining equity, provided by German investors, was issued through profit participation notes from EMP’s Irish special purpose vehicle.

Philipp Prior, managing partner at EMP



Structured Assets, tells *Airfinance Journal*: “For us, the special thing about this deal was that we could include a very high leverage into the structure. This makes the position on the A380 very comfortable for the equity investors – they have a more or less fully amortized aircraft after the lease term. I also think this deal marks the first time an Islamic financier put in pure mezzanine sharia-compliant debt into a structure.”

DekaBank acted as the security trustee for DIB. Seraph Aviation Management is providing lease management services to the EMP equity investors.

Allen & Overy acted for Stellwagen, Pillsbury Winthrop Shaw Pittman acted for Emirates and Bird & Bird acted for EMP. Clifford Chance provided a UAE legal opinion.

Prior is looking to repeat the structure in the future.

“This high-leverage concept is something

we want to do with other airlines and other aircraft types as well. I think it’s a good combination [of] both worlds – the classic senior loan investment approach with relatively low margins and the German investors where everything is new to them.” ▲

### SALE/LEASEBACK DEAL OF THE YEAR

**Borrower/issuer:** Emirates Airline/Irish Orphan SPC

**Structure:** Structured sale/leaseback

**Currency/amount:** \$250 million

**Assets financed:** One Airbus A380

**Lawyers (and role):** Allen & Overy (for Aviation Finance Company), Bird & Bird, Mason Hayes & Curran (for EMP and DekaBank) Pillsbury Winthrop Shaw Pittman (for Emirates), Clifford Chance (for Dubai Islamic Bank/UAE legal opinion), Freshfields (for German institutional investor)

**Banks (and role):** Stellwagen Finance Company (initial mandate arrangement and underwriting), DekaBank (senior lender), Dubai Islamic Bank (senior and junior lender)

**Advisers (and role):** Aviation Finance Company (arranger), EMP (arranger and investment manager), Seraph Aviation Management (asset and lease management)

**Date mandated:** October 2015

**Date signed:** December 5 2015

**Date closed:** December 11 2015





## “Alitalia’s deal raised the bar, not only in aviation but also in the private placement market.”

### CAPITAL MARKETS – UNSECURED DEAL OF THE YEAR

#### Alitalia private placement



One of the more memorable capital markets deals of the year was Alitalia’s €375 million (\$413 million) private placement, the airline’s debut bond issuance under the new company, Alitalia Società Aerea Italiana (SAI).

The deal stood out because it managed to raise, for a previously struggling airline, unsecured capital at a very attractive rate.

Alitalia SAI was formed at the beginning of 2015 after Etihad took a 49% stake in the Italian flag carrier. Since then, the airline has focused on increasing its capacity by 30% over the next three years and revamping its fleet, having previously operated under losses for several years.

“With this deal, Alitalia returned to the capital markets after a long time out,” Nicola Dell’Edera, vice-president treasury and insurance at Alitalia, tells *Airfinance Journal*. “It was an important signal of confidence in the new Alitalia business plan, supported by the investment of a solid industrial partner like Etihad. It’s also important to note that this placement has been a success at a time when financial markets were marked by strong turbulence.”

Alitalia’s deal raised the bar, not only in aviation but also in the private placement market: it is the biggest private placement transaction to have taken place in Italy and the second largest in Europe from a corporate issuer in 2015.

The placement listed on the Irish Stock Exchange on July 30 2015. The bond proceeds were used for general corporate purposes, including funding aircraft deliver-

ies and maintenance, as well as capital expenditures and liquidity support. The use of the proceeds were described by the airline as having “a pivotal role” in its new business plan. Morgan Stanley underwrote 100% of the debt. The loan has a fixed coupon of 5.25% and a tenor of five years, repayable by July 30 2020.

BNP Paribas acted as the payment agent and Arthur Cox acted as the leasing agent. Law firm DLA Piper acted as legal counsel for Alitalia and White & Case represented Morgan Stanley.

Dell’Edera says: “The credit market environment was supportive. The work done with Morgan Stanley as underwriter has allowed us to take home a satisfactory outcome despite a very difficult environment because of the Greek crisis.” ▲

#### CAPITAL MARKETS – UNSECURED DEAL OF THE YEAR

**Borrower/issuer:** Alitalia Società Aerea Italiana

**Structure:** 5.250% five-year unrated senior unsecured bond

**Currency/amount:** €375 million (\$413 million)

**Assets financed:** General corporate purposes, including aircraft financing

**Lawyers (and role):** DLA Piper (issuer counsel), White & Case (lead manager counsel), Arthur Cox (leasing agent)

**Banks (and role):** Morgan Stanley (sole lead manager), BNP Paribas (payment agent)

**Date mandated:** July 14 2015

**Date signed:** July 28 2015

**Date closed:** July 30 2015

### CAPITAL MARKETS – NEW STRUCTURES DEAL OF THE YEAR

#### Virgin Atlantic slot-backed bond



Virgin Atlantic’s £220 million (\$316 million) bond backed by Heathrow slots was a landmark transaction. Not only was it the first of its type in Europe, but also it was the first time the UK airline had used the capital markets to raise financing.

US and Canadian airlines in consortia had previously issued bonds secured against take-off and landing slots, but these were as part of a package where slots, routes and gates were included. A slot securitization had yet to be carried out successfully in Europe.

To make the deal work, an airline had to be established to obtain ownership of the slots if Virgin Atlantic was to go into default. Virgin Atlantic International (VAIL), a wholly owned subsidiary airline of Virgin Atlantic, was created to deliver the necessary finance structure to do the deal. VAIL uses the same aircraft, services and crew as Virgin’s existing Caribbean services.

“The environment is now supportive of more innovative structures, and it’s interesting to juxtapose this in the context of the potential expansion of Heathrow Airport into a third runway,” Shai Weiss, chief financial officer of Virgin Atlantic, tells *Airfinance Journal*. “The fact that it’s potentially happening, and the investors knew this, just shows you the value of Heathrow as a hub, the value of slots at Heathrow and the innovation of the structure we’ve come up with.”

The transaction strengthened the airline’s cash position, helping it acquire aircraft in a fleet that was traditionally all-leased.

The bond has a tenor of 15 years – longer than typical aircraft deals – and is secured >>>

“The finance team of THY is one of the most innovative. They always want to do something new, but because they have deliveries coming in, they also have to diversify their funding source.”

**Yasuhiro Nakauchi, vice-president of Mizuho Securities**

against the majority of Virgin Atlantic's Heathrow slots. The notes are split between two tranches: £190 million A1 notes and £30 million A2 notes.

Macquarie Bank acted as sole arranger. Moody's provided a private rating for the senior notes.

“One thing that set this transaction apart is that the average life of the financing is significant. And, unlike aircraft, the assets are expected to appreciate, so we were able to structure a balloon at the end of the 15-year term,” says Peter Kirk, executive director at Macquarie Bank.

The deal, which involved about 60 people, had Virgin seeking investors that were looking at longer maturity, and were interested in airports and infrastructure.

Herbert Smith Freehills advised Virgin Atlantic. Watson Farley & Williams provided legal advice to investors, as well as advice to the trustee and issuer. Carey Olsen advised on the Jersey security law.

Macquarie's Kirk tells *Airfinance Journal*: “What we found exciting was that we were able to identify an opportunity in a dormant yet valuable asset that was largely invisible from a financing point of view. The slots were used to raise this long-term, low-cost financing that effectively could be seen as quasi-equity.” ▲

#### CAPITAL MARKETS – NEW STRUCTURES DEAL OF THE YEAR

**Borrower/issuer:** Virgin Atlantic International/ Barbados Enterprises

**Structure:** Secured bond issue

**Currency/amount:** £220 million (\$316 million)

**Assets:** General corporate purposes, including purchase of new Boeing 787-9 aircraft

**Lawyers (and role):** Watson Farley & Williams (Macquarie Bank bond trustee, security trustee and agents), Herbert Smith Freehills (Virgin Atlantic), Carey Olsen (Jersey security law)

**Banks (and role):** Macquarie

**Advisers (and role):** Macquarie acted as sole arranger and distributor

**Date mandated:** October 2014

**Date signed:** October 30 2015

**Date closed:** December 9 2015

#### CAPITAL MARKETS – EETC DEAL OF THE YEAR

##### Turkish Airlines' yen-denominated EETC



Turkish Airlines (THY) has won in this category for closing the world's first yen-denominated enhanced equipment trust certificate (EETC).

With a further innovation, the September issuance was combined with equity investment from Japanese investors. By combining the two structures, THY was able to raise 100% of the purchase price of the aircraft.

The privately placed deal was used to support the delivery of three new A321-200s. *Airfinance Journal* understands that the EETC portion of the deal contributed \$99.3 million of the total purchase price, and the Japanese operating lease with call option (Jolco) portion provided the rest.

The deal also priced attractively. An airline source confirmed that if the issuance had been denominated in US dollars, the coupons would have been about 3.83%, 3.95% and 4.52% at the time, which would have been broadly similar to those achieved by repeat US issuers.

Speaking to *Airfinance Journal* at his company's Tokyo office, Yasuhiro Nakauchi, vice-president of Mizuho Securities' strategic solutions department, IB products group, noted the airline's history of innovation.

He said: “The finance team of THY is one of the most innovative. They always want to do something new, but because they have deliveries coming in, they also have to diversify their funding source.”

Nakauchi also mentioned the benefits

that came from DBJ's presence on the deal.

He added: “We tell them it's DBJ and there's no issue from the investor side. DBJ's presence gives some certainty to the deal.”

