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Financial intelligence for commercial aviation

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EDITOR'S LETTER

Delta bolsters Bombardier

The US carrier's order is a major fillip for the Canadian manufacturer and its CSeries programme, but there are still plenty of concerns.

Bombardier looks to have won a defining order for its CSeries programme. The deal with Delta Air Lines for 75 CS100s is exactly what the programme needed. Indeed, it was an order Bombardier could ill afford to lose.

The manufacturer lauded the letter of intent in February from Air Canada for the purchase of up to 75 CS300s as a breakthrough, and some analysts believed the aircraft was a good fit for the airline. A large part of the industry, though, remained sceptical, wondering if this was not a deal that had as much to do with politics as with the undoubtedly good operating economics of the CSeries.

The Delta deal almost certainly has nothing to do with politics and is all about money. Therein lies perhaps the problem for Bombardier. Analysts have speculated that Bombardier would have had to offer massive discounts to the US carrier to seal the deal. Speculating about what price an airline has paid for its new aircraft is a favourite pastime in the world of commercial aviation, but this time there seems to be some concrete evidence that Delta was indeed offered a very low price.

The Canadian manufacturer has confirmed it will lose $500 million on the firm orders it has received this quarter. In its April 29 results statement, Bombardier wrote: "In conjunction with the closing of these firm purchase agreements, Bombardier will record an onerous contract provision of approximately $500 million as a special item in the second quarter of 2016." This quarter, in addition to the Delta order, airBaltic firmed up seven options it had for the CS300.

But all of this may be a price worth paying or at least one that needed paying. Like all manufacturers, Bombardier covets orders from the large US carriers, and the Delta order comes after the CSeries lost out to the Boeing 737-700 in United Airlines' evaluation and recent purchase. There are not that many US majors to target. Crucially, the latest sales take the CSeries over the 300 mark before its entry into service, a target Bombardier has frequently quoted as a critical number.

Bombardier suggests that the CSeries does not directly compete with Airbus and Boeing models, but United is among recent campaigns that suggest this may not be entirely true.

It is a fact that the smaller members of the 737 Max and A320neo families have not sold well. Bombardier suggests with some vindication that this is because these aircraft are below the optimum size for their designs and, as such, are relatively heavy with the associated cost penalties.

As an all-new design targeted at the lower end of the Boeing and Airbus families, the Canadian manufacturer claims the CSeries is a much more attractive offering for its market segment. This is probably true, although lower fuel prices do not help the case. However, the other possibility and worry for Bombardier is that the average size of aircraft required in the single-aisle market is increasing. That is certainly the view of Airbus and Boeing. The European manufacturer, in particular, is bullish about the A321, which is at the opposite end of the narrowbody scale to the CSeries.

Both generations of Embraer's E-Jet models compete with the CSeries, but the Brazilian manufacturer can more genuinely claim not to be directly competing with Airbus and Boeing, which has probably helped the company's position with the ratings agencies *(see Fitch assigns BBB- rating to Embraer, page 8)*. A significant plus for Bombardier from the Delta deal is the announcement by the US carrier that it would no longer be taking E190s into its fleet as planned.

There is no doubt that the Delta order is a major step forward for the CSeries programme, but there is still a long way to go before any semblance of profitability is achieved. Testament that concerns remain is that Alain Bellemare, Bombardier president and chief executive officer, is still keen that the Canadian federal government invests up to $1 billion in the CSeries. The Quebec government has already agreed to a similar amount, but its investment does look a little safer after Delta's decision.

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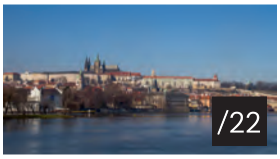

NEWS

People

NAC brings in Madsen as CFO

Nordic Aviation Capital (NAC) has hired a new chief financial officer (CFO) from a Danish mobility and relocation services company.

Michael Østerlund Madsen joined the company as CFO and member of the executive management on March 15.

Madsen held several executive positions in the East Asiatic Company – now known as Santa Fe Group – before joining NAC.

He succeeds Søren Overgaard, who was promoted to chief executive officer in November.

Intrepid has new vice-president marketing

Intrepid Aviation has appointed Stephen Lynch as vice-president, marketing.

Based in the company's Singapore office, Lynch will be responsible for Asia-Pacific accounts. He was previously assistant vice-president commercial.

Mueller to leave Malaysia Airlines

Christoph Mueller, chief executive officer and managing director of Malaysia Airlines Berhad (MAB), will leave the company in September.

The airline said Mueller would be ending his tenure for personal reasons 16 months after taking up the position. His contract was for three years.

MAB has begun its search for a new chief executive, which will include both internal and external candidates.

Mueller took up the top job at MAB in May 2015 to help the airline turnaround after it lost two aircraft in 2014. He was previously chief executive officer of Irish flag carrier Aer Lingus.

Winston & Strawn to expand aviation finance practice

Chicago-based law firm Winston & Strawn is looking to expand its transport practice across North America and Europe, according to the firm's head of transport Bill Bowers.

"We have great ambitions for our transportation finance practice and will be developing our services to include capabilities on high-end structured finance and portfolio acquisitions," Bowers tells *Airfinance Journal*.

He adds that the first step for the firm is to hire one or two partners in New York before looking to expand its transport team in Europe. The firm is also considering adding to its aviation finance presence in the Middle East.

Last month, the firm hired Simmons & Simmons' two remaining aviation lawyers, Mark Moody and Christopher Boresjo. Winston & Strawn now has five aviation partners: one in Chicago, two in New York and two in London.

Boresjo's experience involves operating leases, sales and purchases of aircraft, cross-border loan, and lease agreements and airline joint ventures.

Moody has worked on a wide variety of aircraft finance transactions, including tax-advantaged leases, Islamic financings, sale/leaseback structures and export credit-supported financings.

"We are already helping our airfinance clients complete capital markets transactions in New York, and we're now looking forward to working with Mark and Chris to provide this service to clients globally," adds Bowers.

Although the new partners had done some capital markets deals at Simmons & Simmons, they had not closed any US capital markets transactions.

In an interview with *Airfinance Journal* at Winston & Strawn's London office, Boresjo says: "The additional US capital markets expertise that we now have access to will be hugely valuable to my clients and I expect it to open the door to all sorts of new opportunities."

American Airlines appoints VP financial planning

American Airlines has appointed Heather Garboden as vice president of financial planning.

Garboden will be responsible for the airline's capital and operating budget, long-range financial planning, forecasting systems and the corporate purchasing department. She will report to Devon May, SVP of finance.

Ince & Co launches consultancy

Law practice Ince & Co has launched Ince Consultancy, a firm which will focus on the transport and trade industries.

A company statement said the new consultancy firm would offer a range of services to the shipping, energy, insurance, aviation, trade and real estate industries.

Managing partner Jan Hungar will lead Ince Consultancy. Other members of the team include Regina Langholz (partner and managing director), who is a tax adviser, Daniel Jones (partner), Tim Schommer (partner), Jan Heuvels (partner), Stephen Jarvis (board member) and Alan Hodgson (board member).

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NEWS

People

Air China vice-president retires

Air China's vice-president and executive director Fan Cheung has retired from the company.

The 60-year-old joined Air China Group in July 2004, and has held various positions, including chief financial officer, and chairman of Shenzhen Airlines, according to China Aviation Daily.

Bedaine-Renault to head Natixis team

Bénédicte Bedaine-Renault has been appointed head of aviation finance for Europe, Middle East and Africa (EMEA) at Natixis. She reports to Ramki Sundaram, global head of aviation finance.

Bedaine-Renault will be leading the team in charge of originating aircraft finance deals with all EMEA airlines and lessors. She will also coordinate with other business lines of Natixis for cross-selling opportunities.

Bedaine-Renault was previously director in the Natixis aviation finance team in Paris.

Iera becomes vice-president at EastMerchant London

EastMerchant's London office has hired Diego Iera as a vice-president.

Iera joins the German asset finance specialist from Numera Services, a corporate finance boutique which specializes in the aviation sector, where he was responsible for deal structuring, as well as building and maintaining relationships with investors, banks and airlines.

According to a statement from the company, EastMerchant's recent aviation transactions include structuring investments for seven A380s and five A330s, as well as financing GE90 engines.

Transportation Partners adds to legal team

Transportation Partners has appointed two new staff for its in-house legal team, according to a source.

Ju Xiao Yong joins the Singapore-based lessor as legal counsel from BOC Aviation. Jessie Tan, who formerly worked with Caterpillar, is joining as a paralegal.

Both will report to general counsel Rebecca Cox. Tan was due to start work on April 18 and Ju in mid-May.

The source said that these appointments bring the company's headcount to 15, adding that Transportation Partners expects to add staff to its sales and finance functions before the end of the year.

Michaud joins Falko from Embraer

Falko has brought in a new vice-president, according to a statement from the regional aircraft lessor.

Christophe Michaud will report to Mark Hughes, executive vice-president corporate finance. He will be responsible for acquisition opportunities for the Falko Regional Aircraft Opportunities Fund, which closed in November 2015.

Michaud spent 15 years at Embraer in various sales and marketing roles. Most recently, he was sales director for Africa.

BeauTech hires former Willis Lease CFO

BeauTech Power Systems has appointed Brad Forsyth as its chief financial officer (CFO).

Forsyth was most recently CFO at Willis Lease Finance Corporation, a position he held from 2007.

BeauTeach is a regional aircraft engine lessor which has its headquarters in Dallas, Texas.

Acumen appoints global head of trading

Acumen Aviation has appointed Eamonn Cronin as global head of trading and remarketing.

Cronin has more than 20 years' experience in aviation. He was previously on the board of Octagon Aviation Capital, a start-up leasing operation based in Ireland. He also helped found Eirtrade Aviation Ireland and has held executive commercial positions with Awas, Orix Aviation and SR Technics.

Cronin will be based at Acumen's head office in Dublin, and will join the aviation consultancy's global business development team.

Natixis hires Avolon's Woon

Natixis has appointed Wui Jin Woon to a senior role in its aviation team in Singapore, according to sources.

Woon's previous role was managing director, capital markets Asia-Pacific, for Avolon Singapore.

Other senior members of Natixis Singapore's Asia-Pacific aircraft finance team include Jean Chedeville, director, aircraft finance, and Jean-Francois Lascombe, deputy head of aircraft, export and infrastructure finance.

Hawaiian promotes Villamil

Hawaiian Airlines has promoted Noel Villamil to vice-president of financial planning and analysis.

Villamil will lead financial planning, forecasting and projects, and will oversee the airline's financial governance and capital budgeting processes.

He joined the carrier in 2012.

NEWS

Airlines

Fitch upgrades Hawaiian Airlines

Fitch Ratings has upgraded Hawaiian Airlines, and its parent company Hawaiian Holdings, from B to B+, the agency has announced.

Fitch says the upgrade is supported by the carrier's lower capital spending, maturing international routes, and improved operating margins caused by low fuel prices. This year Fitch expects further improvement to the airline's credit.

United resolves board battle

United Continental Holdings has resolved a dispute with two of its investors by agreeing to appoint two designees to its board of directors.

Under the deal with Altimeter Capital Management and PAR Capital, Edward Shapiro and Barney Harford will join the board immediately. Shapiro is a managing partner at PAR, while Barney Harford is the former chief executive officer (CEO) of Orbitz Worldwide.

In return, Altimeter has agreed not to nominate directors at United's 2016 annual general meeting.

In March, three new independent directors joined the United board: James Kennedy, former president and CEO of T Rowe Price Group; Robert Milton, former chairman and CEO of Ace Aviation Holdings and former president and CEO of Air Canada; and James Whitehurst, president and CEO of Red Hat and former chief operating officer at Delta Air Lines.

Meanwhile, three existing directors have said they will retire at the 2016 annual general meeting. That means seven of the company's 14 directors will be new to the board since March.

Saudia to launch new budget airline

Saudia, the national flag carrier of Saudi Arabia, is looking to launch a budget subsidiary airline in mid-2017, according to Saudi media reports.

The airline, operating under the name of flyadeal, will have its headquarters in Jeddah, and looks likely to begin with a fleet of one A320, Saudia director-general Saleh Al-Jasser said at a press conference. Al-Jasser added that the airline would serve both domestic and international flights.

Cathay: other airlines have benefited more from low fuel prices

The current low fuel price environment has not helped Cathay Pacific Airways as much as other carriers because of its hedging programme, said a senior executive at the airline.

Mark Sutch, general manager cargo, sales and marketing at the Hong Kong flag carrier, said: "We have a very, very big hedging book – it's public knowledge. The hedging hit that we took on the market in our last annual results was very clear. It's not an excuse – it's just a position we have and something we believed in the past has worked in our favour."

He added: "From the business point of view of Cathay, the low fuel price hasn't really helped us the way it has other carriers."

Sutch was speaking on a panel at the Cargo Facts Asia 2016 conference in Hong Kong.

China Eastern predicts up to 70% net profit growth

China Eastern Airlines said it predicts a net profit growth of 60% to 70% in the first quarter of 2016, according to China Aviation Daily.

The Shanghai-based carrier reported net profit of Rmb1.564 billion ($241 million) in the first quarter of 2015.

The airline attributed the profit hike to robust air traffic demand, lower fuel prices, as well as improved operational efficiency.

Oman Air considers widebody order

Oman Air is in negotiations with Boeing and Airbus for an order for either 787s or A350-900s, according to the airline's chief executive officer Paul Gregorowitsch.

Speaking at a press conference in London, Gregorowitsch told reporters that he looks to reach a final decision on which widebodies to order by 2018, and that the new widebody aircraft will replace some of the carrier's A330s.

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NEWS

Airlines

Oman Air operates two A330s on its London Heathrow-Muscat services and will be taking delivery of 12 of the aircraft type in 2016.

Gregorowitsch added that the carrier plans to sell four E175s by July, completely phasing the regional jet out of its fleet. He cited potential interest from Iranian carriers.

He also saw great potential from Iran as a destination for his airline. He said: "I see Iran being a major part of our network over the next three years. Oman Air is in a unique position to offer the connections to that market."

Gregorowitsch also said he wants the carrier to stop receiving government funding by 2017.

He said: "In 2015, we received a OR64 million [$166.2 million] injection from the government and contributed OR440 million to the national economy. This year, we project we will have a OR34 million injection from the government and contribute OR440 million to OR450 million to the economy. In 2017, we project that we will need no capital injection from the government, while contributing between OR440 million to OR450 million to the economy of Oman."

Atlas Air completes Southern Air acquisition

Atlas Air Worldwide Holdings, the parent company of Atlas Air, has completed the acquisition of Southern Air Holdings, according to an airline announcement.

The deal was a debt-free cash transaction valued at about $110 million, the statement added.