#### CAPITAL MARKETS – EETC DEAL OF THE YEAR

**Issuer:** Turkish Airlines

**Structure:** Yen-denominated EETC with Jolco

**Currency/amount/coupon:** ¥11.9 billion (\$125 million): ¥8.5 billion A tranche at 1.228%; ¥1.95 billion B tranche at 1.489%; ¥1.5 billion C tranche at 2.214%

**Assets financed:** Three new A321-200s

**Lawyers (and role):** Pillsbury (English law for lessee), Clifford Chance (English law for lessor), Nishimura & Asahi (Japanese law for lessor)

**Banks (and role):** Mizuho Securities (bookrunner and structuring agent), DBJ Securities (sales agent and liquidity facility agent), Mizuho Bank (depository), Century Tokyo Leasing and Fuyo General Lease (Jolco equity underwriters).

#### CAPITAL MARKETS – ABS DEAL OF THE YEAR

##### BOC Aviation's \$807.9 million ABS



BOC Aviation closed its inaugural aircraft asset-backed security (ABS) on October 16 2015.

The transaction priced on October 9, after road show meetings across Asia, Europe and North America.

This is the first aircraft securitization done out of Asia, and the second-largest aircraft ABS transaction since 2008.

BOC Aviation placed the equity with a large third-party institutional investor with no equity retention, thereby allowing for accounting deconsolidation.

To finance a portion of the portfolio, the SPC SHNTN 2015-1 issued two tranches of



## “Mesa Airlines’ September enhanced equipment trust certificates (EETC) deal stands out for being the first EETC issued by a regional airline.”

notes, comprising \$747.4 million of 4.75% series-A notes (rated A by Standard & Poor’s and Fitch Ratings) and \$60.5 million of 5.75% series-B notes (BBB, Standard & Poor’s/Fitch Ratings). The tranches both have a weighted average life of 5.8 years, according to documents seen by *Airfinance Journal*.

The class-A tranche has an initial loan-to-value ratio (LTV) of about 71% and an expected tenor of 12.1 years. The class-B tranche has an LTV of about 76.8% and a tenor of 11.7 years.

The source of repayment for the notes will be limited to the aircraft portfolio, the leases and related collateral. A third-party institutional investor from the US acquired 100% of the equity interest via a private placement.

The notes are backed by the 24 aircraft to be acquired from BOC Aviation, which are on lease to 21 airlines in 18 countries. The portfolio comprises 11 Airbus A320-family aircraft, seven Boeing 737NGs, two Embraer E190s, two Airbus A330s and two Boeing 777s. The portfolio has an average age of 4.6 years and average

remaining lease term of 5.7 years. The portfolio has an original appraised value of \$1.05 billion.

Citi acted as the sole structuring agent, global coordinator and sole placement agent of the E-note. Bank of China International and Goldman Sachs acted as the joint bookrunners on the transaction. Deutsche Bank, BNP Paribas and Morgan Stanley acted as the co-managers of the deal. Clifford Chance acted for BOC Aviation, while Milbank acted for the underwriters.

In an interview with *Airfinance Journal* in December, Steven Townend, chief commercial officer (Americas, Europe and Africa), said that the deal was “not a funding exercise” for BOC Aviation because the company had its own investment-grade credit ratings and could issue its own unsecured corporate bonds for a “much cheaper rate”.

He added: “Firstly, it’s a way for us to manage our balance sheet. We’re typically taking delivery of 50 to 60 new aircraft each year and we’re now selling 30 to 40 each year.

“One of the key things the ABS gives us is efficiency and scale – being able to sell in this case 24 aircraft in a single transaction is far more efficient than trying to sell them individually to 24 different investors.” ▲

### CAPITAL MARKETS – ABS DEAL OF THE YEAR

**Entity:** BOC Aviation

**Currency/amount:** \$807.9 million

**Assets financed:** 24 aircraft: 11 A320-family aircraft, seven Boeing 737NGs, two Embraer E190s, two Airbus A330s and two Boeing 777s

**Lawyers (and role):** Milbank (Counsel to Underwriters)

**Banks (and role):** Citigroup (Structuring Agent) Citigroup, Goldman Sachs, Bank of China International (Joint Bookrunners) Deutsche Bank, BNP Paribas, Morgan Stanley (Co-managers) Natixis (Liquidity Facility Provider)

**Date mandated:** October 2015

## REGIONAL JET/TURBOPROP DEAL OF THE YEAR 2015

### Mesa Airlines’ EETC

Mesa Airlines’ September enhanced equipment trust certificates (EETC) deal stands out for being the first EETC issued by a regional airline.

The \$246 million deal also signals the progress the airline has made in recent years. As recently as 2010, the carrier filed for bankruptcy protection under Chapter 11, before emerging the following year as a private airline with about 140 fewer aircraft.

The notes were sold to institutional investors in a private placement that attracted more than 20 bids. Chief financial officer Michael Lotz says the arduous roadshow was the biggest challenge of the deal. “We went to 10 cities and visited about 30 companies in the course of about five days,” he said.

The deal is secured against 10 Embraer E175s, delivering in 2015 and over the first half of this year. They will be operated by United Airlines under a previous capacity purchase agreement that was recently expanded to eight aircraft. *Airfinance Journal* understands United played an active role in the deal.



The airline considered expanding the EETC to cover a further eight deliveries, but decided not to proceed because of the carrying costs involved as the first delivery from this group is not scheduled until June this year.

Before launching the deal, Mesa Air Group had to get a rating from Fitch, which awarded the carrier a corporate credit rating of B.

Speaking about the placement of the notes, Lotz said: “The process went fairly smoothly. We took the companies that gave us the best pricing, closed the deal and we’re ready to look at the next group of eight.”

*Airfinance Journal* understands the airline is evaluating the best financing options for

the next eight E175 deliveries, including another EETC. ▲

### REGIONAL JET/TURBOPROP DEAL OF THE YEAR

**Issuer:** Mesa Airlines

**Structure:** Privately placed EETC

**Currency/amount/coupon:** \$245.9 million: A tranche of \$170.79 million at 4.75%; B tranche of \$44.94 million at 5.75%; C tranche of \$30.26 million at 6.25%

**Assets financed:** 10 Embraer E175s

**Lawyers (and role):** Milbank (underwriters), Smith Gambrell Russell (Mesa Airlines)

**Banks:** Goldman Sachs, Deutsche Bank, Imperial Capital

## “The facility achieved significant cost savings for British Airways, and represented excellent terms in the prevailing market”

### PREDELIVERY PAYMENT DEAL OF THE YEAR

#### Asiana Airlines' PDP financing for four A350s

In March 2015, South Korean carrier Asiana Airlines mandated a sale/leaseback with SMBC Aviation Capital for four A350 XWB aircraft, including predelivery payment (PDP) financing.

The tenor of the financing is 12 years. The aircraft will deliver in 2017. Asiana has 30 of the aircraft type on order.

The deal is the first PDP financing in South Korea and the first PDP financing for A350 aircraft.

Min-Kyu Jeon, deputy general manager, aircraft and supplies purchasing, said: “The A350 aircraft is a symbolic fleet to Asiana, and



will be a leading type for our long-haul routes with A380 aircraft.”

He added: “This deal includes our first four A350s to be delivered in 2017, and we were required to find a strategic partner to achieve our main goal of this deal, which is to include a PDP financing as well as delivery financing.”

Jeon said that one of the challenges he and his team faced on the deal was to find the optimal point of predelivery payment sharing by the

lessor to be satisfactory to both parties. He added that it was also a challenge to complete the deal within the given timeframe to meet the agreed PDP schedule.

In terms of benefits to the airline, Jeon said the deal could have financial benefits in terms of future cash flow and financing burden for the airline's future deliveries of purchased aircraft.

He added that, if Asiana were to do a similar deal again, he would like to find any possibility to make the deal structure simpler. ▲

#### PDP DEAL OF THE YEAR

**Entity:** Asiana Airlines

**Assets financed:** A portion of PDPs for four A350 aircraft scheduled for delivery commencing in 2017

**Lawyers (and role):** Clifford Chance (lenders), Milbank (borrower)

**Lender:** SMBC Aviation Capital

**Date mandated:** March 2015

### COMMERCIAL LOAN DEAL OF THE YEAR

#### British Airways' \$1.75bn revolving credit facility

In June 2015, British Airways closed a landmark \$1.75 billion revolving credit facility that had several aspects which made it stand out and, in the view of the judging panel, merits the award of Commercial Loan Deal of the Year. Some of the details of the transaction remain confidential but there was sufficient information to distinguish it from other candidates in the category.

One innovative aspect was that the revolving facility will only encumber selected security assets as and when the facility is drawn.

It also incorporates two extension options to the five-year term.

The assets used as security include older aircraft, as well as newer models selected from a wide pool of varying ages and types.

At \$1.75 billion, it is believed to be the largest bespoke revolving credit facility for an airline in Europe.

The facility achieved significant cost savings for British Airways, and represented excellent terms in the prevailing market. Closing was achieved in just over a month from the launching of the deal.



MUFG and Citibank were the global bookrunners on the deal and more than 30 other banks were involved, which helped expand British Airways' core relationship banking group.

Mandated lead arrangers included Bank of America Merrill Lynch, Bank of China, BNP Paribas, China Construction Bank Corporation, Crédit Agricole Corporate and Investment Bank, Crédit Industriel et Commercial, Credit Suisse, Deutsche Bank, HSBC, Industrial and Commercial Bank of China, Standard Chartered, SMBC and Royal Bank of Scotland.

Milbank was counsel for the lenders, while Allen & Overy acted for the borrowers.