The combined companies will have a fleet of more than 75 aircraft. Southern Air's fleet of five 777s and five CMI-leased (crew, maintenance and insurance) 737s will join Southern Air's fleet of 747s, 767s and a dry-leased portfolio of 777, 757 and 737 freighter aircraft.

Atlas Air agreed to buy Southern Air in January.

Malaysia Airlines records February profit

Malaysia Airlines reported a profit in February, the financially troubled airline's chief executive officer Christoph Mueller told the Associated Press in an interview. Mueller described the airline as a ship that has many leaks, but said the monthly profit was a sign that things are on the right track. He said revenues have improved and costs are down, underpinned by low jet fuel prices.

"Our target is to break even by 2018," said Mueller.

"For a company that lost two billion ringgit [$511 million] just last year, if you are able to break even for a month or so, it means the financial gap between revenue and cost has significantly closed, and that is good news that tells us that we are on the right trajectory," he said.

He added the company is focusing on Asia, the strongest market for international air travel, so that it can leave strong footprints in the region.

"The ambition of Malaysia Airlines is to grow again when we can afford growth," he said. "If you grow as a loss-making airline, you just increase the losses."

Air Guilin gets preliminary AOC approval

Air Guilin has received preliminary approval for receiving its air operator's certificate (AOC), according to a statement from the Civil Aviation Administration of China.

The airline, based in Guilin City, has a registered capital of Rmb600 million ($100 million) and is owned by Guilin Tourism Development Corporation (60%) and Guilin Aviation Tourism Group (40%).

The carrier has received approval to introduce three A319s obtained from Beijing Capital Airlines, including two purchased and one under operating lease.

Air Guilin's chairman is Hu Mingbo, who is also the chairman of Beijing Capital Airlines.

AAG to acquire Virgin America in $4bn deal

Alaska Air Group (AAG), the parent of Alaska Airlines, will acquire Virgin America, the airline group announced.
AAG will acquire the US carrier for $57 a share in cash. The total value of the transaction is about $4 billion, after including existing Virgin America debt and capitalized aircraft operating leases.

AAG said the acquisition would enlarge the group's west coast presence, increase its customer base and help it provide more choices to customers and deliver attractive returns to investors.

The combined airline will have 1,200 daily departures, with hubs in Seattle, San Francisco, Los Angeles, Anchorage in Alaska and Portland in Oregon.

It will have about 280 aircraft, which include regional aircraft, with an average age of 8.5 years.


E190-E2 ROLLOUT – FEB 25, 2016.
EMBRAER
E190-E2
PR-ZEY
E2
HISTORY IN THE MAKING.
The hangar doors opened wide. The wheels turned. And our brand new E190-E2 rolled out to a standing ovation. For those in attendance, it was a moment both joyful and historic. Because it marked the world's first glimpse of the second generation of E-Jets — a highly evolved new family of airliners that builds on the historic success of our first generation. Now, we truly are on a roll. And ready for E-Jets to make history. Again.
EMBRAER
Commercial Aviation

NEWS

Manufacturers

ORDERS IN BRIEF

Delta orders 75 CS100s

Delta Air Lines has placed a firm order with Bombardier for 75 CS100s.
The carrier also has options for an additional 50 aircraft and some flexibility to substitute some orders for the larger CS300.

Delta says that, due to the CSeries order, it will no longer bring E190s into its fleet as planned.

The first CSeires will enter into service with Delta in Spring 2018.

The manufacturer has also announced that Latvian flag carrier airBaltic is converting its remaining seven CS300 options to firm orders.

Garuda Indonesia to take 14 A330neos

Garuda Indonesia has confirmed an order with Airbus for the purchase of 14 A330-900neo aircraft.

The Indonesian flag carrier plans to use the aircraft to develop its medium- and long-haul network. It replaces an existing order for seven A330-300 aircraft. The A330neo models will be delivered from 2019 onwards.

The A330-800neo and the A330-900neo are two new members of the Airbus widebody family with first deliveries scheduled to start in the fourth quarter of 2017.

Emirates opts for two more A380s

Emirates has ordered an additional two A380s from Airbus in a deal that will take the Gulf carrier's total number of orders for the widebody to 142.

The new jets are expected to deliver in the fourth quarter of next year.

Tim Clark, the airline's president, said: "From now until the end of 2017, Emirates will retire 30 older aircraft from our fleet. At the same time, to meet our growth expectations, we will receive delivery of 24 new Boeing 777 and 33 new A380 aircraft, including these two additional A380 aircraft just ordered."

Fitch assigns BBB- rating to Embraer

Fitch Ratings has assigned first-time BBB- foreign and local currency long-term issuer default ratings, BBB- unsecured ratings and AAA(bra) National Scale ratings to Embraer.

According to a statement by the agency, Fitch's actions affect about $3.5 billion of debt outstanding as of December 31. The agency says Embraer's ratings reflect its competitive positions in the commercial and business jet markets and its large order backlog ($22.5 billion) that covers several years of sales.

Embraer's solid liquidity profile and its large export revenues, combined with some offshore operating cash flow, further support the BBB- ratings, according to the statement. Fitch does, however, raise some rating concerns, citing significant competition in both the commercial and business jet markets, ongoing heavy investment and risks of potential delays related to new aircraft programmes as potential problems. The agency also mentions possible new entrants into the commercial jet market as a risk factor and points to significant exposure to BNDES (Brazil's export finance organization), which the agency says finances more than 40% of Embraer's aircraft sales.

On April 19, Standard & Poor's reaffirmed Embraer's BBB rating, which corresponds to investment grade. The agency also removed the negative credit watch classification from the rating.

According to the manufacturer's first-quarter results, it delivered 21 jets to the commercial aviation sector and 23 to the business aviation market. The 44 aircraft represent a 37.5% increase over the previous year.

An agreement signed with Horizon Air, a subsidiary of Alaska Air, for 30 E175 jets with options for another 33 aircraft of the same model will be included in the second-quarter results. The Horizon order is valued at $2.8 billion at list prices, if all options are exercised.

CFM delivers first production Leap-1A engines to Airbus

CFM International delivered the first two production engines for Airbus on April 2. According to the manufacturer, this delivery paves the way for installation on the first customer aircraft and for entry into service by mid-year. The identity of the customer that will take the initial Leap-powered A320neo has not yet been confirmed.

The engines completed final assembly at the Snecma (Safran) facility in Villaroche, France.

The Leap-1A flew for the first time on the Airbus A320neo on May 19 2015. A second A320neo was added to the test programme last September and, in February, the Leap engine was the first to power the new A321neo.

Nesma Airlines becomes new ATR operator

Nesma Airlines took delivery on April 1 of its first two ATR 72-600s. The aircraft will operate in Saudi Arabia, where the airline is developing regional connectivity with the support of the national government. The two aircraft, which were delivered at the ATR manufacturing facilities in France, are leased from Dubai Aerospace Enterprise.

Nesma Airlines and ATR also signed an eight-year global maintenance agreement. Under this deal, ATR will provide Nesma with comprehensive technical support for its ATR 72-600 aircraft. The agreement includes a spare parts inventory on lease at the airline's premises, access to ATR's spare part exchange pool and the management by ATR of the maintenance, repair and overhaul of propellers, engines, landing gears and line replaceable units.

In addition to the availability and repair services, ATR will also handle airframe maintenance for C-checks and calendar inspections of the aircraft.

NEWS

Manufacturers

MRO NEWS

Aelis Group and Vallair offer ATR freighter

Asset manager Aelis Group and disassembly company Vallair have joined forces to offer ATR freighter aircraft, according to a statement from the Slovakian asset manager.

Vallair is a disassembly and end-of-life specialist with offices in France and Luxembourg.

According to the statement, the two companies will collaborate to offer expertise in identifying and purchasing the most suitable ATR for cargo conversion, contracting the fastest and most reliable maintenance, repair and overhaul for the cargo conversion and in offering the market fully converted cargo aircraft and the support of new owners and operators up to aircraft delivery.

Philippe Lienard, chief executive officer, Aelis Group, said: "Together with Vallair, we can supply the ATR cargo operators with aircraft fully ready for operations. Along with our network of financiers, we are ready to offer the aircraft for lease or sale. This aircraft module offers up an 8.5-tonne payload in a 75-metre3 volume, with the cheapest direct operating cost and highest dispatch in the turboprop category. The market perspective for ATR cargo is bright, and it has never been easier to acquire such an aircraft."

Cathay signs A350 support agreement with Airbus

Hong Kong's Cathay Pacific Airways has signed up with Airbus for a flight-hour-based component support plan for the 48 A350s it has on order with the manufacturer.

The agreement covers guaranteed spare parts availability, maintenance and logistics services at Cathay Pacific's main base and selected outstations, as well as flight simulator support. The agreement also covers the purchasing and planning of the airline's A350 expendables inventory, which will be outsourced to Satair, Airbus's materials management subsidiary.

NEWS

Financiers

NAC to acquire Aldus Aviation

Nordic Aviation Capital (NAC) has agreed to buy Ireland's Aldus Aviation, according to a statement from the Danish lessor.

Founded in 2008, Aldus Aviation has a fleet of 30 Embraer E-Jets and will eventually operate under the NAC brand.

NAC acquired US lessor Jetscape in March, bringing into its portfolio 28 owned E-Jets, commitments for 11 E-Jets and a further 18 of the type under management.

After the acquisitions of Aldus and Jetscape, NAC has a portfolio of 294 aircraft, plus an additional 48 managed aircraft.

Clifford Chance represented NAC, while Allen & Overy represented Aldus Aviation.

Aircastle to remove Russian exposure

Aircastle will remove its final two aircraft from Russia this year, the leasing company's chief executive officer has said.

Speaking to delegates at the 36th Annual North America Airfinance Conference in Miami, Ron Wainshal said the lessor would have zero aircraft on lease to Russian carriers in "about a year".

He added that the lessor had 10 aircraft on lease to a Russian carrier at the end of 2014, but now has only two aircraft in the country.

Aircastle recently announced it had closed or committed to more than $850 million of new investments for 2016. The deals, nearly all of which are expected to close by the end of the third quarter, include 29 aircraft, 26 of which are narrowbodies.

AerCap does deals for 131 aircraft in 2016 first quarter

AerCap has leased, purchased and sold a total of 131 aircraft in the first quarter of this year, according to a statement from the Dutch lessor.

The company signed lease agreements for 100 aircraft, made up of 23 widebodies and 77 narrowbodies, and purchased six aircraft, comprising five 787-9s and one 737-800.

During this period, AerCap also executed sale and part-out transactions for 25 aircraft: three A320-200s, one A321-100, three 737NGs, one 737 Classic, two 747-400s, two 757-200s, three 777-200ERs and four CRJ900s from its owned portfolio, and one A330-300, one A340-300, two 737 Classics, one 757-200 and one 777-200ER from its managed portfolio.

LEASES IN BRIEF

Air Pegasus takes ATR 72-500

Indian carrier Air Pegasus has taken delivery of one ATR 72-500 on lease from Nordic Aviation Capital.

The lessor told Airfinance Journal that the turboprop is 2007 vintage, but did not reveal the length of the lease.

Eastar Jet leases second MCAP 737-800

Eastar Jet took delivery of a 737-800 from MC Aviation Partners (MCAP) on April 8.

The jet is the second of four aircraft MCAP plans to deliver to the South Korean low-cost carrier this year. The remaining aircraft are scheduled to be delivered before this summer, according to a statement from the Japanese lessor.

Airfinance Fleet Analyst indicates that all the aircraft are of 2012 vintage.

Eastar Jet has been operating an all-Boeing 737 fleet since 2009 from Gimpo, Incheon and Cheongju airports to 21 domestic and international destinations in South-East Asia and the north-east part of the region.

S7 agrees deal for Neos

S7 Airlines has agreed to lease five A320neo-family aircraft from US lessor Air Lease Corporation (ALC), according to an announcement by the airline.

The aircraft are scheduled to begin delivering in spring 2017. Airfinance Journal understands the aircraft are from ALC's order book, because according to the manufacturer's orders and deliveries report, S7 only has orders with Airbus for A320-family Ceos.

According to Airfinance Fleet Analyst, S7 operates a fleet of 55 aircraft. The fleet mostly consists of A320-family Ceos, but the airline also operates 10 737-800s and two 767-300ERs on lease from Awas.

Air Canada takes Nordic Q400

Air Canada has agreed to lease a Dash 8-Q400 from Nordic Aviation Capital.

According to Airfinance Fleet Analyst, the 2011-vintage aircraft was previously on lease to US carrier Republic Airlines.

Secured financing still challenge for Japanese regional banks

Secured financing still presents a challenge for regional banks trying to enter the aircraft financing space, according to two senior Japanese bankers. Speaking on a panel at the 5th Annual Airfinance Conference in Tokyo, Daisuke Kawasaki, head of Europe, the Middle East and Africa and Asia-Pacific, at Development Bank of Japan, said that while unsecured financing is attractive for Japanese regional banks, secured financing still takes time.

"Unsecured financing doesn't take much time," he said. "You don't have to do things like analyze assets, etc. Of course, there are some major regional banks who can deal with that secured financing, but still the number who can accommodate it is limited. We would like to grow it more and more."

Shin Watanabe, general manager, global aircraft finance department, international banking unit at Sumitomo Mitsui Banking Corporation, said regional banks have a "lot of potential", but it is not easy for them to be fully equipped for secured financing.

"Regional banks are still happy to stay at the secondary trading level," he said. "I think we need to have a bit more deep thinking about the best way of working together with those regional banks."

NEWS

Financiers

Gecas looks to place two ATR 72s

Gecas is looking to place two ATR 72s with new operators, after an unplanned return of the turboprops from the former operator, according to Chris Damianos, executive vice-president, marketing – specialty markets, at Gecas.

Damianos added that the turboprops are two and three years old.

Asked by *Airfinance Journal* at the ERA Conference in Prague whether Gecas was considering making a new order for regional jets, Damianos said: "We have no order [for regional jets] imminent but we are in constant dialogue with all the manufacturers, including the likes of ATR, Bombardier and Embraer."

9 Air restructures two 737-800 leases

Juneyao Airlines subsidiary 9 Air has closed the restructuring of the operating leases of two 737-800s from Gecas, according to a source.

Harvest International Financial Lease, a leasing subsidiary of Juneyao Airlines, arranged the restructuring.

The source said that the purpose of the restructuring is to "vest" the lease into the Tianjin Free Trade Zone (FTZ) so that the sublessor can get the tax refund in accordance with the current tax policy in the FTZ.

"Thus, the lease cost can be reduced if the sublessor and sublessee agree to share the refund," said the source.

The new structure is a lease-in/lease-out at the free trade zone.

Biman BANGLADESH AIRLINES LTD.