A source close to the transaction told *Airfinance Journal*: “This was a very significant

upsizing of the previous revolving credit facility on excellent market terms. It used older aircraft and older types as collateral, but nevertheless attracted very wide investor interest. Despite the over 30 banks being involved, the deal was launched and closed very swiftly, and is now a cornerstone of the airline's liquidity plans for the future.” ▲

#### COMMERCIAL LOAN DEAL OF THE YEAR

**Borrower/issuer:** British Airways

**Structure:** Revolving credit facility with security only created when drawn

**Currency/amount:** \$1.75 billion

**Assets financed:** Pool of potential assets of varying ages and types

**Lawyers (and role):** Milbank (lender's counsel), Allen & Overy (borrower's counsel)

**Banks (and role):** MUFG, Citi (global bookrunners), consortium of 30 banks

**Advisers (and role):** MUFG, Citi (arrangers)

**Date mandated:** May 2015

**Date signed:** June 23 2015

**Date closed:** June 23 2015



## “The deal is the first yen-denominated French tax lease supported by US Ex-Im”

### TAX LEASE DEAL OF THE YEAR 2015

#### THY's yen-denominated, US Ex-Im-supported French tax lease

Turkish Airlines (THY) wins this award for a French tax lease, denominated in yen, which was supported by US Export-Import Bank.

The 12-year financing was arranged for THY by BNP Paribas. It supports the delivery to the airline of one 777-300ER, which delivered in September 2015. The total amount of the deal is equivalent to \$140 million.

The deal is the first yen-denominated French tax lease supported by US Ex-Im, according to a source who was involved on the deal. It is also the first time THY has used an Ex-Im-guaranteed French tax lease to support an aircraft delivery since 2008.



The source adds that the combination of tax benefits and the yen denomination resulted in a “very low cost of borrowing” on the deal.

*Airfinance Journal* understands that THY arranged the cash flow structure in yen because it is long in the currency. By switching to yen, the airline is able naturally to hedge its foreign exchange risk by matching its excess yen revenues. After the mandate of this deal, which was agreed in February, THY also used export credit agency-backed debt denominated in a non-dollar currency to finance three new A330s.

Bertrand Rabu, director of aviation finance EMEA at BNP, said: “The bank provided a larger financing than for an ordinary commercial loan, because they were covered by Ex-Im.

We were more comfortable to provide financing in Yen in that case.”

Laurent Tarrieu, Managing Director at BNP Paribas Asset Leasing Solutions, added: “The premium that you have to pay to US Ex-Im is quite expensive, but by having a French tax lease, it made the US Ex-Im financing much more competitive than a commercial loan.” ▲

### TAX LEASE DEAL OF THE YEAR

**Issuer:** Turkish Airlines

**Structure:** Yen-denominated, US Ex-Im-supported French tax lease

**Currency/amount/coupon:** \$140 million

**Assets financed:** One 777-300ER

**Lawyers (and role):** Zuckert, Scouff & Rasenberger (Ex-Im), Pillsbury (THY), Norton Rose Paris (BNP Paribas as lease arranger), Milbank (BNP Paribas as debt arranger), Norton Rose Tokyo (DBJ)

**Banks (and role):** BNP Paribas (lead arranger and lender), Development Bank of Japan (lender and sales agent), Mizuho Bank (depository)

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“The financing was structured through 10 Coface-guaranteed loans arranged by BNP Paribas. The proceeds from the transaction were used to refinance those loans at a lower funding cost to Transportation Partners.”

## EXPORT CREDIT DEAL OF THE YEAR

### Lion Air/Transportation Partners’ \$144m floating rate guaranteed notes due 2025

Lion Group closed a Coface- and Sace-backed capital markets bond issuance of export credit agency (ECA) lease financings for 10 ATR 72-600 aircraft on December 17 2015. The deal also financed a spare parts package, although this was outside the bond.

The \$143.711 million guaranteed floating rate notes are privately placed and due 2025 for Aeronautic Investments 18 Limited, an issuing vehicle set up within an aircraft financing structure for Transportation Partners. The bond is guaranteed by Coface and reinsured by Sace.

In 2014, Transportation Partners (TP) took delivery of 10 ATR 72-600 turboprop aircraft and leased them to PT Wings Abadi and Malindo Airways. The two airlines are part of Lion Group, an Indonesian airline company for which Transportation Partners acts as a captive lessor.

The financing was structured through 10 Coface-guaranteed loans arranged by BNP Paribas. The proceeds from the transaction were used to refinance those loans at a lower funding cost to Transportation Partners.

Allen & Overy advised BNP Paribas, as the arranger, lead manager and bookrunner.

The law firm said it has advised on all of the Coface-backed bonds for aircraft that have been issued to date. This is the first of those bonds to be privately placed.

“What the deal demonstrated is that Coface is particularly focused on facilitating bond issuances,” Tim Conduit, a finance partner at Allen & Overy, told *Airfinance Journal* in December in an interview about the deal.

“There are obviously a number of macro reasons why that’s a good idea. Also, looking towards the Asian market shows a different direction to where Coface has gone before. I think bond guarantees are almost becoming a more routine occurrence for them. They have shown the way for a number of ECAs to do it.”



Conduit added: “Coface have done previous bonds – for example, Emirates – but not only is this outside the Middle East, it is for ATR rather than Airbus aircraft. It’s a well-trodden path to use Coface bonds for Airbus aircraft, so I think this deal does demonstrate diversity.”

“Previous bonds have been listed and this one is a purely private transaction. This demonstrates that Coface are open to different forms of financing and that it doesn’t have to be a public listed bond.”

Nicolas Parrot, managing director, co-head transportation sector, investment banking Asia-Pacific, BNP Paribas, told *Airfinance Journal*: “The deal is interesting because you know well that the US Ex-Im bond market was extremely active up until maybe 18 months ago but the European ECA market was more quiet. The deal has created a new demand for Coface bonds.”

“It was the first bond for ATR aircraft [and] when doing export credit transactions for Airbus aircraft, it is usual for one of the ECAs to act as a fronting agency. With ATR transactions, on the other hand, it is usually 50% Sace and 50% Coface.”

Parrot added: “We told TP that they should insist that Coface was the fronting agency – that was really key to the bond. You don’t have a lot of airlines that can have 10 ATRs that can

deliver closely to each other. With fewer aircraft in the deal it would have been quite expensive.”

Parrot concluded that Lion Air was a little bit hesitant to start the bond documentation without a guarantee on pricing, but BNP Paribas got some investors to commit to a pricing in advance of the documentation being drafted. ▲

## EXPORT CREDIT DEAL OF THE YEAR

**Entity:** Aeronautic Investments 18 Ltd

**Currency/amount:** \$143.711 million

**Assets financed:** 10 ATR 72-600s, plus spare parts package (but this was outside of the bond)

**Lawyers (and role):** Allen & Overy (advising BNP Paribas), White & Case (advising Coface and Sace), Stephenson Harwood (advising Lion Group), Watson Farley Williams (advising ATR), Walkers (advising the lead manager on laws of Cayman Islands)

**Banks (and role):** BNP Paribas (arranger and lead manager for the bond issuance), DBJ and SMBC (existing lenders being refinanced by the bond)

**Export credit agency:** Coface and Sace

**Date mandated:** October 2013

**Date signed:** December 15 2015

**Date closed:** December 17 2015



## “American has taken significant steps in reducing its leverage and refinancing existing debt.”

### AIRLINE OF THE YEAR 2015

#### AMERICAN AIRLINES

*Joe Kavanagh finds out what lies behind the record profits posted by the US carrier*

American Airlines takes the prize for posting record profits, carrying out a large fleet-renewal programme and achieving very efficient financing, all in the wake of one of the most significant airline mergers in recent history.

For the full-year 2015, American posted a net profit of \$6.3 billion, excluding special items. The airline also invested more than \$5.3 billion in new aircraft, taking delivery of 75 mainline aircraft and 52 regional aircraft, financed in part with its March enhanced equipment trust certificate (EETC) issuance, which achieved the lowest coupons for an A and B tranche.

In addition, American has taken significant steps in reducing its leverage and refinancing existing debt.

Speaking about the merger with US Airways, chief financial officer Derek Kerr told *Airfinance Journal*: “It’s been much more successful than we planned, from a financial standpoint. The number one item from an integration point that we’ve focused on is bringing the teams together and making sure that the two teams are on the same page. Doug’s [Parker, chief executive officer] done a tremendous job of doing that.”

He added: “From an integration standpoint, it’s gone really smooth. There was no disruption whatsoever cutting over to the Sabre system. It was a tremendous job by the operating team, the IT team and the integration management team. On the day of the cutover, the teams were sitting around waiting for something bad to happen and it never did.”

He added: “From a financial perspective, the number one item for integration was to make sure that we were financially stable and able to raise



“We are in the process now of negotiating with banks on some aircraft mortgage debt and we are looking at a number of opportunities.”

**Tom Weir, vice-president and treasurer**

low-cost capital for the many aircraft deliveries over the past two years as we implemented our fleet-replacement programme. The new aircraft enabled us to save costs and provide a better product for our customers. Tom [Weir, vice-president and treasurer] and his team did an incredible job of raising cash to fund the aircraft deliveries at very attractive rates.”

Speaking about aircraft financing, Weir said: “The EETC market remains strong. We are always looking for ways to diversify our funding, so we continue to talk to banks and leasing companies about potential transactions. I see the market for those kinds of transactions very similar to last year.”

Asked what financial options the airline is exploring, Weir added: “We are in the process now of negotiating with banks on some aircraft mortgage debt and we are looking at a number of opportunities.” ▲



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“Having received an upgrade in credit rating from Standard & Poor’s to A- in early 2015, the BOC Aviation treasury team completed a number of groundbreaking financing transactions with a focus on the unsecured markets.”