HEAD OFFICE, BALAKA, KURMITOLA, DHAKA-1229, BANGLADESH, PHONE-88 02 8901730-44, 88 02 8901600FAX-88 02 8901558, www.biman-airlines.com

Ref: DACBK/Delivery Refinancing DP/ 737/800/ Senior/2016/201 Date: 21 April 2016

NOTICE

Request for Proposal (RFP)

Senior Loan for Refinancing of Delivery Payment for

1st Boeing 737-800 (MSN: 40334) aircraft delivered to Biman

Biman Bangladesh Airlines Ltd. (Biman) has entered into an agreement with the Boeing Company ("Boeing") for the purchase of 2 (two) Boeing 737-800 aircraft ('the Aircraft") which were delivered in November 2015 and December 2015.

- The first 737-800 (MSN:40334) aircraft was acquired directly and registered under the ownership of Biman Bangladesh Airlines rather than an SPC (Special Purpose Company) as required pursuant to the Ex-Im FC. It can be converted to SPC subject to approval from Ex-Im Bank.

2. Biman seeks offer from reputed financial institutions for Delivery Financing for the Aircraft in either of the following form:

(a) Invitation – Senior Commercial Loan ("the Senior Loan") Financing

The financing shall be in US Dollars for a 12 years term for up to USD 45.50 Million. The loan will be supported by a guarantee from the Government of Bangladesh. The form and structure of the loan and the guarantee will be as agreed with Biman and the Government of Bangladesh; or

(b) Invitation – Ex-Im Bank Guaranteed Loan Financing.

Purpose of Financing	Term Loan to finance the senior portion of the net delivery price of aircraft plus 100% of Ex-Im Bank Exposure Fee.
Estimated Amount of Financing	Aggregate amount of Ex-Im Bank guaranteed financing including the exposure fee will be up to USD 45.50 Million
Term of Guaranteed Loan	12 years from respective aircraft delivery dates.
Currency of Financing	US Dollars

(c) Invitation- Combination Senior Commercial Loan and Ex-Im Bank Guaranteed Loan Financing

3. Detailed information is available in the RFP Schedule, which may be viewed at Biman's website: www.biman-airlines.com. For further information or query. Controller of Accounts. Biman Bangladesh Airlines Ltd, may be contacted at Telephone: +8802-890-1590. Cell: ++88-01-7777-5526, e-mail: controller@bdbiman.com during the office hours.

4. The proposal/offer should be submitted at the latest by 1000 hours BST (0400 hours UTC) on 06 June 2016 addressed to Controller of Accounts, Biman Bangladesh Airlines Ltd., Head Office, Balaka, Dhaka, Bangladesh through Courier Service or E-mail at finance-737-800-sl2@bdbiman.com . The proposal(s)/offer(s) will be opened on the same day immediately after the closing time. No proposal/offer would be accepted after the closing time on the date specified above. Biman Bangladesh Airlines Ltd. would not be responsible for late receipt of any proposal/offer due to any reason whatsoever.

5. Biman Bangladesh Airlines Ltd. reserves the right to accept or reject any or all proposal(s)/offer(s) partly or wholly at any time and /or stage without assigning any reason whatsoever and no claim shall be entertained in this regard.

(Md Mizanur Rashid)

General Manager Cost, Budget, FMIS & MAE&S (Acting)

NEWS

Deals

BOC Aviation prices $750m 10-year notes

BOC Aviation has issued $750 million 10-year fixed-rate Rule 144A/Regulation S senior unsecured notes due 2026.

The transaction was issued under the Singapore-based lessor's $5 billion global medium-term note programme.

BOC International, Citigroup, Goldman Sachs, HSBC, JP Morgan, Morgan Stanley, BNP Paribas and Wells Fargo Securities were the joint bookrunners for the issue.

The notes will bear a fixed-interest coupon of 3.875% a year, with interest payable semi-annually in arrears.

BOC Aviation said in a statement that there was "strong interest" from institutional funds, pension funds and insurers with orders of more than $3.2 billion. The lessor will apply the net proceeds to fund capital expenditure, refinance existing borrowings or for general corporate purposes.

The notes will be listed on the SGX-ST, and will be rated BBB+ by Standard & Poor's and A- by Fitch.

The notes were allocated to 203 accounts in Asia (72%), the US (16%), as well as Europe/Middle East (12%).

BOC Aviation has a portfolio of 270 owned and managed aircraft leased to 62 airlines worldwide in 30 countries, with commitments to acquire 241 aircraft, as of December 31. The lessor is owned by Bank of China and based in Singapore, with offices in Dublin, London, Seattle and Tianjin.

DELIVERIES IN BRIEF

Aeroflot receives SSJ100

Aeroflot has taken delivery of a new Sukhoi Superjet 100 on a finance lease from Russian lessor Sberbank Leasing.

Aeroflot signed a memorandum of understanding for 20 of the Russian-manufactured aircraft in January 2015.

SAS takes fourth Bocomm A330-300 on sale/leaseback

Scandinavian Airlines has taken delivery of its fourth A330-300 on lease from Bank of Communications Financial Leasing (Bocomm Leasing), according to a statement from the Chinese lessor.

This delivery is the final one in a deal to lease four A330-300s from Bocomm Leasing. All four of the aircraft are on 12-year sale/leasebacks.

Small Planet Airlines gets A321

Small Planet Airlines, a Lithuanian charter airline, has received an A321 on lease from AviaAM Leasing.

According to an announcement from the lessor, the 2006-vintage aircraft is the first from a four-aircraft deal between the airline and lessor. The remaining three aircraft are scheduled for delivery this year.

ANA closes deal for three 737-800s with FGL

All Nippon Airways (ANA) has taken delivery of a third 737-800 from FGL Aircraft Ireland, the Dublin subsidiary of Fuyo General Lease.

The delivery closes a three-aircraft deal between the two Japanese companies. The first two deliveries took place in December 2015 and January 2016.

Thomas Cook takes second Avation A321-200

UK airline Thomas Cook has taken delivery of its second A321-200 on lease from Avation, according to a statement from the Singapore-based lessor.

The new aircraft – part of a sale/leaseback agreement for two aircraft signed by the parties in 2014 – is on lease for 12 years. To finance the aircraft, Avation entered into an asset-backed senior debt facility, with an existing lender.

Virgin Atlantic takes one 787-9 on sale/leaseback

UK carrier Virgin Atlantic has taken delivery of one new 787-9 on sale/leaseback.

The aircraft will be leased from Irish lessor Avolon. *Airfinance Journal* understands that the jet is on lease for 10 or 12 years.

FPG and FPG Amentum sign ¥11bn credit facility

FPG and FPG Amentum have signed an ¥11 billion ($101.4 million) credit facility, including an ¥8 billion dual currency tranche.

The deal is for the financing of aircraft acquisitions by FPG Amentum. Sumitomo Mitsui Banking Corporation and Sumitomo Mitsui Trust Bank arranged the facility. Aozora Bank, Gunma Bank and Shizuoka Bank participated in the transaction.

The facility enables FPG Amentum to warehouse aircraft that the company acquires for Japanese operating lease transactions, according to a statement from the lessor.

NEWS

Deals

Aircastle completes $120m unsecured loan

US lessor Aircastle has completed a $120 million senior unsecured term loan with a group of Japanese financial institutions, according to an announcement by the lessor.

The three-year loan will provide working capital for general corporate purposes, including aircraft acquisitions.

Development Bank of Japan acted as the deal arranger and lender. The lessor did not reveal the identity of the other financial institutions when contacted by *Airfinance Journal*.

Mike Inglese, chief financial officer, Aircastle, said: "This financing is another example of Aircastle's success in building on our strategic relationship with Marubeni Corporation, broadening and diversifying our funding sources under favourable terms. We welcome the expansion of our global bank group and look forward to building long-term relationships with these world-class financial institutions."

Japanese trading and investment company Marubeni Corporation bought a 15.25% stake in Aircastle for $209 million in 2013.

In March this year, Aircastle also announced the formation of a leasing joint venture with IBJ Leasing. The new company is 75% owned by IBJ and 25% by Aircastle, which will manage the portfolio.

AerCap closes $700m credit facility

AerCap has closed a $700 million credit facility that will be mainly used to acquire new narrowbody and widebody aircraft through to the end of 2016, according to a statement from the Dutch lessor.

The facility was signed to finance a portfolio of nine aircraft and has a maturity date of December 2022.

It was coordinated by CTBC Bank, Development Bank of Japan and DBS Bank. Tokyo-Mitsubishi UFJ, National Australia Bank, China Construction Bank, Bank of East Asia and Tokyo Star Bank acted as mandated lead arrangers.

>>>

NEWS

Deals

SECONDARY MARKET NEWS

Malaysia Airlines to return 747-400Fs to lessor
Malaysia Airlines plans to return two leased 747-400 Freighters to the aircrafts' owner as part of its on-going restructuring, according to sources.

The aircraft are being operated by MAB Kargo, which trades as MASkargo.

Airfinance Journal understands that Aircraft Leasing & Management is the technical agent for the aircraft. The owner is a Japanese company, but a source did not disclose its name.

Malaysia Airlines is undergoing a major restructuring after financial difficulties.

First Air purchases ATR 42-500

First Air, an expanding regional operator based in Canada, has purchased an ATR 42-500 that was previously operated by Brazilian carrier Azul (Trip).

Aircraft remarketing specialist Airstream International arranged the sale of the 1997-vintage aircraft. This is the 25th ATR aircraft that Airstream has placed in the past three years.

Liat looks for Q300 buyer
Antiguan airline Liat is to sell two Q300s, *Airfinance Journal* has learnt. The aircraft are 1992 and 1995 vintage.
Cabot Aviation has been given the mandate to remarket the aircraft.

Iran Air pays cash for two Tay engines
Iran Air, the national flag carrier of Iran, has paid cash for two Tay engines, bought from Dutch lessor Mass Lease, *Airfinance Journal* has learnt.

The engines, of 1993 vintage, will be used to power Iran Air's Fokker 100 aircraft.

It is understood the engines were paid for in United Arab Emirates dirhams.

Clifford Chance advised Mass Lease on the US sanctions law on the transaction.

Luxair to offload two ERJ 145s
Luxembourgian flag carrier Luxair is trying to sell two ERJ 145s.

Luxair has already sold four of the six ERJ 145 aircraft it wanted to dispose of by mid-2016, *Airfinance Journal* has learnt.

A source at the airline told *Airfinance Journal* in July 2015 that it was planning to sell six of the aircraft type. The same source has now confirmed that only two of the aircraft are left to be sold. The aircraft are between 15 and 18 years old.

The source added that the airline has had some interest from Asia, Mexico and Africa for the aircraft.

Intrepid sells A330
Intrepid Aviation has sold a 2015-vintage A330-300 to an affiliate of Banco Santander, *Airfinance Journal* understands.

The aircraft is on lease to Spanish charter airline Evelop Airlines. According to Airfinance Fleet Analyst, it is powered by Trent 772s.

Intrepid announced in February it had agreed to place seven A330-300s with Turkish Airlines. The aircraft were formerly on lease or planned to deliver to Skymark Airlines, which cancelled its lease agreements with Intrepid in February 2015.

Novoair pays cash for three ATR 72-500s
Bangladeshi carrier Novoair has paid cash for three ATR 72-500s, which were previously operated by Uruguayan carrier BQB Líneas Aéreas.

The aircraft, which Novoair purchased directly from BQB, were delivered in December, February and March.

The three aircraft join Novoair's existing fleet of three ERJ 145s.

UK-based firm Airstream International arranged the sale of the ATR 72-500s. The company previously also arranged the sale of the three ERJ 145s that are now in Novoair's fleet.

Zimex Aviation buys ATR 72-200
Zimex Aviation has bought one ATR 72-200 from Slovakian company Ready 4 Aero. *Airfinance Journal* understands the turboprop is 1994 vintage and was previously owned by EuroLOT. The Polish airline folded after financial difficulties in March 2015.

Founded in Switzerland in 1969, Zimex Aviation provides aircraft support to the oil and gas industry.

The Swiss airline operates a fleet of 22 aircraft. The ATR 72-200 has been converted for cargo operations.

Aelis Group, an asset manager and subsidiary of Ready 4 Aero, arranged the deal. All the parties used in-house lawyers on the transaction.

Omni Air takes second 777-200ER
Omni Air International has taken delivery of the second 777-200ER it has bought from Kenya Airways.

The US carrier previously entered into a sale agreement with Kenya Airways to purchase two of the African airline's 777-200ERs, plus a spare engine. The first aircraft delivered earlier this year.

Clifford Chance Abu Dhabi acted for Kenya Airways and Conner & Winters acted for Omni Air International.

NEWS

Deals

ALC prices senior notes as rating confirmed

Kroll Bond Rating Agency has affirmed ALC's issuer and senior unsecured debt ratings at A- with a stable outlook. Commenting on the reasons for affirming ALC's ratings, Kroll noted the company's low leverage, strong liquidity and cash-flow metrics, and a largely unencumbered asset base. It also noted the management team and strength of its global franchise.

Before the announcement, ALC priced a $600 million senior unsecured notes issuance at 3.375%.

The notes were offered at a price of 99.059% of their face amount. The lessor states it will use the proceeds of the offering for general corporate purposes.

JP Morgan, Bank of America Merrill Lynch, Pierce, Fenner & Smith, RBC Capital Markets and SunTrust Robinson Humphrey are acting as joint bookrunning managers for the offering.

Investec Aviation Finance puts second debt fund in place

Investec Aviation Finance has closed its second managed aircraft debt fund for European insurers. The company said it is on course to achieve $1 billion of managed debt funds by the end of this year.

Investec Aviation Finance, a unit of Investec Bank, closed its first fund – the Aquila Debt Fund – in 2014, and has about $700 million across the two funds, according to a statement from the company. The target yield of the new portfolio is 4% to 4.5% after fees, matching the return achieved for the Aquila fund since inception.

The Investec Aviation Finance team plans, over the next six to 24 months, to build a portfolio of secured aviation debt, comprising mainly senior with some mezzanine tranches, up to a target size of $500 million. This fund is open for further investors.

Investec Aviation Finance always co-invests with institutional clients in the managed platforms, taking a share of 10% or more.

American Airlines closes 737-800 financing

American Airlines has closed the financing for a new 737-800, a source with knowledge of the deal told *Airfinance Journal*.

Crédit Agricole Corporate and Investment Banking acted as deal arranger for the $35 million mortgage financing.

Emirates completes German/Korean sale/leaseback deal

Emirates has closed two structured sale/leasebacks for two 777-300ERs, *Airfinance Journal* has learnt.

Both aircraft, which delivered at the end of March, are two years old and are on 10-year leases.

EMP Structured Assets arranged the transaction. It is understood that Air Finance Company purchased the aircraft initially before ownership transferred to EMP after the lease novation.

Seraph Aviation Management – formerly known as Volito Aviation Services – is providing lease management services to the EMP equity investors.