## LESSOR TREASURY TEAM OF THE YEAR 2015

### BOC Aviation

*Mike Duff looks at the deals that contributed to BOC’s exceptional year.*

Having received an upgrade in credit rating from Standard & Poor’s to A- in early 2015, the BOC Aviation treasury team completed a number of groundbreaking financing transactions with a focus on the unsecured markets. BOC’s team raised more than \$2 billion during 2015. This, combined with achieving the lowest average cost of debt among aircraft lessors in *Airfinance Journal’s* Leasing Top 50 survey 2015, win it the Lessor Treasury Team of the Year Award.

### The highlights included:

**\$750 million 144A/Reg S bond issuance (March 2015):** BOC Aviation converted its existing euro medium-term (EMTN) notes programme to a \$5 billion global MTN programme, launching its debut 144A/Reg S bond and allowing it to access the US institutional investor base for the first time. The \$750 million five-year bond was well received, with 50% allocation to US investors and strong demand from Asia and Europe, as shown by a \$5.5 billion order book. Joint bookrunners were BOC International, Citi, HSBC and JP Morgan.

**\$145 million 10-year private placement (May 2015):** The company re-entered the Singapore dollar bond market with a 10-year private placement to several Singapore-based institutional investors. The proceeds were swapped back to dollars at closing. This successful transaction again illustrated BOC Aviation’s ability to tap opportunistically different currency markets to obtain best-in-class funding. The private placement was arranged by HSBC.



**\$300 million Japanese unsecured syndicated term loan (July 2015):** BOC Aviation closed its first unsecured syndicated loan in the Japanese domestic market. This loan was solely arranged by Development Bank of Japan and syndicated to 17 regional and domestic Japanese banks. With secondary transfers, more than 20 Japanese domestic banks now participate in this loan. BOC Aviation was the first aircraft lessor to access this market with an unsecured dollar-denominated loan, and the transaction opened a new source of funding for the company.

**\$500 million unsecured syndicated term loan (December 2015):** After the success of its Japanese transaction, BOC Aviation closed a separate syndicated loan that was mainly marketed to banks in the Asia-Pacific region, excluding Japan. The loan was arranged and syndicated by ANZ Bank, DBS Bank, Commonwealth Bank of Australia and Westpac Banking Corporation. The transaction was overwhelmingly successful – it increased to \$500 million from an original transaction size of \$300 million with 13 banks participating. Participation came from a broad group of banks from all over Asia, such as Bank of East Asia (Hong Kong), Bank of Communications (China), Kookmin Bank (South Korea), Bank of the Philippine Islands (Philippines), Overseas-Chinese Banking Corp and United Overseas Bank (Singapore) and Hua Nan (Taiwan). The transaction confirmed BOC Aviation’s appeal as an attractive name for the syndicated loan market in Asia. ▲

“BOC’s team raised more than \$2 billion during 2015.”

“Over the course of 2015, Emirates took delivery of 29 aircraft – 16 A380s, 12 777s and one 777 freighter – about 50% on balance sheet and 50% off.”

## AIRLINE TREASURY TEAM OF THE YEAR 2015

### Emirates

*Jack Dutton speaks to Huzaiifa Ayaz, treasury manager, aircraft financing at Emirates, about diversifying his airline's funding and his highlights of 2015.*

Emirates had a busy year in 2015, achieving several milestones on its mission to diversify its funding.

“Clearly, the stand out has to be the Ukef [UK Export Finance] sukuk bond we closed,” Huzaiifa Ayaz, treasury manager, aircraft financing at Emirates Airlines, tells *Airfinance Journal*. “It was one of a kind and was something where we pushed the envelope. Nobody has been there before and has taken the extra effort to expand the investor base on the Ukef guarantee.”

The \$913 million Ukef-guaranteed sukuk (see Middle East Deal of the Year) funded the delivery of four new A380s. It was the first sukuk bond guaranteed by the UK export credit agency (ECA) and the largest capital markets offering in aviation involving an ECA guarantee.

“We knew it would be a challenge, but it was important for us to bring newer investors to the table so that we have this avenue open for future fundings as well.”

Another memorable Emirates deal, which closed at the very end of last year, was a structured sale/leaseback to fund an A380, featuring both Islamic and German investment. The highly leveraged transaction featured a traditional senior loan provided by Deka Bank, a pari-passu senior tranche from Dubai Islamic Bank (DIB) and a 40% Islamic mezzanine tranche from DIB that uses a Murabaha commodities facility to maintain compliance with Islamic law. Emirates has warmed to the structure, more recently closing another similar deal for an A380.

In March 2015, the Dubai-based air-



line also tapped the Japanese markets, closing its first Japanese operating lease with call option (Jolco) financing for one of its A380s. Mauritian lessor Veling arranged the equity, while Crédit Agricole Corporate and Investment Bank acted as Jolco debt arranger. The 12-year deal was special because it allowed Emirates to negotiate an earlier termination option than on a typical Jolco transaction – at year seven and year ten.

Over the course of 2015, Emirates took delivery of 29 aircraft – 16 A380s, 12 777s and one 777 freighter – about 50% on balance sheet and 50% off.

“All our financings for the year have grown, which is pretty much what we’re seeing every year. We have 36 deliveries coming in the next financial year starting in April, so suddenly the task is becoming more and more challenging,” says Ayaz.

“The focus now has been over the last several years to diversify our sources of funding and to look at newer and more diverse avenues to raise money, so we have all of these open and available to us in future years – especially, if one is not available to us at some point in time, you can always look at some of the others to tap into.”

Having one of the largest fleets in the world, Emirates’ treasury team has had to think also about how it is phas-

ing out and trading older aircraft.

Ayaz explains: “We are in the process of phasing out a few of our aircraft. But what has happened to us in the meanwhile is that we are also looking at extending some of the existing aircraft, just to maintain the capacity. We still need some capacity as we’re flying on newer routes. So all of the A330s are in the process of being phased out but some of the 777s that we had are being extended for a few years more.”

Emirates’ well-thought-out financing strategy has shown in the carrier’s 2014/15 annual results, with the airline achieving a net profit of Dh4.55 billion (\$1.2 billion), a 40% rise from the previous year. The airline looks to continue this in the years to come.

Ayaz offers his thoughts for the future.

“We want to continue to do more of the same in these coming years,” he says. “The challenges are bigger, the numbers are bigger, the values are bigger – we’re looking at about eight or nine billion dollars of funding next year, and again, with the more challenging aircraft, the A380s and the 777s. It’s important to keep exploring new avenues and, at the same time, tapping into sources you have tapped into earlier to keep that relationship going as well.” ▲

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## LIFETIME ACHIEVEMENT AWARD

# Breaking the mould

Joe Kavanagh talks to Norm Liu about his career and plans for retirement.

### **Airfinance Journal: How did you get into aviation?**

**Norman Liu:** My first exposure to aviation was as a banker in the early 1980s, arranging leveraged leases and tax-benefit transfer deals on aircraft and other big-ticket assets.

I learned about operating leasing in 1991 at GE Capital trying to sell our minority stake in GPA, the largest aircraft lessor at the time. Because of the Gulf war, there were no takers, so I worked a planes-for-shares swap deal with GPA instead. We booked a nice gain on the shares, plus got a portfolio of young leased aircraft. I was promoted next to head up commercial M&A at GE Capital HQ.

After GPA's failed IPO [initial public offering] and given its high leverage, we then had an opportunity in 1993 to buy GPA back. I was part of a HQ team that concocted a deal cherry-picking a big batch of planes, taking an equity option and buying the organization that managed the fleet for fees. A couple of years later I was asked to join Gecas, thinking it would be a two- to three-year assignment. I was a bit off in the ultimate duration.

### **What was your first job and how did you get it?**

My first job after getting my MBA was working at the securities firm Dean Witter Reynolds as an associate in corporate finance. In the early '80s, the [Wall] street was still a clubby, cottage industry and there were very few hires. Guys had putting greens in their offices and spreadsheets were big paper pads, as the PC was just coming out. The Dow [Jones index] was under 1,000, too.

I didn't really fit the mould as an Asian American, though I wore wing tips and pinstriped suits. Fortunately, I was one of the lucky few who got an offer.

The guy who hired me was an alumni of my same business school, had been a Navy pilot in Vietnam, which was an unusual background, and headed up the project finance unit. I think he liked my engineering undergrad degree, me being different and he thought I was good at math and programming algorithms. Thank heaven for the entry of Lotus spreadsheets!



### **What has made you stay in this industry for this long?**

Financial services was the growth industry starting from the crazy '80s until 2000-plus. Luckily, I advanced over the years and joined GE Capital when it took off in the late '80s



1993

General Electric, Gecas' parent company, buys a stake in Guinness Peat Aviation (GPA), then the largest lessor in the world. Norm Liu assists with the merger, working in GE Transportation's merger department.

1994

GE appoints Jim Johnson as Gecas chief executive officer and president to merge Polaris, GE's existing aircraft leasing subsidiary, and the remaining GPA team working as Gecas, together.

1996

By the mid-1990s Gecas has become one of the world's leading lessors, owning 445 aircraft and managing more than 430 aircraft for investors, giving it a network large enough to place an order worth \$6 billion for Boeing jets.

1997

Henry Hubschman is appointed president and chief executive officer of Gecas.

1998

GE Capital drops option to buy the remainder of GPA. Instead, GPA is sold to Texas Pacific Group, changing its name to AerFi. AerFi is later acquired by debis AirFinance, an affiliate of DaimlerChrysler and then eventually sold in 2005 to Cerberus Capital and subsequently renamed AerCap.

1999

Between 1998 and 2003 Gecas expands into other segments. It starts leasing engines in 1999, financing aircraft by 2000 and converting aircraft into freighters by 2002. It also enters the cargo market and orders regional jets.

“My 2016 priority is to ensure a seamless transition to a new CEO and help customers and the team in any way I can.”

and Gecas in the mid-'90s when aircraft leasing blossomed. With the sell down of much of GE Capital, things have come full circle but, again fortunately, Gecas is still part of the GE mix given the industrial links with the aircraft engines business and our own decent ROE [return on equity].

I really enjoy – and will truly miss – the great people in our space: the Gecas team, the cool aircraft toys and the incredibly global nature of our business.

#### **You joined Gecas in 1995. How has the industry changed since then?**

Gecas has grown 10 times in the last 20 years to nearly \$50 billion in assets and \$1.3 billion in profits. There were so many levers to play in the past – expanding into debt products, going global into the emerging markets, going into fleet niches like regional and cargo or adjacent areas like engines, parts and 'copters. Growth has been harder to come by in recent years given many more competitors and mass airline consolidation, which enables the now larger, more profitable airlines to tap the liquid capital markets. I know this sounds trite – future success will require more packaging of airline solutions, more aircraft sales and trading, more pioneering markets and even faster process speed.

#### **What are the most memorable industry events or biggest turn-arounds since you started?**

9-11/Iraq/Sars and the financial crisis were tough but memorable periods and showed the resilience of this industry and the people. Airlines that were on the brink are now prospering wildly. Fuel helps no doubt, but it's also driven by the huge productivity improvements and revenue/network management by airlines and vastly more efficient OEM [original equipment manufacturer] planes – and engines, of course.

The other notable development is the secular rise of the global emerging consumer. Thanks to our industry, be it network carriers or LCCs [low-cost carriers], billions can now tour and enjoy the wonders of the world. Travel has been democratized and it's no longer just a luxury for the elite.

#### **You are planning to remain as chairman until the end of this year, but what's next?**

My 2016 priority is to ensure a seamless transition to a new CEO and help customers and the team in any way I can. I'm also trying to give back a little to the next generation of aviation professionals by supporting multiple scholarships and fellowships. Personally, I just bought a place in Boca Raton to gain Florida domicile. I'll also maintain a part-year presence in Asia, in Seoul, as my wife is from Korea, and in Singapore and Kuala Lumpur, where I live now.

For 2017, when I turn 60, and beyond – hopefully well beyond – I intend to stay healthy and focus full time on growing my stock and real estate portfolios, which have been decent hobbies in the past.

I will likely do some more private equity investing as well, with an Asean [Association of Southeast Asian Nations] emphasis. Boards or academia might play in the mix as well. The good news is I don't have to sweat the details for the quarter, but have time to develop a well-thought-out plan for the next act. Even though I'll live right on a golf course, I have no interest whatsoever in picking up the sport. Do pop by though if you are ever in Boca. ▲

## GECAS: the past twenty years

2001

The September 11 terrorist attacks devastate passenger demand in the US. Gecas, which has large exposure to US carriers, negotiates favourable creditor positions among US carriers as many begin restructuring. At the same time the lessor focuses more on emerging markets, leading Gecas to open 10 new regional offices.

2006

Gecas expands into airframe parts distribution by purchasing The Memphis Group.

2009

Norm Liu takes over as CEO, Hubschman remains as chairman.

2011

Gecas makes its first order for A320neos and ATR 72-600s.

2013

Gecas orders its first 787 Dreamliner, while Boeing delivers its 350th 737 to Gecas.

2015

Gecas closes the acquisition of Milestone Aviation Group. The \$1.78 billion deal sees Gecas acquire a fleet of 178 helicopters with orders and options for a further 121.

2016

Norm Liu retires as CEO, remains as chairman until the end of the year. He is replaced by Alec Burger, a 25-year veteran at GE including 15 years at GE Capital Real Estate, where he last served as President and CEO.

## AIRCRAFT PROFILE

# Embraer E190 still in demand



Embraer's 100-seater faces challenges from next-generation models of its own family, as well as from those of competing manufacturers.

Embraer's E190 is a member of its E-Jet family and is a stretch of the E170/175 models. The E190 is fitted with a larger wing, larger horizontal stabilizer and a more powerful engine – the General Electric CF34-10E – than the smaller models.

The E190 competes with the Bombardier CRJ1000 and fills a gap in the size category below the Airbus A320 and Boeing 737 families.

Embraer produces two models that can be described as 100-seaters, with the larger E195 having barely 10 more seats than the E190. The larger model has sold less well than E190.

### Future developments

The success of the E190 has been in part because of the absence of a direct competitor for much of its production run. However, Bombardier's new-technology CRJ900 models, plus the development of the A320neo and the 737 Max, have increased the competition, albeit that these new models are all somewhat larger than the Embraer aircraft.

The Brazilian manufacturer has responded by launching the developed and re-engined E2 family, of which the E190-E2 will be the first to enter service. The first E190-E2 was rolled out at Embraer's manufacturing facility in February.

### ISTAT APPRAISERS' VIEWS



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**Gueric Dechavanne,**  
**vice-president,**  
**commercial aviation**  
**services**

The market demand for the Embraer E190 has remained strong over the past 12 months. New aircraft continue to be in demand, as well as used aircraft based on the increased requirement from the US market.

CV knows of only six aircraft listed as available for sale and/or lease, which is about a 40% drop from a year ago. About 5% to 6% of the fleet is in storage. It is CV's opinion that these percentages are low for a regional aircraft type that has been in production for more than 10 years.

Current values have remained stable for new and used aircraft with a slight increase of 2% to 3% over the past 12 months. CV expects this trend to continue over the next six to 12 months, because demand should remain strong for the type.

In looking at the leasing market, the monthly lease rates have also increased by 3% to 7%, depending on the vintage, over the past 12 months. The difference in value between the E190STD and E190AR is about plus or minus 2% with lease rates varying by plus or minus \$5,000 a month, depending on the variant.

### AIRCRAFT CHARACTERISTICS

#### Capacity/range

Max seating	114 at 30-inch pitch
Typical seating	98 at 32-inch pitch

Maximum range (LR version)	2,400 nautical miles (4,445km)
----------------------------	--------------------------------

#### Technical characteristics

MTOW (LR version)	50.3 tonnes
OEW	27.8 tonnes
MZFW (LR version)	40.8 tonnes
Fuel capacity	16,150 litres
Engines	CF34-10E
Thrust	18,500lbs

#### Fuels and times

Block fuel 200 nautical miles (nm)	1,340kg
Block fuel 500nm	2,710kg
Block time 500nm	46 minutes
Block time 4,000nm	83 minutes

#### Fleet data

Entry into service	2005
In service	511
Operators (current and planned)	76
In storage	31
On order	111
Built peak year (2011)	95
Built 2015	19
Average age	6 years

Source: Airfinance Fleet Analyst/Aertransport Data Bank

#### Indicative maintenance reserves

C-check reserve	\$45 to \$50 per flight hour
Higher checks reserve	\$35-\$40/flight hour
Engine overhaul	\$70-\$75/engine flight hour
Engine LLP	\$90-\$95/engine cycle
Landing gear refurbishment	\$35-\$40/cycle
Wheels, brakes and tyres	\$55-\$60/cycle
APU	\$70-\$75/APU hour
Component overhaul	\$180-\$185/flight hour

Source: Airfinance Journal research



## “Low oil prices have contributed to the ongoing popularity of the current generation of E-Jets.”

**Olga Razzhivina, senior Istat appraiser, Oriel**

The introduction of newer, more efficient aircraft such as the Mitsubishi MRJ, the Bombardier CSeries, the Comac ARJ21 and Embraer's own E2 family may affect the E190's future. However, CV believes that any impact on the E190's residual values from the competing manufacturers' aircraft will only occur once the new entrants begin to mature and show signs of real success. CV believes that operators are more likely to shift to the next-generation variant of the E190, which will impact values and lease rates, but we do not expect this trend to happen overnight.

CV still feels the current E190 has a viable future as smaller operators look to develop their markets further using 70- to 100-seat aircraft and move away from 50-seat regional jets. This trend will also not occur quickly, but as more secondary operators get created, we feel the market will show more signs of stability.



**Morten Beyer & Agnew (MBA)**  
**Lindsey Webster, manager, valuations**

Launched in 2004 by Embraer as part of the E-Jet family, the 114-seat E190 found success in a market where larger, heavier aircraft such as Boeing's 737-600 and Airbus's A318, were struggling. The lower weight of the aircraft reduced its payload range capability, but it had better operating economics on shorter, denser routes than other regional aircraft could deliver.

Production of the Boeing 737-600, the Boeing 717 and the Airbus A318 ended shortly after the E190 entered service, and the aircraft operated without a direct competitor until 2011, when Bombardier delivered the CRJ-1000. Despite similar operating characteristics to the E190, the CRJ-1000's late entry to the market has limited it to less than 70 orders.

There are four main variants of the E190, differing mainly in their maximum takeoff weight (MTOW). The most common variants are the E190AR (MTOW 51.8 tonnes), which is most popular in North and South America, and the E190LR (MTOW 50.3 tonnes), which is the preferred model in Europe and Asia. Unlike Bombardier's CRJ competing aircraft family, which is found predominately in North America, the E190 is evenly distributed geographically with no single region accounting for the majority of the fleet. As a direct result of this, the market for the type has been resilient, with available aircraft transitioning to new operators relatively quickly. In addition, the E190 is seen as a viable replacement for older aircraft types nearing retirement, such as the BAe-146 and the Fokker 70, which are found mainly in Europe.

While the current secondary market of the E190 is relatively strong – as of December, the E190 had only 55 orders on backlog – the shrinking backlog can be largely attributed to a combination of North American carriers shifting their fleets towards the smaller E175 because of pilot scope clause agreements, and also to the approaching re-engined E190-E2.