DekaBank is providing a senior loan and a group of South Korean investors is providing a junior loan for the two aircraft. A German institutional investor has bought 100% of the equity in the widebodies.

Bird & Bird acted for EMP and DekaBank. Pillsbury acted for Emirates. Allen & Overy acted for AFC and Korean law firm Yulchon acted for the Korean investors.

Silk Way secures Ex-Im financing for two 747Fs

Azerbaijani cargo carrier Silk Way Airlines has closed US Ex-Im-guaranteed financing for two 747-8 Freighters according to a source.

Apple Bank acted as guaranteed lender and Crédit Agricole Corporate and Investment Banking acted as facility agent.

Latam gets $275m revolver facility

Latam Airlines Group has closed a $275 million, three-year senior secured revolving credit facility.

The revolver is secured against nine A320-family aircraft, 20 aircraft engines and more than 500,000 spare parts.

Airfinance Journal understands that the facility is expected to increase by a further $75 million.

Citi is acting as mandated lead arranger, sole bookrunner and structuring agent. BancoEstado and Bank of America Merrill Lynch acted as lead arrangers.

JP Morgan, Deutsche Bank, BNP Paribas and Morgan Stanley acted as arrangers.

Deutsche Bank is Brazilian collateral agent and Wilmington Trust is collateral agent.

Milbank represented Citi and the lenders as US counsel, while Norton Rose Fulbright represented the issuer as US counsel.

Pinheiro Neto Advogados acted as Brazilian counsel for all parties, while PPU Legal acted as Chilean counsel.

ANALYSIS

Thailand repossession a positive development for lessors?

One of the 767-300ERs formerly on lease to BAC from Sojitz

The repossession of a 767-300ER belonging to Israeli lessor GKL could be the first time the Civil Aviation Authority of Thailand has deregistered an aircraft without the lessee's consent or a court order. Michael Allen reports.

Global Knafaim Leasing (GKL) has repossessed an aircraft it had on lease to Thai airline Business Air Centre (BAC), the Israeli lessor's president and chief executive has told *Airfinance Journal*.

Sidney Slasky said the 767-300ER departed Thailand on March 31 and is now parked in the US.

Critically, the Civil Aviation Authority of Thailand (CAAT) deregistered the aircraft without a court order and without the lessee's consent – something unusual for Thailand. As *Airfinance Journal* reported in August 2015, the Thai civil aviation authorities have to ask the airline for permission to deregister the aircraft, which the airline can refuse. The authorities can then apply for a court order, but this takes time.

"The Thai DCA [Department of Civil Aviation] does not want to incur liability with the airline because the airline could sue them if they deregister improperly," explained Clifford Chance Bangkok partner Fergus Evans at the time. Clifford Chance acted as GKL's leasing council.

The BAC case "marks a shift in thinking" and is "certainly a positive development", according to John Frangos, a consultant at Tilleke & Gibbins, the firm which acted as GKL's litigation counsel for this case.

"This is the first time, to my knowledge, that they have deregistered the aircraft without the lessee's consent or a court order," he said.

"Up to that point we were given the same response which was, 'We can't deregister the aircraft'. Whether that's a policy to be applied in future actions is still uncertain. We will see how this plays out in future cases."

Airfinance Journal reported in December that BAC had filed for business rehabilitation protection after a dispute with GKL for non-payment of lease rentals and the return of the 767-300ER. In Thailand, business rehabilitation is regarded as distinct from bankruptcy and is designed to give a debtor some breathing room in order to rehabilitate its company, according to a source with knowledge of Thailand's bankruptcy laws.

The first hearing on December 28 at Bangkok's Central Bankruptcy Court saw the airline's multiple creditors argue against BAC's capability to restructure its business. A second hearing was being scheduled to allow the airline to present its case, as well as for creditors to voice their objections.

It is not clear whether this second hearing will take place now that BAC has no aircraft, but *Airfinance Journal* understands that the application for business rehabilitation is not directly linked to the dispute with GKL but rather part of the airline's overall bid to recover its financial situation.

The Bangkok Post reported on February 13 that CAAT had rescinded the registration of the aircraft. The newspaper cited CAAT chief Chula Sukmanop as saying the airline must find a new aircraft within a month or lose its operating licence.

Business Air's operations were suspended on January 16 after it was unable to settle debts estimated at Bt1 billion, the English-language Thai newspaper reported. According to the paper, the abrupt suspension left 700 passengers stranded at South Korea's Incheon International Airport.

GKL originally sought to repossess after the airline stopped making lease payments. "We had been in constant contact with the CAAT team for quite some time in preparation, and once they understood our position and we were able to show that the lessee themselves had stated in court that the original expiry of the lease was in January 2016 that was very helpful," said Slasky.

Two other lessors, Sojitz Aircraft Leasing and Sky Holding Company, have previously been in dispute with BAC.

Neither Sojitz Aircraft Leasing nor Sky Holding Company responded to requests for comment. However, *Airfinance Journal* was able to speak to a source with direct knowledge of Sky Holding Company's situation.

The source said that Sky Holding was able to get its aircraft out, but lost "a fair amount" of money in the process.

The source added that the company initially tried "everything up to repossession without repossessing", but "ultimately changed it from a collection to a repossession situation".

Frangos of Tilleke & Gibbins said the case was indicative of repossessions in Thailand.

"Repossessing aircraft in Thailand is entirely possible, but it's slow since the case usually must wind its way through the courts," he said.

He added: "Without the lessee's consent, a court order or judgment is required to recover the aircraft. In the meantime, lessors can get frustrated because they are unable to retrieve their asset, and they are losing money. Litigation in Thailand is often different from what lessors are used to in their home jurisdictions, which can add to the frustration. That said, a lessor should generally expect to be able to repossess its aircraft."

Business Air Centre declined to comment for this article.

DEVELOPMENT BANK OF JAPAN

Global aviation team celebrates fifth anniversary

Michael Allen meets Development Bank of Japan's aviation team and hears about the bank's ambitions.

DBJ's aviation team at the 5th Annual Japan Airfinance Conference

Since its founding in April 2011, Development Bank of Japan's (DBJ) global aviation team has been pursuing the goal of bringing more and more Japanese money into the international aviation finance market.

According to Masao Masuda, head of the global aviation team, general manager, DBJ, the team's financials were "very modest" during its first year. But he says it made "a big jump" in 2012 mainly because of the European crisis.

"Going back to 2012, many people were discussing how we should fill the funding gap," says Masuda.

"So the funding gap and the impact of Basel III on lending activity were among the hot topics in this community. DBJ started to be active at the right time, so when the European banks found it difficult to finance many transactions as they did, DBJ suddenly showed up on the scene and many airlines and European banks came to DBJ and asked us to join as many deals as possible."

In the first three years, DBJ set out to sell its name in the market and establish a market position.

"The basic strategy was very simple," says Masuda. "We took top 20 airlines, we took only new deliveries, we took only fully amortized debt, so the segment we targeted was very narrow and not so easy to make profit in a normal condition."

The first three years were good ones for DBJ, says Masuda. Not only did the company build a good loan asset, but it also made a good profit, even though its focus was on what he describes as not such a profitable area.

In what Masuda calls DBJ's "stage two", the team decided to become a constant capital provider, and it grew its annual lending amount to \$1.4 billion. Although this was a record year, DBJ did not want to increase that number every year. Rather, it wanted to ensure that even when the market was bad, DBJ would be there to provide a certain amount of debt capital to its customers, with a constant provision of \$1 billion.

Therefore in 2014-15, the company's loan amount was not as good as in 2013.

"We didn't intend to increase our loan amount," says Masuda. "If we took that strategy our profitability would be much lower and DBJ would have distorted the market.

"When we newly started this business, many European banks told us that new entrants tend to distort the market by offering cheap pricing or proposing a crazy loan to value, etc. So that's the lesson we learnt from European banks in the beginning. Our commitment is not to win the competition by pricing. DBJ is always trying to provide additional value to our customers to get the new transaction. That's our basic philosophy."

> "Investors are looking for a new opportunity but they need to understand the product and feel enough size of transactions coming to the market."

Regional banks

DBJ's loan book is not completely an accurate representation of what DBJ has been doing over the past couple of years, argues Masuda, because DBJ has been selling down some of its loans to regional banks and other institutions.

"We found that DBJ is in the best position to bridge the Japanese financial market and the global aviation market," he says.

"DBJ's role in this market is to become a gateway to the Japanese market. That's the value proposition we define."

DBJ's ability to do this stems from its history as a government institution, which has given it very broad access to most of the institutions in Japan.

As a result of this position in the market, DBJ was able to transfer about $200 million of loans to regional banks and other new entrants in 2014.

"A secured loan is not so easy to syndicate because the primary transaction requires each participant to be as quick as possible and regional banks cannot keep pace with such a short-term process, so we underwrote and transferred to regional banks, so they have enough time to consider and analyze each transaction.

In order to educate the Japanese regional banks and institutional investors on aircraft finance investment, DBJ has been organizing a seminar, Aviation Day in Japan, for the past four years along with BNP Paribas.

"We started the first conference four years ago with just 20 institutions and for the last event we got more than 50 institutions," says Masuda. "That's the reason why DBJ has been successfully syndicating so many loans and also transferring our loan to the customers."

Capital markets

Another challenge DBJ has set is to open the Japanese capital markets for aircraft financing. One of the bank's achievements in this area includes being involved in the Turkish Airlines yen-denominated enhanced equipment trust certificate (EETC) that picked up the *Airfinance Journal* Capital Markets-EETC Deal of the Year Award for 2015.

"So going forward, DBJ will make every effort to open the Japanese market for aviation players. We have some ideas but at this moment there is nothing more I can say. There is a huge potential, especially given that bond investors are now suffering from a negative interest world.

He adds: "Investors are looking for a new opportunity but they need to understand the product and feel enough size of transactions coming to the market."

DBJ wants to bring more EETC transactions to the Japanese market. Masuda points to unsecured bond products available in the Tokyo Stock Exchange market such as the Tokyo pro-bond for professional investors. This allows non-Japanese issuers to go to the Tokyo market using the same documents that they used in, say, Singapore, London or the US. The issuers do not have to translate their documents into Japanese.

"If some companies have a track record of MTN [medium-term note] programme in 144A format or something like that, they can easily issue the bond in the Tokyo market as well," says Masuda.

Equity strategy

Masuda states firmly that DBJ has no ambitions to become a leasing company, but it does want to enhance its equity strategy. The bank has been providing mezzanine debt through Tamwheel Aviation, a joint venture with Airbus, Novus and NordLB. DBJ wants to continue to provide junior loans through Tamwheel, as well as independently.

> "DBJ's role in this market is to become a gateway to the Japanese market."

But it has to tread carefully when considering equity investment.

"In the very long future, we want to do something on the equity side as well," says Masuda.

"I think bridging two markets and acting as a gateway to Japanese investors is a great value proposition. We want to take the same position on the equity side as well, but as I mentioned, leasing companies are great customers for us, so we are now thinking about how we can achieve that goal without creating conflict with our customers. There are some ideas, but there is nothing I can say as of today."

Team composition

DBJ's global aviation team now consists of 19 members (11 based in Tokyo and eight outside Japan), but Masuda says this is likely to be expanded.

"In 2017, we will start the new mid-term strategy and hopefully introduce additionally four or five people in the coming three years," he says. "I think given the size of the team, it seems to be better to concentrate on one city, like Boeing. If you look at Boeing Capital, many people stay in Seattle. Similarly, DBJ's decision making has to be in Tokyo, so I think as many people as possible have to stay in Tokyo."

Usually top-tier banks have three regional heads, but DBJ splits the world into two regions: senior vice-president Rikan Miura covers north and South America and north-east Asia and Daisuke Kawasaki, head of Europe, the Middle East and Africa and Asia-Pacific, covers the rest.

Future growth

With an eye on DBJ's future growth, Masuda says that, in the long term, DBJ may want to become as large a player as BNPP, which has about $10 billion exposure. But he adds that is more likely to be 20 years down the line than five.

"In the first 10 years, we want to achieve five billion, then we will make the next strategy – we may want to go to 10 billion, we may want to stay that level and take more risk. We haven't decided, but that is the immediate role we have to achieve."

CEO INTERVIEW: ALAFCO

Towards 100 aircraft and beyond

Jack Dutton speaks to Ahmad Alzabin, chief executive officer and vice-chairman of Kuwaiti lessor Alafco, about portfolio expansion, preferred funding strategy and aircraft trading.

***Airfinance Journal:* What is your current fleet made up of at the moment?**
Ahmad Alzabin: The lessor has a fleet of 49 aircraft leased to 14 airlines globally. As well as this, Alafco has 117 aircraft on order with Airbus and Boeing, comprising 12 A350-900XWBs, 20 737 Maxs and 85 A320neos.

What is the average age of your fleet?
It is our policy to maintain the average age of the aircraft in our portfolio at between five to six years.

How is the current low fuel price affecting your business?
Lower fuel prices are a blessing for our airline customers whose income statements are positively impacted. However, the industry's requirement for more fuel-efficient aircraft will continue to create demand for the newer aircraft like 737 Max and A320neo, and Alafco has 20 737 Max and 85 A320neo on order.

What plans do you have for your portfolio? Can you see more room for growth?
We plan to grow our portfolio to around 100 aircraft by the end of this decade [some of Alafco's 117 orders are not scheduled for delivery until 2020 and beyond]. We do not have any geographic limitations, and therefore we plan to expand globally.

How do you determine which airlines you lease aircraft to?
We provide aircraft on lease to airlines globally without any geographic restriction. We lease aircraft to full-service flag carriers, low-cost carriers and charter operators.

What is your favourite asset and why?
Although we have the A350-900XWB in our order book and a couple of 777-300ER aircraft in our portfolio, we prefer investing in narrowbody aircraft.

How do you typically fund your transactions?
Our aircraft are financed by Islamic-structured commercial financing facilities and also through US Ex-Im Bank and European export credit agency-guaranteed financing facilities. We also finance aircraft with major international banks.

Which banks do you work with? Is it mainly local banks or international banks?
We obtain aircraft financing mostly from international banks. We have also obtained financing from regional banks and Kuwaiti banks, in addition to US Ex-Im Bank and the European export credit agencies.

Would you like to do more work with Middle Eastern banks?
Yes. Although a small portion of our financing comes from Middle East-based banks, we hope to obtain more financing from them in the future.

We mandate banks that offer us the best commercial terms for financing our aircraft. If Middle East banks increased their capacity to finance aircraft and offer competitive margins, we would most definitely try to obtain financing from them.

Which law firms do you work with?
Dentons and Hogan Lovells are the law firms that we use.