First E190-E2 deliveries are targeted for 2018. While not a clean-sheet replacement, the E190-E2 is likely to have a negative impact on residual values for last-off-the-line E190s, as the economic life of the newest vintages shortens compared to the rest of the fleet.



**Oriel**  
**Olga Razzhivina, senior Istat appraiser**

The Embraer E190 is the second largest and the most successful member of the E-Jet family of small narrowbody aircraft. After the first delivery to JetBlue in 2005,

the E190 fleet grew to more than 520, and some 50 aircraft are on order. The aircraft proved popular worldwide with a variety of airline business models – mainline, regional and low-cost carriers.

Embraer announced in late 2011 the development of the re-engined E2 generation. The E190-E2 is the only variant to retain the same size as its predecessor, with both the E175-E2 and E195-E2 being stretched. Pratt & Whitney geared turbofan engines will power all of the E2 generation.

Low oil prices have contributed to the ongoing popularity of the current generation of E-Jets. At the same time, however, the low fuel cost has reduced the attractiveness of the re-engined version, whose main advantage is the decreased fuel burn. Arguably, this may have contributed to slower sales recently. The E190-E2 has accumulated 77 orders, 50 of which came from lessors.

Nevertheless, as the E190 fleet continues, ageing airlines may choose to upgrade to the E2 to improve their maintenance costs. The current GE CF34-10 engine has proved relatively expensive to overhaul, with costs reaching those of mainline narrowbody engines.

With the oldest aircraft now over 10 years of age, the E190 has started trading on the secondary market. Embraer's in-house lessor, ECC, plays an active role in using pre-owned aircraft to support the manufacturer's sales campaigns. It has been instrumental in helping start-up airlines and supporting the opening of new routes.

Although the parting out of some E190s has taken place, the number of aircraft involved is low, and it is more an indication of high demand for parts than a signal of a trend to large-scale retirements. We expect the current E190 to remain a successful asset, with the E2 model ensuring competitiveness with competing new-generation aircraft. ▲

### VALUES - E190LR, GE CF34-10E ENGINES, MTOW 50.3 TONNES

#### Current market value (\$m)

Build year	2006	2008	2010	2012	2014	2016
CV view	16.5	17.7	20.0	23.0	26.9	33.9
MBA view	16.2	18.4	21.0	24.4	28.4	33.0
Oriel view	14.7	16.2	18.1	20.7	24.1	32.5

Assuming standard Istat criteria. Maintenance status assumes half-life, except for new aircraft, which assumes full-life.

#### Indicative lease rates (\$m/month)

Build year	2006	2008	2010	2012	2014	2016
CV view	180	200	220	240	260	290
MBA view	167-179	180-194	195-209	215-230	237-254	262-281
Oriel view	170	180	190	210	235	280

Monthly rental will vary according to factors such as term and lessee credit.

## DEAL WATCH

## LOANS/FINANCE LEASES

Borrower	Country	Asset	Amount	Structure/status (closed unless stated)	Arranger	Debt/Equity
<b>March 2015</b>						
THY	Turkey	1x737-800	\$47m (CMV)	Jolco	ING, Natixis	ING, Natixis/Century Leasing
British Airways	UK	787-9	\$136m (CMV*)	Jolco		SMBC, Mitsubishi UFJ/Century Tokyo Leasing, Fuyo General Lease
Aircastle	US	Unsecured	\$500m	Senior notes due 2023	Deutsche Bank, BNP Paribas, Citi, Credit Agricole, Goldman Sachs, JP Morgan, Mitsubishi UFJ, RBC	
Air India	India	3x777-300ER	\$155m	PDP finance	Deutsche Bank	
Awes	Ireland	1xA320	undisclosed	Long-term finance	CA-CIB	
Fly Leasing			\$385m	Blind pool	Commonwealth Bank of Australia, Bank of Tokyo-	
Fly Leasing			\$300m	Blind pool	Commonwealth Bank of Australia, Bank of Tokyo-Mitsubishi UFJ, New York Life Insurance Company, National Australia Bank.	
<b>February 2016</b>						
Accipiter	Ireland	42 x narrowbody, 2 x widebody	\$1.2bn	Secured refinancing facility	Syndicate of 11 banks	
Emirates	Dubai	1xA380	\$221m (CMV*)	Jolco	Natixis, Société Générale, DBS, IBJ, CIC, Century Tokyo, MUFJ	
Braathens Aviation	Sweden	3xATR72-600	\$61m (CMV*)	Commercial loan	CA-CIB, DVB Bank	
Alliant Air	US	2xA319 (used)	Undisclosed	Five year recourse debt	Development Bank of Japan (DBJ), Tokyo Star Bank	
ACG	US	Unsecured loan	\$200m (approximately)	Unsecured syndicated yen loan	BNP Paribas, Development Bank of Japan	15 Japanese regional banks
Goshawk	Ireland	17 narrowbodies	\$646m	Recourse facility	Natixis	BNP Paribas, Bank of East Asia, CA-CIB, HSBC
<b>January 2016</b>						
ICBC FL	China	1x737-800	\$48m (2015 CMV*)	French tax lease	CA-CIB, National Australia Bank	
THY	Turkey	4x737-800	\$188m (CMV*)	Jolco	BTMU, Century Leasing	BTMU/Century Leasing
THY	Turkey	4xA321-2000	\$210m (CMV*)	French tax lease/mandated		CIC Helaba, CIC
THY	Turkey	2xA321-2000	\$105m (CMV*)	French tax lease/mandated	CA-CIB	
Minsheng Financial Leasing	China	3xA320, 4x737-800	Undisclosed	Secured loan		DVB, Helaba, ICBC Korea Development bank
SAS	Sweden	5xA320neo (PDP)	Up to \$46m	Revolving credit	DVB	
SAS	Sweden	5xA320neo (PDP)	Up to \$46m	Revolving credit	DVB	

## EXPORT CREDIT DEALS

Borrower	Country	Asset	Amount	Structure/status (closed unless stated)	Arranger/status (closed unless stated)	Debt
<b>February 2016</b>						
Air Cote D'Ivoire	Ivory Coast	4xQ400	\$87m (CMV*)	Secured loan/EDC		
<b>January 2016</b>						
THY	Turkey	2xA330-300	\$209m (CMV*)	CHF-denominated loan	KfW Ipex	
THY	Turkey	8x737-800, 1x777-300ER, 1xGE90	\$567m (CMV*)	euro-denominated French tax lease (Ex-Im)	BNP Paribas	
THY	Turkey	3x777-300ER, 1xGE90	\$513m (CMV*)	euro-denominated French tax lease (Ex-Im)	BNP Paribas	

\* Current market value (as per Air Investor 2016 unless stated)





# DEAL WATCH

## CAPITAL MARKETS

Borrower	Country	Asset/Security	Amount	Structure/status (closed unless stated)	Arranger/status (closed unless stated)	Coupon/Rating
<b>March 2016</b>						
Aircastle	US	Unsecured	\$500m	Senior notes	Deutsche, BNP, Citi, Credit Agricole, Goldman Sachs, JP Morgan, Mitsubishi UFJ, RBC	5.00%
Apollo	US	32 aircraft	\$510m (A:\$395m, B:\$80m, C:\$35m)	ABS	Goldman Sachs	Pricing TBD
<b>February 2016</b>						
EasyJet	UK	Unsecured	€500m	7-year Eurobond	Bank of America Merrill Lynch, Barclays, Société	1.75%
<b>January 2016</b>						
American Airlines	US	22 recently acquired aircraft	\$1.07 billion	EETC		3.57%/AA
<b>December 2015</b>						
Norwegian Air Shuttle	Norway	Unsecured	€125m	Eurobond	Danske Bank Markets, DNB Markets and SEB	7.25%
Air Canada	Canada	5 Boeing widebodies	\$537m (AA:\$295m, A:\$121m, B:\$121m)	EETC	Morgan Stanley, Credit Suisse	AA:3.75%, A:4.25%, C:5.0%/AA:A1, A:A3, C:B+ (Moody's)

## SALE/LEASEBACKS

Borrower	Country	Asset	Lessor/Arranger	Amount	Status
<b>March 2016</b>					
Emirates	Dubai	1xA380	AFC	\$221m (CMV*)	
<b>February 2016</b>					
Aegean	Greece	1xA320	Alafco	\$44m (CMV*)	Closed
Latam	Chile	4xA321	Ping An	\$210m (CMV*)	Closed
<b>January 2016</b>					
Emirates	Dubai	1xA380	EMP	\$222m (CMV*)	Closed



For more extensive deal coverage and lawyers details go to <http://www.airfinancejournal.com/dealsdatabase>

## DEAL PIPELINE (MANDATES)

Borrower	Country	Asset	Structure	Amount	Status
<b>January 2015 to March 2016</b>					
Scoot	Singapore	787s	TBD	TBD	RFP expected mid 2016
Air Cote D'Ivoire	Ivory Coast	5 x A319/A320	TBD		Shortlist imminent
Flydubai	UAE	16 aircraft	TBD	Undisclosed	Mandate expected
Biman Bangladesh	Bangladesh	2x777-200ER	Undisclosed	\$131m (2015 CMV*)	RFP issued
IAG (Vueling)	UK/Spain	3xA320	Jolco	\$131m (2015 CMV*)	RFP issued
Lufthansa	Germany	1xA380, 2xA321	Jolco	Undisclosed	RFP issued

\* Current market value (as per Air Investor 2016 unless stated)

# RATINGS

## AIRLINE FINANCIAL RATINGS

Airline	Fitch	Moody's	S&P
Aeroflot	B+(stable)	-	-
Air Canada	B+(stable)	B1(stable)	B+(pos)
Air New Zealand	-	Baa2(stable)	-
Alaska Air Group	BBB-(stable)	-	BBB-(stable)
Allegiant Travel Company	-	Ba3(stable)	BB(stable)
American Airlines Group	BB-(stable)	Ba3(stable)	BB-(stable)
Avianca Holdings - IFRS	B(neg)	-	B+(stable)
British Airways	BB+(pos)	Ba2(pos)	BB(pos)
Delta Air Lines	BB+(pos)	Baa3(stable)	BB+(stable)
Etihad Airways	A(stable)	-	-
GOL	CCC	Caa1(neg)	B-(neg)
Hawaiian Airlines	B(pos)	B2(stable)	B+(stable)
jetBlue	BB-(stable)	Ba3(stable)	BB-(stable)
LATAM Airlines Group	B+(neg)	Ba2(stable)	BB(neg)
Lufthansa Group	-	Ba1(pos)	BBB-(stable)
Qantas Airways	-	Baa3(stable)	BBB-(stable)
Ryanair	BBB+(stable)	-	BBB+(stable)
SAS	-	B3(stable)	B-(stable)
Southwest Airlines	BBB+(stable)	Baa1(pos)	BBB(stable)
Spirit Airlines	BB+(stable)	-	BB-(stable)
Turkish Airlines	-	Ba1(stable)	BB(stable)
United Continental Holdings	BB-(pos)	Ba3(pos)	BB-(pos)
US Airways Group	-	B1(stable)	-
Virgin Australia	-	B2(Stable)	B+(stable)
WestJet	-	-	BBB-(stable)

Source: Ratings Agencies - 24th March 2016

## AVIATION COMPANY RATINGS

Company	Fitch	Moody's	S&P
Airbus Group	A-(stable)	A2(stable)	A(pos)
Boeing	A(stable)	A2(stable)	A(stable)
Bombardier	B(neg)	B2(neg)	B(neg)
Embraer	-	Ba1(neg)	BBB(neg)
Rolls-Royce	A(neg)	A3(stable)	A(neg)
United Technologies	A-(stable)	A3(stable)	A-(stable)

Source: Ratings Agencies - 24th March 2016

## LESSOR CREDIT RATINGS

Lessor	Fitch	Moody's	S&P
	Fitch	Moody's	S&P
AerCap	BB+(pos)	Ba2(pos)	BBB-(stable)
Air Lease Corp	-	-	BBB-(pos)
Aircastle	-	Ba1(stable)	BB+(stable)
Avation PLC	B+(stable)	-	B(stable)
Aviation Capital Group	BBB-(pos)	-	BBB-(pos)
AWAS Aviation Capital Limited	-	Ba3(stable)	BB+(neg)
BOC Aviation	A-(stable)	-	A-(stable)
CIT Group Inc	BB+(stable)	B1(pos)	BB+(stable)
DAE Aviation Holdings	-	-	B-(stable)
Fly Leasing	-	B1(pos)	BB(stable)
ILFC (Part of AerCap)	-	Ba2(pos)	-
SMBC Aviation Capital	BBB+(stable)	-	BBB+(stable)

Source: Ratings Agencies - 24th March 2016



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# AIRCRAFT ORDERS

## COMMERCIAL AIRCRAFT ORDERS BY MANUFACTURER

	Gross orders 2016	Cancellations 2016	Net orders 2016	Net orders 2015
Airbus*	30	7	23	1,036
Boeing	113	6	107	768
Bombardier	45	0	45	35
Embraer	0	0	0	165
ATR	40	0	40	68

*Based on Airfinance Journal research and manufacturer announcements as of March 26*

## COMMERCIAL AIRCRAFT ORDERS BY CUSTOMER

Customer	Country	Quantity/Type
<b>December 2015 to February 2016</b>		
Pegasus Airlines	Turkey	5x737-800
Air China	China	12xA330-300
Air Niugini	Papua New Guinea	4x737Max
Air Canada	Canada	LoI for 45xCSeries
Philippine Airlines	Philippines	6xA350
Okay Airways	China	8x737Max8, 3x737Max9, 737-900ER
Iran	Iran	40xATR72-600
ANA	Japan	3xA380
Iran	Iran	MoU for 73 Airbus widebody and 45 single aisle
Gulf Air	Bahrain	29xA320neo
Calc	China	2xA320ceo
Air China	China	6x777-300ER
BOC Aviation	Singapore	18xA320neo, 12xA320ceo
IAG	UK/Spain	15xA320neo



## CURRENT PRODUCTION AIRCRAFT PRICES AND VALUES (\$ MILLIONS)

Model	List price	Current market value*
<b>Airbus (2016 price)</b>		
A319	89.6	37.0
A320	98.0	44.2
A321	114.9	52.6
A330-200	231.5	92.3
A330-300	256.4	104.4
A350-900	308.1	144.5
A380	432.6	221.4
<b>ATR (2015)</b>		
ATR42-600	21.6	16.4
ATR72-600	25.9	20.4
<b>Boeing (2015)</b>		
737-700	80.6	36.7
737-800	96.0	47.5
737-900ER	101.9	49.5
747-8 (passenger)	378.5	164.0
777-200LR	313.8	N/A
777-300ER	339.6	163.1
787-8	224.6	118.2
787-9	264.6	136.2
<b>Bombardier (2015 Avitas BlueBook)</b>		
CRJ700	41.0	22.3
CRJ900	46.0	26.3
CRJ1000	49.1	28.1
Q400	30.0	21.8
<b>Embraer (2016)</b>		
E170	41.2	26.9
E175	44.4	29.0
E190	49.1	33.1
E195	52.0	35.1

\*Based on Istat appraiser inputs for Air Investor 2016

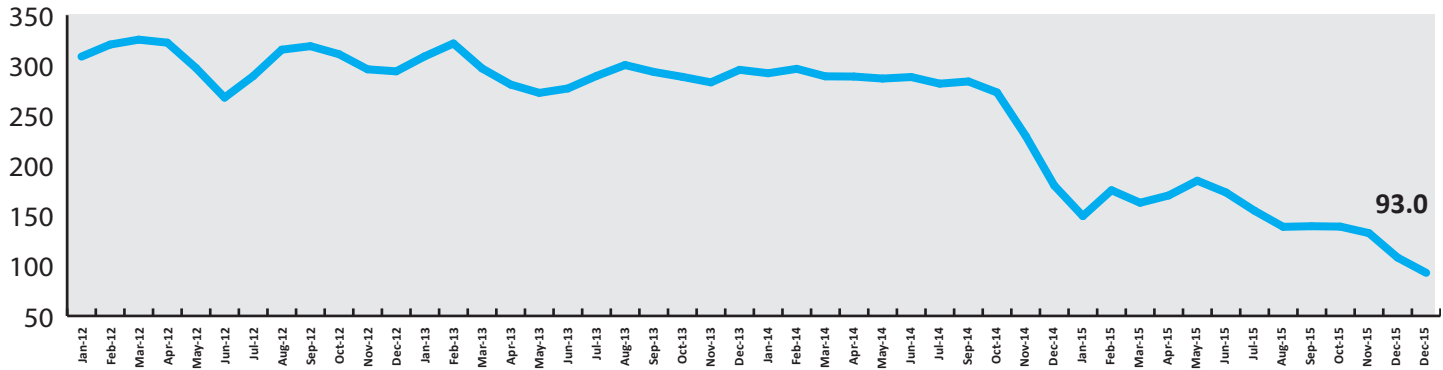
## AIRCRAFT LIST PRICES - NEW MODELS

Model	\$ millions
<b>Airbus (2016 prices)</b>	
A319neo	98.5
A320neo	107.3
A321neo	125.7
A330-800neo	252.3
A330-900neo	287.7
A350-800	272.4
A350-1000	355.7
<b>Boeing (2015)</b>	
737 Max7	90.2
737 Max8	110.0
737 Max9	116.6
777-8X	371.0
777-9X	400.0
787-10	306.1
<b>Bombardier (2015)</b>	
CS100	71.8
CS300	82.0
<b>Embraer (2016)</b>	
E175-E2	50.8
E190-E2	58.2
E195-E2	65.6





## US GULF COAST KEROSENE-TYPE JET FUEL (CENTS PER US GALLON)



Source: US Energy Information Administration

## LEASE RATES (\$000S)

Model	Low	High	Average
<b>Airbus</b>			
A319	230	240	235
A320	280	389	335
A321	360	460	410
A330-200	640	859	750
A330-300	900	1,242	1,071
A350-900	1,050	1,300	1,175
A380	1,175	2,028	1,602
<b>ATR</b>			
ATR42-600	135	167	151
ATR72-600	165	216	191
<b>Boeing</b>			
737-700	225	340	283
737-800	315	421	368
737-900ER	355	435	395
747-8 (passenger)	1,150	1,425	1,288
777-300ER	1,150	1,450	1,300
787-8	850	1,100	975
787-9	1,050	1,250	1,150
777-300ER	1,050	1,550	1,300
787-8	850	1,110	980
787-9	1,190	1,340	1,265
<b>Bombardier</b>			
CRJ700	175	214	195
CRJ900	190	240	215
CRJ1000	210	260	235
Q400	180	240	210
<b>Embraer</b>			
E170(AR)	180	210	195
E175(AR)	200	260	230
E190 (AR)	225	290	258
E195 (AR)	230	300	265

Based on Istat appraiser inputs for Air Investor 2015



## PILARSKI SAYS

# Hard cold reality of Chinese slowdown: predictable and predicted

Investors have only themselves to blame for not seeing the inevitable, writes Adam Pilarski, senior vice-president at Avitas.