What is your funding model? How do you work with investors?
On the aircraft, we invest around 20% of aircraft price in equity and finance the remaining 80%. Alafco is a listed company and 30% of our shares are traded on the Kuwait Stock Exchange. Of the remaining shares, Kuwait Finance House holds 46%, Kuwait Airways holds 10% and Gulf Investment Corporation holds 14%.

Would you say it is more of a buyers' market or sellers' market at the moment?
It is a sellers' market. There is a lot of competition out there, whether you are trying to acquire aircraft with lease attached from other lessors or if you are bidding on sale and leaseback transactions with airlines.

Has any of the recent inactivity of the European ECAs (Ex-Im as well) affected your business? If so, how has it affected your business?
No, it has not affected our business. European ECA and US Ex-Im Bank are still active in aircraft financing. In 2013, Alafco tapped the capital markets with US Ex-Im guarantee for financing two 777-300ER aircraft. We have diverse sources of financing that include commercial facilities. We believe export credit agencies will continue to play an active role in financing aircraft in the future.

What are the main challenges for you as a lessor in the Middle East?
The challenges we face in the Middle East are not any different than those faced by lessors in other parts of the world. We are all subject to the state of the world economy and its impact on air traffic, oil prices and demand and supply factors.

EXECUTIVE INTERVIEW

Opportunity knocks for NAC

Jack Dutton speaks to Martin Møller, founder and chairman of Nordic Aviation Capital, about how the recent acquisitions of Jetscape and Aldus Aviation came about and what they mean for his company.

Martin Møller has had a busy time recently. Over the past eight months, the founder and chairman of Danish turboprop lessor Nordic Aviation Capital (NAC) has been working tirelessly on the acquisitions of Embraer lessors Jetscape and Aldus Aviation. After the acquisitions, NAC – already the largest turboprop lessor by fleet size – will have an overall fleet of 294 owned aircraft with a further 48 managed. In addition, NAC has a further 74 aircraft on order, comprising 20 E-Jets and 54 ATRs.

Speaking to *Airfinance Journal* on the phone from the US, Møller says the Jetscape acquisition "is completely done" and Aldus will be acquired "in the next two or three weeks" after regulatory approval (at the time of writing). His main focus now is getting all the new teams settled in and integrated into the NAC organization.

More hands needed

But even with 45 more employees joining him under his NAC brand, taking the total number of staff up to 160, Møller is still looking to hire more people.

"With the anticipated linear growth, we certainly expect to need more hands," he says. "In my view, there's one way of looking after an asset right. You've got to travel to the location of the asset: you've got to be there, you've got to follow up on it and stay in touch with the client and the more assets you have, the more hands you need. It needs to be completely interconnected."

Møller's business has steadily grown since he founded NAC in 1990. Over the past five years, its profits after taxes have grown twofold from $54 million in financial year 2010/11 to $111 million in 2014/15. The company's investment in aircraft has grown threefold in that same period, from $350 million to $1.11 billion.

In the 26 years of NAC's existence, the leasing market has gone through several changes.

"I don't have that much experience in the narrowbody and widebody sector, but obviously we've seen a lot of new entrants and a lot of competition," says Møller.

"We have also seen the margins come down. You really need to be super-efficient now. You need to have very attractively priced funding in order to make decent margins. So the good old days were the good old days and it's different times now."

Møller's plan

To improve NAC's management, Møller looks to draw on the expertise of Jetscape and Aldus.

"These guys are smart and intelligent people and, in some areas, they've been doing things better than we've been doing them until now. So we're going through each and every area of activity and making sure where the new guys are smarter than us, we'll start doing it their way and vice versa. We're not only taking on board a number of new colleagues, but we're also upgrading to NAC 2.0," he says.

Although there has been a bit of shuffling around on the management side after the acquisitions, Møller insists he has found everyone a position in the new organization.

"Within NAC, we already have a focused, well-run management team. Most of them have been on board for a number of years, and as for the entire team after two acquisitions, we have found positions for each and every one. But, of course, we don't have three CEO positions – we only have one."

Steve Gorman and John Evans, the chief executive officers (CEOs) of Aldus and Jetscape, will hold senior positions in the new company. These will be publicly announced in the near future. Søren Overgaard, CEO of NAC, will keep his position under the new company.

Møller says that the idea to acquire Aldus and Jetscape has been in his head for about two-and-half years.

"Back in September 2013, we could see more and more liquidity flowing into the market and we guessed that that would mean a number of people getting access to liquidity, allowing them to do transactions that they would otherwise not be able to do and that there would be so many of them – that organically generated equity would not be enough to support the deals we would like to do."

“The difficulty is not so much going from 250 to 400 airplanes, it’s more going from 75 to 200.”

EQT’s equity

Based on that, Møller started looking for ways of getting more equity on board, prompting him to sell off just over half of the company in August 2015 to EQT, the largest private equity firm in Scandinavia. Despite having a majority stake, the firm has agreed to keep work at arm’s length. It is the first financial industry investment EQT has made, although Møller still has most of the control over NAC.

“The clear agreement between them and ourselves is that they have bought a ticket to be part of our ride,” he says. “They’re specialists in private equity and they keep their focus on that and we’re specialists in running leasing companies – and there’s a very clear agreement that leaves me firmly at the steering wheel. There’s very little change in my every day from this, with the exception we have much more firing power to transact now than we did before.”

In the agreement, Møller injected some of his proceeds from the sale of the company shares. EQT put in additional equity and there is more to come from both. It was those proceeds that allowed NAC to acquire the entirety of ALC’s turboprop fleet, comprising 25 aircraft, just before Christmas and then to complete the Jetscape and Aldus acquisitions. This was all part of Møller’s long-term plan.

He says that without EQT’s help, the ALC, Aldus and Jetscape transactions may not have been possible.

“We’ve had phenomenal growth – financial institutions said they have seen nothing like it on the organic side,” he adds. “We’d been doing well to produce good results, but we have had the capability to do more. I was faced with the choice of doing a little bit of business or doing more business and having a partner on board, and I chose what was best for the company.”

Taking on the E-Jet

Although the acquisitions of the two lessors mark NAC’s first foray into the E-Jet market, Møller believes that the lessor’s experience with other regional jets will help it manage the new additions to its fleet. It has 12 CRJ1000s with Garuda and seven CRJ900s with Go Jet flying for Delta.

Martin Møller.

“Although we did have some Embraer expertise on board, with Jetscape and Aldus, we now have an enormous volume of expertise and know-how, and of course that means we can continue what the two specialists have been doing until now and maybe even improve on total volume.”

Despite owning and managing all these extra aircraft after the acquisitions of Jetscape and Aldus, Møller does not appear to be losing much sleep over it.

“The difficulty is not so much going from 250 to 400 airplanes; it’s more going from 75 to 200. That’s where it’s difficult. You need to change completely – you need to go from Excel spreadsheets to something much more solid to run it. But you have to do it to prepare for the future, and now it is really paying off that we are running as an organization rather than a group.”

More to come

Møller says there will be more interesting news to come over the coming months from NAC and he is working on some exciting projects, in addition to what has just been announced.

“What is my official position in NAC apart from being founder and chairman? My real position is being the goal-setter, and certainly I have my eyes much further into the future than just now.”

He adds: “NAC has always been opportunistic. When the stars, the moon and the sun align we’re ready to act. We can’t plan that in five years’ time we will do X, Y. If things align and it makes sense and we have the resources to do the deal, we’ll do it.”

ERA CONFERENCE ROUND-UP

Educating investors about regional aircraft

Jack Dutton looks back on the European Regions Airline Association (ERA) conference held in Prague in April.

The feeling at this year's European Regions Airline Association (ERA) Conference was one of optimism. Taking place at the Marriott Hotel in the Czech capital of Prague, located in the heart of the beautiful Old City, airline chief executive officers, lessors, regulators and lawyers gathered to discuss the main issues facing the regional airline industry. Located in close proximity to some of the leading players in the European regional market, including NAC in Denmark and KLM Cityhopper in the Netherlands, Prague was a good choice of location to hold these discussions.

Simon McNamara, ERA director-general, opened the conference with a panel about the challenges of regulation for European airlines. Joining him was Boet Kreiken, managing director of Dutch regional airline KLM Cityhopper and ERA president, Jon Horne, chief operating officer of London Southend Airport, Jan Palmer, Nordic Aviation Group, and Luc Tytgat, strategy and safety management director, European Aviation Safety Agency.

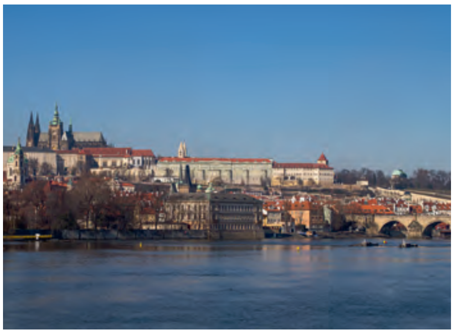
The opening panel asked whether regulation was "a friend or foe" of European regional carriers. The discussion focused on issues including the European Commission's recent aviation strategy and whether the regulators were doing enough to ensure a fair and competitive market. Although there were arguments for regulations being a friend, more of the arguments about regulation seemed to weigh in on the foe side.

There seemed to be a greater presence of lessors and original equipment manufacturers at this year's conference, compared to last year's in Rome, Italy. NAC, Jetscape, Avation and Gecas were among the lessors in attendance.

In a later panel, Saad Hammad, chief executive officer of flybe, spoke about his airline's turnaround and the need to educate investors about the attractiveness of the regional market.

Trevor Charsley, senior market analyst, Afex, later spoke on macroeconomic issues that could affect the European regional carriers, such as the strong US dollar, low fuel price and the possibility of the UK voting in June to leave the European Union.

Coming from an aviation finance perspective, Gary Topp, chief commercial officer of regional aircraft lessor GA Finance, gave a presentation that discussed the complexities of refleeting an industry short on capital. He first touched on where investment into regional aircraft was coming from and provided a general overview of the market.



Topp's financial outlook for regional aircraft in 2016 was quite negative.

"2016 has started off pretty horribly." he said. "This is perhaps one of worst markets for capital raising that we've experienced since the 2008 financial crisis. So if you succeeded in raising equity out there, well done to you. But if you're not, you're in good company because it's quite hard to find the cash right now."

Although he noted that the equity and debt financing was available and structured finance had previously been successful in the regional space, Topp said that a deal such as Aldus Aviation's 2014 enhanced equipment trust certificate would be hard to replicate at the moment because of market volatility.

Topp compared and contrasted the regional jet market to the more popular single-aisle and widebody markets. He said that if the regional market was to receive the financing it needed, more investors would have to recognize regional aviation as a sub-sector. Although he was optimistic for the financial future of regional jets, he acknowledged that there was still some way to go before the market gets the commercial financing it needs.

Others disagreed with Topp, instead saying there were enough banks which were attuned to the financing requirements of the regional market.

In a meeting with *Airfinance Journal*, Chris Damianos, executive vice-president, marketing – specialty markets, at Gecas, said that there had been "plenty of competition from the banks" on requests for proposals to fund regional jets.

Although some of the messages of the speakers at the ERA conference were mixed, those that were speaking on financing regional airlines had one thing in common: they all seemed positive that the necessary financing would be available for regional aircraft and airlines in the near future.

MRO REVIEW

Promise of growth fails to halt concerns

The MRO market met in Dallas, Texas, at the beginning of April to discuss the state of the industry. Joe Kavanagh joined them.

Thousands of maintenance, repair and overhaul (MRO) professionals gathered in Dallas last month to network with colleagues, to close deals and to discuss the market.

The consensus was that the sector would see robust growth over the next decade, despite a number of challenges ahead.

According to a review by ICF International, the global demand for MRO services is about $64 billion. Analysts expect very robust growth as the world's aircraft fleet expands, with most expecting the market to grow to about $100 billion over the next 10 years.

While the overall trend is growth, there are a number of causes for uncertainty. Low fuel prices, exchange rate volatility and regional economic weakness are all causing MRO players some concern.

The introduction of new-technology aircraft means MRO providers will have to adapt to remain relevant, or may struggle to enter the market because of high entry costs. Dominance of the market by original equipment manufacturers (OEMs) is concerning independent shops, and there is still debate about whether Boeing and Airbus are oversupplying the market.

Still, the feeling among delegates was that there is a growing market for MRO services despite the potential challenges.

In 2015, about 80% of demand was split fairly evenly across North America, Asia-Pacific and Europe, with North America still the single largest market. MRO demand in the Middle East, Latin America and Africa accounts for about 18%.

However, with growth in Asia-Pacific outstripping that of Europe and North America, the region is set to become the world's largest market for MRO services. What this shift will mean for the industry is unclear. In the near term, there are a number of more pressing issues.

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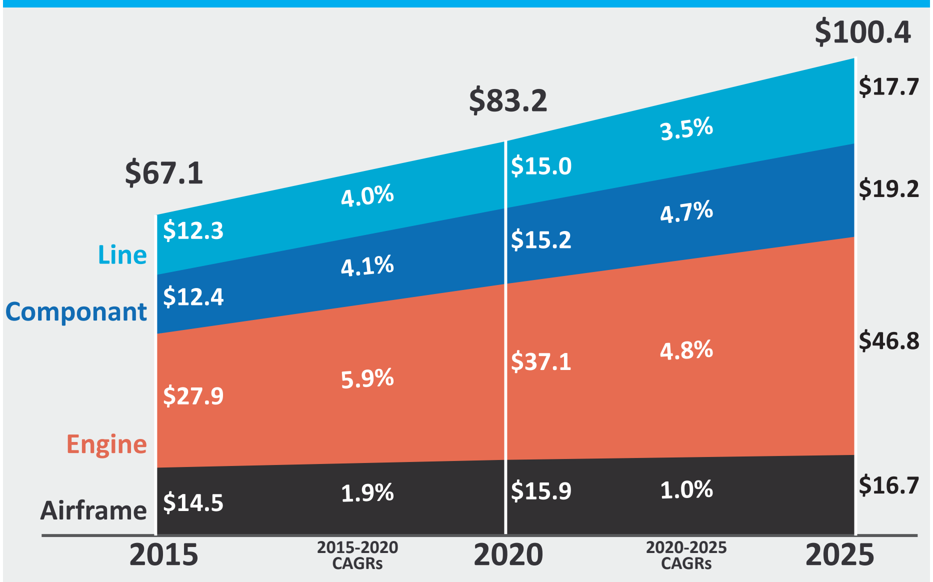
GLOBAL MRO MARKET FORCAST BY MRO SEGMENT (US$ BN)



Source: CAVOK Global Fleet and MRO Market Forcast

> “The world’s aircraft fleet is set to produce unprecedented levels of information over the next 10 years.”

Big data

The future impact of “big data” was one of the most widely discussed topics at the conference.