Uncertainties in the world affect aviation profoundly. Some factors are obvious, such as signs of recession, terrorism or wars. Others are less obvious, and even counter intuitive.

One of those was the precipitous drop of oil prices, which I discussed in last month's column. This drop was vilified by many Wall Street analysts as a negative and disruptive force in aviation.

The second most commonly mentioned negative factor was developments in China, which, incidentally, I wrote about in my November 2015 column. To demonstrate that this kind of thinking is not confined to the US, let me quote the UK bank RBS, which in January issued a warning to sell everything, saying "2016 will be a cataclysmic year", citing falling oil prices and volatility in China as the "top two red flags for the year".

The basic reply to the supposedly unexpected volatility and decline in growth rates in China is that these developments have not only been predictable but also have been predicted for some time. Nobody should have been caught by surprise, and anybody who made wrong decisions based on predicting that double-digit growth rates would continue indefinitely cannot complain. The situation is quite different from 30 years ago when I predicted long lasting high growth rates for Chinese aviation.

This time my observations were not out of line with the consensus and were based on facts clearly available to everybody. There are three broad reasons why Chinese growth had to abate. These are related to demographic factors, to structural changes in the economy and to statistical factors.

Starting with the population structure, China had been pursuing a policy of allowing only one child for each family for a number of decades. Such a policy created a very different population pyramid where the proportion of people in the labour force has been declining and the proportion of retired people has been rising rapidly. Many other countries have experienced such developments and its consequences are well known.

Many European countries are facing similar problems as did, closer to China, Japan and Singapore. Fewer people supporting more retirees is a clear prescription for declining economic growth. It is interesting to notice the government reaction in Singapore, where 40

years ago the virtues of having only one child were stressed, but already in the 1980s posters appeared showing a bored looking child with the headline: "The most precious gift you can give your child is a brother or sister."

China now acknowledges the negative consequences of its population. Importantly, though, such developments were clearly in the open for a long time. The number of women in China of child-bearing age, say 20 to 30, has been known for exactly 20 to 30 years. Anyone who did analysis on China should not have missed that point.

The second point is related to the Chinese structure of the economy. China had a national investment policy so high it was unprecedented by world standards: this led to huge manufacturing output. Farmers moved to cities to produce products that were then exported.

This is over. The Chinese leadership realized for a number of years that this could not continue because excess farm labour evaporated and wages were increasing. China decided to shift more towards consumption and away from government investment. This policy even has an official name (the "new normal") and has been promoted by the country's leader Xi Jinping. The result is that growth rates will have to slow down.

The third broad reason for the decline in Chinese growth rates is related to some statistical laws. Larry Summers, maybe the most eminent American economist and a former president of Harvard University, published a paper on the topic in 2013. He pointed out that countries which grow at very high rates can continue that for a few decades but eventually will have to accept lower rates. For example, South Korea, Singapore and Taiwan all grew at more than 8% annually between 1969 and 2000. The average annual growth rates for the period of 2011 to 2015 for those same countries fell to about 3%. Similar developments are under way in China and can reasonably be expected to progress in a most predictable way.

All this does not mean there are no great business opportunities in China. It is still an enormous country with the second largest economy and travelling population in the world – and it will continue growing for a long time. But those who did not anticipate the slowdown we are experiencing now only have themselves to blame. All the signs were there, in plain view. ▲



# The Airline Analyst

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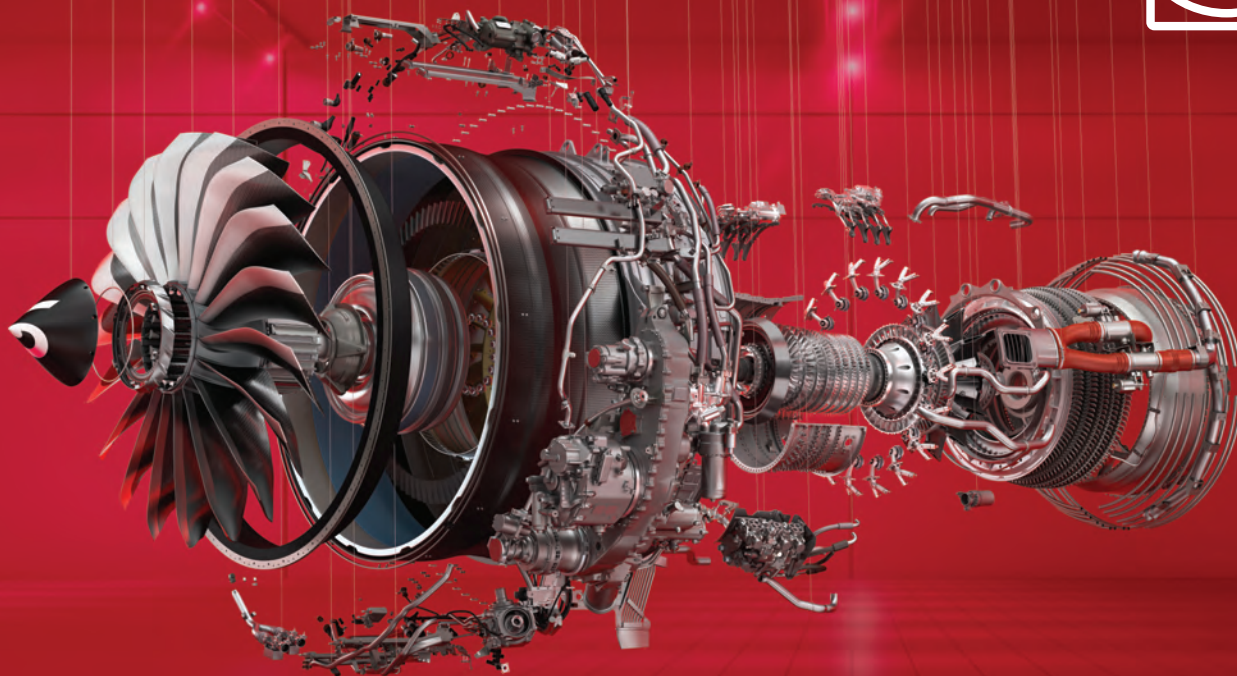
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Airline	TAA Financial Rating						TAA Financial Rating Scores - LTM						Overall Rating Scores		
	Avg Fleet Age	EBITDAR Margin	FCC (%)	Liquidity	Leverage	Avg Fleet Age	EBITDAR Margin	FCC	Liquidity	Leverage	LTM-2	LTM-1	LTM		
Aer Arica	10.1	13.0%	1.3	0.5%	6.2	5	2	2	1	3	1.4	1.3	2.2		
Aegean Airlines	5.7	21.8%	2.1	36.9%	2.3	7	4	4	8	6	2.4	4.0	5.6		
Aer Lingus	7.9	13.0%	3.6	51.4%	0.6	6	2	7	8	8	6.0	6.2	6.2		
Aeroflot	5.9	18.0%	2.4	6.9%	4.2	7	3	4	2	4	3.2	3.5	3.6		
Allegiant Air	10.1	5.2%	0.8	13.1%	8.3	5	1	1	3	2	2.0	2.9	2.0		
Air Arabia	2.8	22.3%	4.9	41.7%	3.4	8	4	8	8	5	5.7	6.6	6.4		
Air Algerie	8.8	17.5%	2.6	12.1%	5.4	6	3	4	3	4	N/A	3.9	3.7		
Air Berlin	5.8	10.2%	0.6	3.6%	13.0	7	2	1	1	1	1.9	1.9	1.7		
Air Canada	13.8	11.9%	2.2	19.1%	3.3	4	2	4	4	5	3.6	3.8	3.8		
Air China	8.0	19.3%	3.0	15.2%	6.9	6	3	5	4	3	5.1	4.6	3.9		
Air France	10.7	9.7%	2.1	9.3%	5.8	5	1	4	2	4	N/A	N/A	2.9		
Air France-KLM	9.5	11.1%	2.2	11.9%	5.1	5	2	4	3	4	2.7	2.9	3.4		
Air Greenland	20.5	14.8%	13.3	5.9%	0.7	2	2	4	3	4	2.7	2.9	3.4		
Air India	7.3	-12.7%	-0.5	1.4%	-24.6	6	1	1	1	1	1.4	1.4	1.4		
Air India Express	8.0	8.9%	0.6	21.2%	14.0	6	1	1	1	1	1.9	1.9	2.3		
Air New Zealand	11.0	13.9%	3.1	4.2%	3.5	5	2	6	1	5	1.9	1.9	2.3		
Air North	8.8	19.6%	5.1	24.6%	1.7	8	3	8	5	7	4.2	5.3	5.8		
Air Norway	17.0	24.0%	2.1	13.5%	3.3	3	3	2	1	3	2.2	2.5	2.5		
Air Transat	11.6	17.9%	1.3	1.4%	7.7	5	3	2	1	3	2.2	2.5	2.5		
AirAsia X	4.3	35.9%	2.8	21.4%	6.9	7	6	5	5	3	7.0	6.1	4.9		
Alaska Air Group	8.0	15.0%	1.3	8.2%	9.5	6	2	2	2	2	N/A	N/A	2.3		
Alliott Travel Company	22.2	25.0%	8.4	28.1%	0.3	5	4	8	6	8	6.0	6.5	6.4		
American Airlines Group	13.2	11.8%	2.1	26.7%	4.9	4	2	4	6	4	2.4	2.9	4.0		
ANA Holdings	10.1	17.6%	3.1	23.3%	3.8	5	3	6	5	5	4.5	5.0	4.8		

To ask for a **FREE DEMO** or further information, contact Harry Sakhrani on +852 2842 6975 or email [hsakhrani@theairlineanalyst.com](mailto:hsakhrani@theairlineanalyst.com)





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