The phrase refers to how operators, OEMs and MRO shops can benefit from analyzing the data produced by their equipment. As an aircraft flies, for example, its monitoring equipment creates huge amounts of operational data. By analyzing this data correctly, an operator or an MRO provider can make better decisions about how to use or repair its asset, which can lead to large cost savings and a better chance of avoiding certain maintenance problems.

Speakers and delegates said that more companies could benefit from this data analysis, particularly as more data is likely to be produced in the future. Although aircraft already produce large amounts of data, the quantity is set to grow massively as new aircraft and engines enter the market, and there is no consensus about what the impact of new technology will be.

The key problem facing airlines and MRO shops now is how to extract value from the rapidly increasing amount of information.

Tim Hoyland, partner at advisory firm Oliver Wyman, believes that airlines are failing to make the best use of data because of outdated IT systems.

He notes: “These new next-gen aircraft provide a robust data stream which will enable operators and providers to better forecast, plan and deploy aircraft assets. However, the industry faces a real disconnect on how to integrate this data into ageing IT infrastructure at many airlines. Until this is resolved, the real power of this data cannot be leveraged.”

The world’s aircraft fleet is set to produce unprecedented levels of information over the next 10 years. A forecast by Oliver Wyman, for example, predicts that aircraft could generate more than 98 million terabytes of data in the year 2026. By comparison, they produce an estimated one million terabytes a year today.

The latest generation of aircraft, such as the 787 and A350, or new-engine narrowbodies, such as the A320neo and 737 Max, all generate far more data during operation than older models.

By way of illustration, *Airfinance Journal* understands that a new 787 generates data for about 100,000 AHM (aircraft health monitoring) parameters. By contrast, a 767 generates data for just 10,000.

Because new-generation types will account for more aircraft in operation by 2026, the amount of data produced will far exceed today’s levels. The companies which are quickest to use it effectively will have an advantage over those that do not. If used in the right way, this surge of information could result in sophisticated improvements to the way that aircraft are maintained. This could lead to large efficiency savings for the companies that crack the problem early on.

It could also lead to tension as the different parties involved all fight for control of this valuable data.

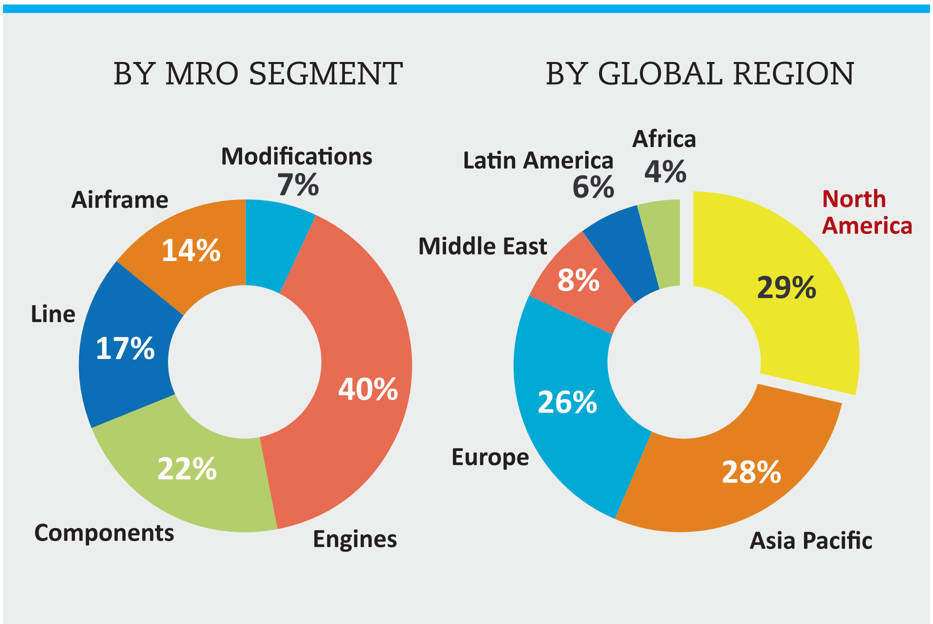
The fight for control over this data will be a “battleground” in the future, says David Stewart, vice-president at ICF International.

He says: “The air transport fleet is set to undergo a rapid change of mix towards more next-generation aircraft over the next decade. These aircraft represent such a shift in technology that airlines and MRO suppliers alike are taking the opportunity to adopt new ways and business models to deliver and support MRO. The relationships between OEMs (whether airframe, engines or systems), airline MROs and independent MROs are evolving as we speak.

“Who will be the winners and losers moving forward? There are three key battlegrounds that will determine the outcome in this new support environment,” he says, “data, work scope and assets. First, the entity that controls the data will have significant advantage, with the ability to feed operational and reliability data back into achieving performance improvements. Second, the supplier that controls the work scope has the ability to manage and control costs better. Third, the provider that owns the assets (ie, the inventory where large pools drive significant economies of scale) will be in an advantaged position to provide integrated component services.”

The immediate challenge for some operators will be to handle the existing data they collect more effectively. Sources tell *Airfinance Journal* that some airlines are already asking OEMs to reduce the amount of data collected by the older aircraft in their fleets, because their IT systems cannot deal with the quantity produced. If they want to make the best use of big data, these airlines will need to adapt their systems quickly as newer aircraft enter their fleet.

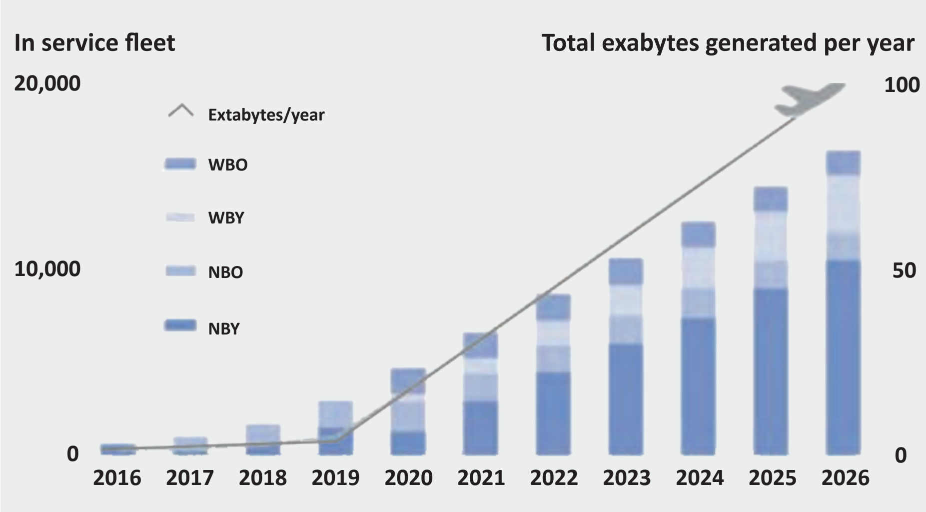
2015 GLOBAL MRO DEMAND



Source: ICF International

> "As the market share of new technology increases, MRO providers are increasingly keen to win support contracts for new equipment."

DATA GENERATED FROM PROJECTED GLOBAL FLEET



Source: Oliver Wyman MRO Survey 2016

New technologies

Although low fuel prices are keeping older aircraft in the air for longer, the arrival of new-generation jets is set to cause significant change.

Crucially for MRO providers, these newer aircraft have longer maintenance intervals than their older counterparts and are designed to require less MRO spending as a result.

Boeing's 787, for example, is designed to reduce maintenance costs by 30% once check-interval escalations are complete. This cost reduction is because of its largely composite structure, which requires fewer man-hours and materials than conventional designs. While this is good news for operators, whose MRO spend is reduced as a result, it is not such good news for the maintenance shops.

As the market share of new technology increases, MRO providers are increasingly keen to win support contracts for new equipment. In a recent market update, for example, Lufthansa Technik outlined the steps it is taking to prepare for supporting the 737 Max.

It is extending spare parts warehouses, including the CFM Leap-1B in its portfolio of serviced engines, and has offered 737 overhauls in a new Puerto Rican facility since November.

The company says it will be able to offer the same level of service to its customers when the new aircraft begin operations as it does for current-generation models. However, smaller MRO shops may struggle to make the same shift given the high costs involved in dealing with new technology.

The high barriers to entry in this market mean that independent MRO providers may struggle to compete with their larger competitors.

Frank Berweger, senior vice-president of corporate sales Americas, at Lufthansa Technik, says that the incoming wave of new-technology aircraft will profoundly affect the MRO market.

He says: "There's a huge surge of new-technology aircraft coming into the market. That's going to change the whole MRO pattern."

Berweger suggests that smaller MRO players may be "squeezed out" of the market because investing in new technology is a capital-intensive exercise, and because original equipment manufacturer restrictions on intellectual property may disadvantage the smaller players.

EUROPEAN COMMISSION PROBES COMPETITION

The European Commission is still investigating the market for maintenance, repair and overhaul (MRO) services to decide whether it is competitive enough, although it is unclear what stage the process is at.

The investigation began after high-profile figures had complained about rising costs. The point of the probe is to help it decide whether the European authorities should launch a formal investigation in the future.

When contacted by *Airfinance Journal*, a European Commission official said that there had been no new developments, suggesting that the probe is still determining whether to launch an investigation.

Engine investors are particularly concerned about the result because the health of the MRO market affects engine values. By the time an aircraft reaches the end of its life, more than 60% of its value will be contained in its engines. This has enormous significance for aircraft remarketers, lessors and financiers – not just engine specialists.

A healthy and competitive MRO market could not be more important for commercial

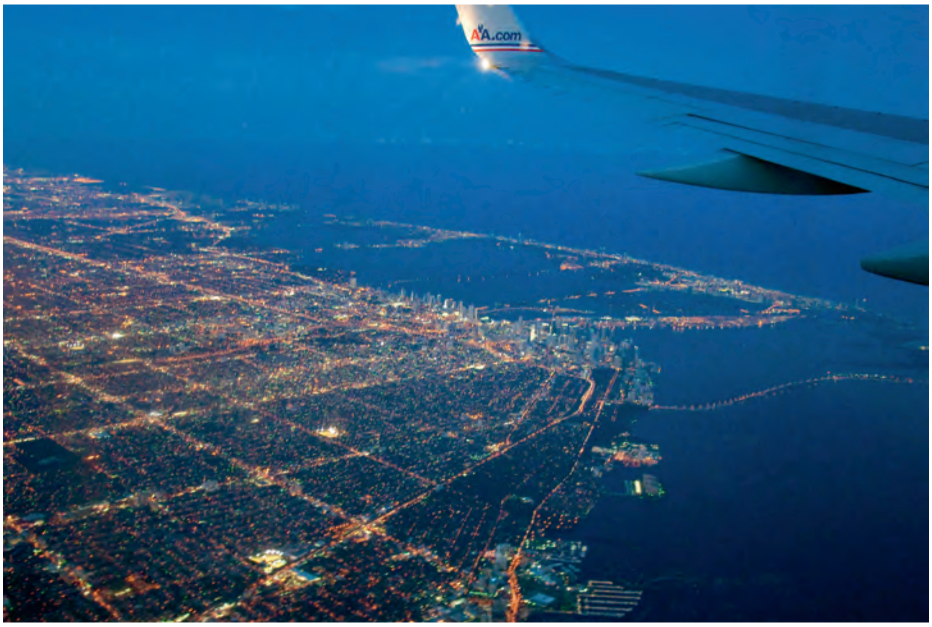
aviation. So it is unsurprising that the commission's probe has caused a few ripples.

Airfinance Journal understands that Rolls-Royce, CFM and a number of MROs and some airlines were contacted by the commission last year for information.

There are rumours that the asset types it is investigating include the popular CFM56 engine variants, which power the 737 and A320 families of aircraft. This has puzzled some observers, who note that the MRO market for this engine is one of the most competitive, with a deep, liquid market and a wide range of independent MRO shops.

NORTH AMERICA REVIEW

Success in Miami



Joe Kavanagh rounds up the main points from the 36th annual North America conference.

This year's North America Airfinance conference attracted more than 300 delegates to the Ritz-Carlton on Miami's South Beach.

Delegates proved their willpower by remaining inside all day, despite the fine weather, packing their schedules with meetings and panel discussions instead.

When they spoke with *Airfinance Journal*, many reflected on the positive state of the US and Canadian markets. Although there were a handful of causes for concern, such as Ex-Im's continued inability to approve aircraft financing deals, there were plenty of causes for optimism.

In particular, delegates highlighted the financial health of US carriers and the increasing activity of new investors in the US dollar-denominated capital markets.

Confidence in cash-rich airlines

Low fuel prices have combined with increased capacity discipline to give US carriers a bumper year.

Annual airline profits in 2015 were higher than they had ever been. According to data collected on more than 30 US airlines by The Airline Analyst, American carriers made $22.4 billion of profit in 2015 (see graph). By comparison, that figure was $7.5 billion in 2014.

Those who can remember the heavy losses posted in the aftermath of the 2008 financial crisis may struggle to comprehend how the US airline industry had performed such a U-turn. But airline chiefs were confident that the dark days of heavy losses and low margins were behind them.

In a recent speech in Dallas, Doug Parker, chief executive officer, American Airlines, insisted that US airline profitability was here to stay. He argued that increased efficiency, improved networks and better employee relations meant the health of US airlines had improved permanently.

Avitas' Adam Pilarski takes a more cautious view to Parker *(see Are we entering the magical world of no aviation cycles? page 44).*

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US CARRIERS' NET INCOME 2006-2015

Source: The Airline Analyst

"Low fuel prices have combined with increased capacity discipline to give US carriers a bumper year."

DEALS OF THE YEAR

Airfinance Journal presented the winners with their Deals of the Year awards at a ceremony in Miami.

Here is a full list of the winning deals:

Overall Deal of the Year
Macquarie's Awas portfolio acquisition and financing

Editor's Deal of the Year
Amedeo Air Four Plus

Innovative Deal of the Year
EA Partners' $700 million bond

European Deal of the Year
Deucalion (DVB) asset-backed security

Africa Deal of the Year
Comair Ex-Im rand financing of four 737-800s

Middle East Deal of the Year
Emirates sukuk

Latin America Deal of the Year
Latam's inaugural EETC

North America Deal of the Year
Element's $1.21 billion asset-backed security

China Deal of the Year
China Southern Airlines' $100 million ECA-backed offshore renminbi financing

Asia-Pacific Deal of the Year
Cheunk Kong/Accipiter's acquisition of aircraft portfolios from Gecas and BOC Aviation

Equity Deal of the Year
IndiGo IPO

M&A Deal of the Year
EQT acquisition of NAC stake

Used Aircraft Deal of the Year
Korean Air

Sale/leaseback Deal of the Year
Emirates/EMP/AFC A380

Capital Markets – Unsecured Deal of the Year
Alitalia private placement

Capital markets – New Structures Deal of the Year
Virgin America slot-backed bond

Capital Markets – EETC Deal of the Year
Turkish Airlines' yen-denominated EETC

Capital Markets – ABS Deal of the Year
BOC Aviation's $807.9 million asset-backed security

Regional jet/turboprop Deal of the Year
Mesa Airlines' EETC

Predelivery Payment Deal of the Year
Asiana Airlines' PDP financing for four A350s

Commercial Loan Deal of the Year
British Airways' $1.75 billion revolving credit facility

Tax Lease Deal of the Year
THY's yen-denominated, US Ex-Im-supported French tax lease

Export Credit Deal of the Year
Lion Air/Transportation Partners' $144 million floating-rate-guaranteed notes due 2025

Airline of the Year
American Airlines

Lessor Treasury Team of the Year
BOC Aviation

Airline Treasury Team of the Year
Emirates

Lifetime Achievement Award
Norm Liu, Gecas

“Hawaiian Airlines, jetBlue, Delta Air Lines, Southwest, United and American Airlines have all been bumped up by the ratings agencies in the past year.”

Many US airlines have received ratings upgrades as a result. Hawaiian Airlines, jetBlue, Delta Air Lines, Southwest, United and American Airlines have all been bumped up by the ratings agencies in the past year.

The success of US carriers has created a ripple of interest in the financial markets. American carriers are achieving very tight spreads on the strength of their recent financial results.

Late last year, a five-year unsecured issuance by Southwest Airlines carried a coupon of 2.650%, with a spread to US Treasury of 112.5 basis points.

Conference delegates mentioned a more recent €3 billion ($3.41 billion) eurobond issued by FedEx, which the US cargo giant will use to fund its takeover of Dutch rival TNT Express.

The offering was so heavily oversubscribed that it had attracted €17 billion of bids by the time it closed. One financier at the conference said he saw “stunning interest” from investors.

The issuance consisted of €500 million of floating-rate notes due 2019, €500 million of 0.5% notes due 2020, €750 million of 1% notes due 2023 and €1.25 billion of 1.625% notes due 2027.

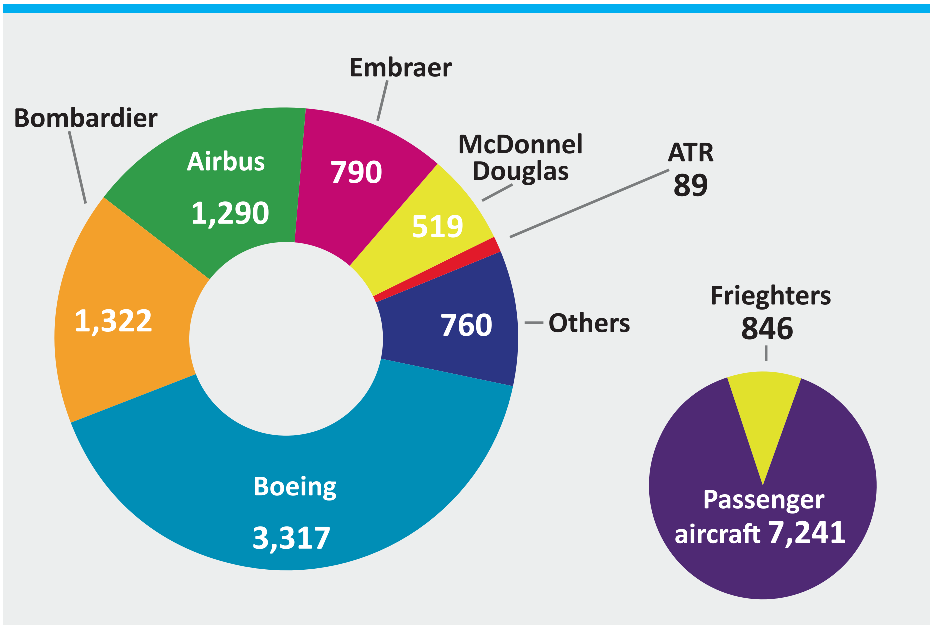
On the airline side, panellists from leading US carriers said they were examining the market for Japanese operating lease with call option financing.

The trend of US carriers looking eastwards for financing was one that *Airfinance Journal* noted in February, when Japanese financiers said the largest US carriers were interested in tapping the Japanese markets to finance aircraft deliveries.

Meanwhile, Mesa Airlines chief executive officer Jonathan Ornstein reflected on the buoyant mood when he said the airline was considering going public as a way of raising liquidity. Although he noted some market difficulties, it was a positive sign, nonetheless, about the health of the US industry.

This optimism was reflected in the investment community, as many delegates said, both on stage and at the various networking events, that more investors were entering the space.

NUMBER OF IN-SERVICE AIRCRAFT IN NORTH AMERICA



Source: Airfinance Fleet Analyst

Element’s $1.21 billion asset-backed securities (ABS) deal, for example, which won the North America Deal of the Year Award, was, when it closed last year, the most widely syndicated ABS deal since 2007.

This was partly because of increased awareness of the reliability of commercial aviation lending, but also because of stronger balance sheets and a steadier operating environment in the US.

Jude Bricker, Allegiant’s chief operating officer and senior vice-president of planning, added that traditional lenders for newer equipment had recently become more willing to invest in older aircraft.

On the leasing side, Aircastle recently announced the addition of Japanese financial institutions to its investor base. It closed a $120 million unsecured loan in April, arranged by Development Bank of Japan, which tapped new investors for the US lessor.

Ex-Im delay

The reauthorization of Ex-Im Bank last year had led many to believe the agency would soon be up and running, authorizing aviation deals as it had done up until the expiration of its mandate.

However, since the reauthorization by the Senate in December, the bank had been unable to approve new deals above $10 million in size.

Robert Roy, vice-president of Ex-Im Bank’s transport division, explained to delegates the reason for the delay was because, with only two active board members, it had not yet reached a quorum.

He said the bank needed a third board member to be approved by the US Senate before it could begin authorizing larger deals.

The White House had already nominated the third member, Republican Mark McWatters, but the Senate had to approve his confirmation before he could begin.

Until then, Ex-Im Bank was still unable to approve larger deals, which was bad news for airlines that had planned to finance their imminent Boeing deliveries with US Ex-Im-backed debt.

Because of the delay, there was a $2 billion glut of deals that Ex-Im would like to approve but could not. *Airfinance Journal* understood that many carriers were waiting for financing to be approved.

AIRLINE INTERVIEW

Starflyer's hybrid approach

Michael Allen speaks to Yuichi Ito about Starflyer's strategy to return to profitability after financial difficulties caused by ill-fated international expansion.

As *Airfinance Journal* stood in the viewing area of Kita-Kyushu Airport looking down at the runaway, a single A320 draped in a glossy black livery gently touched down on the tarmac. With no other aircraft in sight, the jet taxied to the gate and the passengers quietly disembarked.

The aircraft belonged to Starflyer, which once had bold expansion plans and even tried to fly international routes, but as the airline's senior vice-president of corporate planning admits, the initial growth was too rapid.

"Since the network strategy as well as fleet planning didn't match the demand of the market, this is why we are reviewing these strategies and keeping the current fleet and the network for a while," Ito tells *Airfinance Journal* at the carrier's offices at the airport.

"We are now trying to restructure the organization in any aspect in terms of the operating cost, as well as the financing. In the coming years, we have to turnover or change our strategy for further growth."

Starflyer's predecessor, Kobe Airlines, was established on December 17 2002, the 100th anniversary of the first flight of the Wright Brothers' Flyer. However, the airline did not officially launch operations until March 16 2006 on the opening of Kitakyushu Airport.

On December 14 2012, ANA took over Doll Capital Management's 16.61% stake in Starflyer, upping its stake to 17.96%, making it the largest shareholder.

Starflyer's financial difficulties partly arose from its ill-fated attempts at international expansion.

The airline had to suspend its Kitakyushu-Busan service on March 29 2014 after it suffered from limited demand and too high a cost base. But on the same day, says Ito, it

had started a new domestic route of Nagoya (Chubu)-Fukuoka as part of its restructuring plan. This was followed by the next new route of Yamaguchi/Ube-Haneda (Tokyo) on October 26 2014.

Starflyer now operates a fleet of nine A320-200s, down from 11. Two of the aircraft were returned to their leasing companies.

At the end of fiscal year 2013 (March 2014), Starflyer had 11 aircraft but one of them had already been taken out of service to carry out necessary maintenance to meet the lease return conditions. One more aircraft was taken out of service in October 2014.

While Starflyer had planned to boost its fleet back up again to 10 aircraft, the airline decided to defer a planned delivery to 2018 and focus on its current fleet.

"Even if we could finance this aircraft, we didn't have any clear strategy on the network at this moment as to how we should use this 10th aircraft," says Ito, adding that the airline has started a "precise study" on how this aircraft can be implemented into the fleet. The airline has been in discussions with Gecas and Awas for reductions in lease rentals on the aircraft it has on lease from these companies.

Starflyer defines itself as neither a full-

STARFLYER'S FLEET

Aircraft	Lessor	Year built	Current market value ($m)
A320-200	Gecas	2011	33.4
A320-200	Macquarie	2011	33.4
A320-200	Gecas	2012	35.6
A320-200	Financial institutions	2012	35.6
A320-200	Awas	2013	38.0
A320-200	Awas	2013	38.8
A320-200	Macquarie	2013	38.8
A320-200	Gecas	2013	38.8
A320-200	Financial institutions	2013	38.8

Source: Airfinance Fleet Analyst

> “Starflyer now operates a fleet of nine A320-200s, down from 11. Two of the aircraft were returned to their leasing companies.”

service carrier nor a low-cost carrier (LCC), but rather as a hybrid carrier. Its aircraft use a 150-seat configuration, which it says gives its customers extra comfort and distinguishes its services from LCCs.

“We somehow manage the yield and revenue to sell the seat relatively higher than LCC price but relatively below such FSC [full-service carriers] seats like ANA and JAL,” explains Ito.

“We are not flying such a huge aircraft like the 777 or 767, so somehow we sell for business passengers and also the pleasure passengers. We are not a big company, but we would like to aim to be a profitable company by aiming to sell our high-yield standard. The small number of passengers will be fine, but once he or she takes on board Starflyer, we would like to keep this passenger on board.”

This strategy could be particularly effective on the Tokyo-Fukuoka route, which Ito describes as a “headache” because of the intense competition.

The route is also served by ANA and JAL, as well as low-cost carriers Jetstar Japan, Peach and Skymark. By pitching itself as a hybrid carrier, Starflyer is in the middle of the market and catches those passengers who do not want to pay ANA/JAL prices, but who also do not want to forego all the comfort and convenience a full-service carrier can offer.

Once the carrier overcomes its financial difficulties, international expansion could be on the cards again.

The airline hopes eventually to fly to South-East Asia, China and, once again, South Korea, but it is not quite ready to do so yet.

“To do that, we need more aircraft and need to be more healthy in terms of financial areas and be a more profitable organization,” says Ito. “That’s why before expansion we have to do something for such future planning.”

However, on May 2, at midnight, the airline was due to make its first flight to Taipei, Taiwan, suggesting there is hope for future international expansion.

JAPAN

Home economics

Michael Allen reports on some of the key issues facing Japan's domestic carriers.

Japan's domestic airline market can be divided into three groups: full-service carriers, hybrids and low-cost carriers (LCCs). Heavyweights JAL and ANA come under the full-service category, Solaseed, Starflyer and Skymark are hybrids, while LCCs include Spring Japan, Peach and Jetstar Japan.

Because of Japan's geography, there are a host of regional carriers operating in all parts of the country. ANA and JAL are the two largest airlines and operate extensive domestic routes alongside their international offerings.

Conversely, the outer regions of Japan are home to some tiny airlines. Oriental Air Bridge, based in Nagasaki, operates only two Q400 aircraft on routes to Fukuoka and outlying islands. On the opposite side of the country, Hokkaido Air Commuter operates a small fleet of Saab aircraft.

The regions the respective airlines operate in also presents their own challenges. Japan Air Commuter (JAC), based in Kagoshima, must contend with flying in the vicinity of an active volcano – Sakurajima – that regularly spews ash into the air. JAC, therefore, ensures it cleans its aircrafts' engines more frequently than airlines based away from active volcanos. It and other Kagoshima-based airlines also sometimes cancel flights as a safety precaution when the volcano poses a risk.

Low-cost carrier perception

Japan's domestic airline market is suffering from an image problem on the LCC side. Unlike in China and South-East Asia, where the public is more accepting of low-cost carriers as reliable cheap and cheerful ways of getting from A to B, some of the Japanese public – particularly the older generation – view them with suspicion.

"My parents still have some negative perceptions of LCCs – they really think it's not safe," says an executive at one Japanese leasing company.

A PR executive from one of Japan's low-cost carriers says that parents will often send their children money so they can afford to take a JAL or ANA flight rather than an LCC.

The older generation, then, does not generally trust LCCs. In a country with a significant ageing population, this presents a big problem.

Low-cost carriers also are not immediately attractive to businessmen, who need the flexibility to change flights at the last minute – something LCCs generally do not offer.

LCCs also do not have enough slots at Haneda Airport, the preferred airport for business travellers going to or from Tokyo because of its much closer proximity to the central area of the city compared to Narita Airport.

> "Japan's domestic airline market is suffering from an image problem on the LCC side."

Airport curfews

Many airports in Japan have restricted operating hours because of environmental and noise concerns. This presents problems for the airlines because it means their fleets often suffer from low utilization rates.

"They want to sweat their planes as much as they can, but they can't do that between the hours of 11pm and 6am at Narita Airport," says a market source in Japan.

Nagasaki Airport, in particular, has been aggressive in pushing for 24-hour operations. One of the reasons for this is because the airport is located offshore, about 38 kilometres from central Nagasaki, meaning that aircraft noise is not so much of a problem for Nagasaki residents. At the moment, the airport has a curfew of about 10.30pm.

"If the government were to want to privatize Nagasaki you can see why they would raise the curfew to try to raise the value of that airport," says Ross Howard, a partner in Clifford Chance's Tokyo office.

Howard explains there are alternatives to 24-hour operations that are being explored.

"I know that Japanese air traffic control has been working with a company called Nats to work out how they can use the skies better," he says.

Howard adds: "They have a lot of experience of operating multiple airports in a similar metropolitan area. Environmentally, I know that they have looked at some of the airports in Japan and I know that they have been talking to some of the private operators… you could get more plane movements through the skies at the same time. The noise impact will be reduced by new technology." .

AIRCRAFT PROFILE

Boeing 787-9 – a top choice

Appraisers think the middle member of the Boeing 787 family may prove the most successful

The Boeing 787, marketed as the Dreamliner by the manufacturer, is a twin-engine, twin-aisle aircraft that typically seats between 240 and 330 passengers depending on the variant. The 787 was designed to be 20% more fuel-efficient than the Boeing 767.

Several major suppliers have key roles in the production of the 787 and their involvement has been blamed in part for the type's troubled development programme.

Although originally planned to enter service in 2008, the original 787-8 model did not gain US and European type certification until 2011, after which it entered service with lunch customer ANA. Its early service history was also marred by a number of reliability issues.

The stretched 787-9 variant, which has a greater range than the original variant, first flew in 2013 and deliveries began in 2014.

Future developments

The next model of the family to enter service will be the 787-10, which is a further stretch of the original model. Kawasaki Heavy Industries, Boeing's Japanese production partner, began work on a section of the new model's fuselage on March 14.

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.

ISTAT APPRAISERS' VIEWS

Collateral Verifications (CV)
Gueric Dechavanne, vice-president, commercial aviation services

The 787-9 is showing stability in its market value with lease rates about $1.25 million a month for new aircraft. We expect these numbers to remain stable and even increase as the market demand for such aircraft continues to grow. Boeing's planned increase in production rate suggests strong demand for the type, which will in the long term replace many ageing types such as older Airbus A330s and Boeing 767s.

With so much cutting-edge technology incorporated into one aircraft, it is no surprise that the 787 had a number of issues as it got up and running. However, with the major hurdles out of the way, we expect Boeing to continue ramping up production to fill the backlog it has accumulated.

With more than 500 orders since its launch, the 787-9 has already shown great signs of success and it will continue to do so as the fleet grows. We expect this variant of the 787 to be the most popular among operators and investors. The 787-9 offers improved seat-mile economics

AIRCRAFT CHARACTERISTICS

Capacity/range	
Max seating	408
Typical seating	290 in two-class configurations
Maximum range	8,500 nautical miles (15,740km)
Technical characteristics	
MTOW	253 tonnes
OEW	120 tonnes
MZFW (LR version)	181 tonnes
Fuel capacity	138,700 litres
Engines	GEnx 1B/Trent 1000
Thrust	71,000lbs
Fuels and times	
Block fuel 1,000 nautical miles (nm)	10,480kg
Block fuel 2,000nm	19,500kg
Block fuel 4,000nm	37,630kg
Block time 1,00nm	146 minutes
Block time 2,000nm	265 minutes
Block time 4,000nm	501 minutes
Fleet data	
Entry into service	2014
In service	445
Operators (current and planned)	42
In storage	1
On order	102
Built peak year (2015)	64
Planned 2016	114
Average age	0.6 years

Source: Airfinance Fleet Analyst/Aerotransport Data Bank

Indicative maintenance reserves	
C-check reserve	$110 to $115/flight hour
Higher checks reserve	$85-$90/flight hour
Engine overhaul	$305-$310/engine flight hour
Engine LLP	$315-$320/engine cycle
Landing gear refurbishment	$75-$80/cycle
Wheels, brakes and tyres	$100-$105/cycle
APU	$125-$130/APU hour
Component overhaul	$320-$335/flight hour

Source: Airfinance Journal *research*

"Over the longer term, residual values for the 787-9 are expected to be above average."

Angus Mackay, principal, ICF International

and greater cabin flexibility than the -8 model and is better able to meet passenger demand, which is a compelling combination for operators. As the A330 and 767 fleets age, we expect the 787 to continue replacing these aircraft as operators look to operate the most efficient types.

With the A350-900 having now entered service, the 787-9 has significant competition from an aircraft that offers more seats to operators that require them. Boeing claims that the 787 offers better economics than the A350, but CV feels that both aircraft will do very well because of the large demand for this type of aircraft from the global operator base.

The inclusion of most engines in manufacture maintenance schemes (Rolls-Royce's TotalCare or GE's OnPoint) have given rise to some concerns about the impact of such schemes on future residual values. There is an increasing view that it has become more difficult to remarket these engines because the manufacturers retain such high level of control over their engines. However, we believe the engine manufacturers are aware of this issue and are trying to determine the best course of action to provide a more liquid market. We believe that, although it may take time, at some point there will be more third-party facilities that will be able to maintain these engines, thereby creating a secondary market for the two engine types. Until then, the remarketability of these engines may be viewed as challenging.

Overall, CV feels the 787 family of aircraft will perform very well for many years to come and will continue to be one of the top aircraft choices by operators and investors.

ICF International
Angus Mackay, principal

Launched in April 2004 as the 7E7, the Boeing 787 family initially comprised three models: the high-capacity, short-range 787-3, medium-capacity, long-range 787-8 and high-capacity, longer-range 787-9. Orders for the 787-3 version, designed with the Japanese domestic market in mind, were limited and, in 2010, all were converted to the 787-8 variant. Boeing subsequently launched the higher-capacity 787-10 during the 2013 Paris Air Show, restoring the current family offering to three variants.

The 787 was a radical departure from traditional commercial transport aircraft in terms of materials and systems architecture. Composites comprise about 50% of the primary structure of the 787 (including wing spars and floor beams) and reduce weight by about 20% compared to conventional airframe designs.

The 787 features a no-bleed electrical system as opposed to the pneumatic systems found on current-generation commercial jetliners, which provides a number of benefits, including weight savings, improved engine efficiency and reduced maintenance costs. Operators of the 787 have a choice of two new-technology engines – the General Electric GEnx 1B and the Rolls-Royce Trent 1000 series, which both deliver significantly improved fuel consumption and reduced noise and emissions compared to previous-generation engines.

The stretched 787-9 typically seats 250 to 290 passengers and, with its increased maximum take-off weight and fuel capacity, has an enhanced range of up to 8,500 nautical miles. It allows airlines such as launch customer Air New Zealand to open new long-haul routes, acting as a replacement for the Boeing 777-200ER and Airbus A340-300/-500.

The 787-9 has sold well since entering service in 2014, with about 100 in operation and about 500 on firm order backlog. The aircraft is positioned in the small twin-aisle market segment, which is an active sector that has shown consistent demand because airlines value the flexibility and efficiency that these aircraft provide in operation. However, competition in this segment is fierce, with the A350-900 (more than 20 in service and over 550 on firm order backlog), the A330-200/-300 (more than 1,000 in service and about 300 on order, including new engine option models) and the 767-300ER (about 430 in service) all challenging the 787-9.

With its large fleet and firm order backlog, ICF expects demand, values and lease rates for the 787-9 to continue to be firm, especially if traffic continues to be robust. Over the longer term, residual values for the 787-9 are expected to be above average.

VALUES BOEING 787-9

Current market value ($m)

Build year	2014	2015	2016
CV view	119.6	127.2	142.8
ICF view	122.0	130.0	138.5

Assuming standard Istat criteria. Maintenance status assumes half-life, except for new aircraft, which assumes full-life.

Indicative lease rates ($'000s/month)

Build year	2014	2015	2016
CV view	1,100	1,175	1,250
ICF view	950-1,100	1,000-1,125	1,050-1,175

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
April 2016						
Latam	Chile	Spare parts	$275m	Three-year senior facility	Citi, BancoEstado, Bank of America Merrill Lynch	
AerCap	Netherlands	Unsecured	$650m	Credit facility	Coordinators: CTBC Bank, DBJ, DBS Bank	Mandated lead arrangers: Tokyo-Mitsubishi UFJ, National Australia Bank, China Construction Bank, Bank of East Asia, Tokyo Star Bank
Aircastle		Unsecured	$120m	Senior unsecured term loan	DBJ	Japanese financial institutions
Etihad Airways	Abu Dhabi	2x787-9	$272m (CMV)	Jolco	SMFL	
FPG/ FPG Amentum	Ireland	Unsecured	JPY11bn ($101.4m)	Warehouse credit facility	SMBC, SMTB	Aozora Bank, Gunma Bank, Shizuoka Bank
American Airlines	US	1x737-800	$35m	Mortgage	CA-CIB	
March 2015						
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 BNP Paribas, Citi, Credit Agricole Goldman Sachs, JP Morgan Mitsubishi UFJ, RBC	
Air India	India	3x777-300ER	$155m	PDP finance	Deutsche Bank	
Awas	Ireland	1xA320	undiclosed	Long-term finance	CA-CIB	
Fly Leasing			$385m	Blind pool	Commonwealth Bank of Australia, Bank of Tokyo-Mitsubishi UFJ, New York Life Insurance Company, National Australia Bank.	
February 2016						
Accipiter	Ireland	42 x narrwbody, 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	
Allegiant 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

EXPORT CREDIT DEALS

Borrower	Country	Asset	Amount	Structure/status (closed unless stated)	Arranger/status (closed unless stated)	Debt
April 2016						
Silk Way Airlines	Azerbaijan	2x747-8Fs	$761m (at list prices)	ECA-backed guaranteed loan	Apple Bank, CA-CIB	
February 2016						
Air Cote D'Ivoire	Ivory Coast	4xQ400	$87m (CMV*)	Secured loan/	EDC	
January 2016						
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
April 2016						
BOC Aviation	Singapore	Unsecured	$750m	Senior notes	BOC International, Citigroup, Goldman Sachs, HSBC, JP Morgan, Morgan Stanley, BNP Paribas, Wells Fargo Securities	3.875-/SEP BBB+/ Fitch -A
March 2016						
Aircastle	US	Unsecured	$500m	Senior notes	Deutsche, BNP, Citi, Credit Agricole, Goldman Sachs, JP Morgan, Mitsubi-shi UFJ, RBC	5.00%
Apollo	US	32 aircraft	$510m (A:$395m, B:$80m, C:$35m)	ABS	Goldman Sachs	Pricing TBD
February 2016						
EasyJet	UK	Unsecured	€500m	7-year Eurobond	Bank of America Merrill Lynch, Barclays, Société Générale	1.75%

SALE/LEASEBACKS

Borrower	Country	Asset	Lessor/Arranger	Amount	Status
April 2016					
Thomas Cook	UK	A321-200	Avation	Undisclosed	Delivered on 12 year lease
Emirates	UAE	2x777-300ER	EMP Structured Assets	Undisclosed	Delivered on 10 year lease
Virgin Atlantic	UK	1x787-9	Avolon	$136.2m (2016 CMV*)	Delivered on 10/12 year lease
March 2016					
Emirates	Dubai	1xA380	AFC	$221m (CMV*)	
January 2016					
Aegean	Greece	1xA320	Alafco	$44m (CMV*)	Closed
Latam	Chile	4xA321	Ping An	$210m (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
February 2016 to April 2016					
Saudia	Saudi Arabia	New aircraft	Sukuk bond	5 billion riyal ($1.3bn)	Mandated (sale H2 2016)
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

** 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-(neg)
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)	CCC-(neg)
Hawaiian Airlines	B+(stable)	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+(neg)
WestJet	-	-	BBB-(stable)

Source: Ratings Agencies - 28th April 2016

LESSOR CREDIT RATINGS

Lessor	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 - 28th April 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	BBB-	Ba1(neg)	BBB
Rolls-Royce	A(neg)	A3(stable)	A(neg)
United Technologies	A-(stable)	A3(stable)	A-(stable)

Source: Ratings Agencies - 28th April 2016

AIRCRAFT ORDERS

COMMERCIAL AIRCRAFT ORDERS BY MANUFACTURER

	Gross orders 2016	Cancellations 2016	Net orders 2016	Net orders 2015
Airbus	46	22	24	1,036
Boeing	148	18	130	768
Bombardier	132	0	132	35
Embraer	30	0	30	165
ATR	40	0	40	68

Based on Airfinance Journal *research and manufacturer announcements as of April 26*

COMMERCIAL AIRCRAFT ORDERS BY CUSTOMER

Customer	Country	Quantity/Type
December 2015 to February 2016		
Delta Air Lines	US	75xCS100
Chorus Aviation	Canada	5xCRJ900
Xiamen Airlines	China	10x737-800
airBaltic	Latvia	7xCS300
Horizon	US	30xE175
Emirates	Dubai	2xA380
Garuda	Indonesia	14xA330-900
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 Air	Iran	40xATR72-600
ANA	Japan	3xA380
Iran Air	Iran	MoU for73 Airbus widebody and 45 single aisle

CURRENT PRODUCTION AIRCRAFT PRICES AND VALUES ($ MILLIONS)

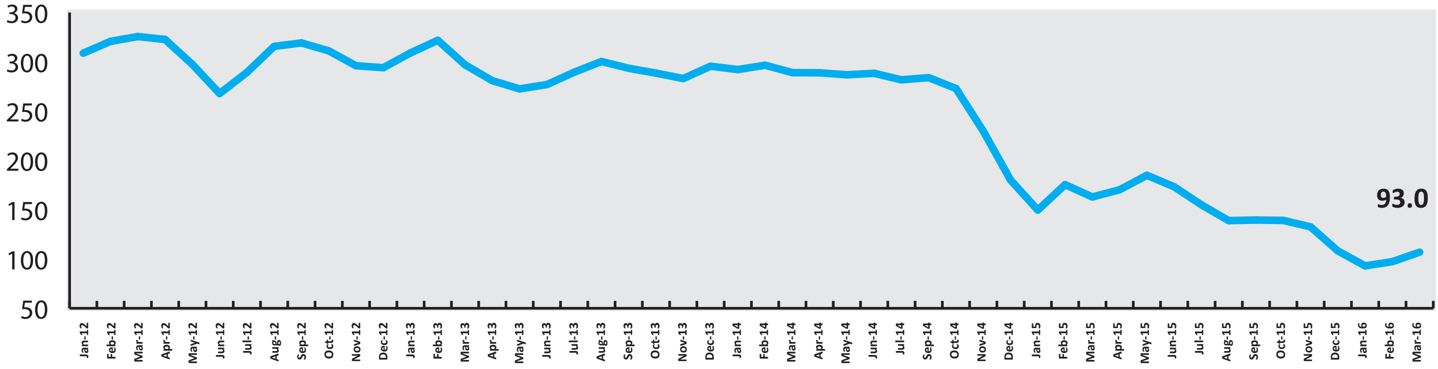
Model	List price	Current market value*
Airbus (2016 price)		
A319	89.6	37.0
A320	98.0	44.2
A321	114.9	52.6
A330-200	231.5	92.3
A330-300	256.4	104.4
A350-900	308.1	144.5
A380	432.6	221.4
ATR (2015)		
ATR42-600	21.6	16.4
ATR72-600	25.9	20.4
Boeing (2015)		
737-700	80.6	36.7
737-800	96.0	47.5
737-900ER	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
Bombardier (2015 Avitas BlueBook)		
CRJ700	41.0	22.3
CRJ900	46.0	26.3
CRJ1000	49.1	28.1
Q400	30.0	21.8
Embraer (2016)		
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
Airbus (2016 prices)	
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
Boeing (2015)	
737 Max7	90.2
737 Max8	110.0
737 Max9	116.6
777-8X	371.0
777-9X	400.0
787-10	306.1
Bombardier (2015)	
CS100	71.8
CS300	82.0
Embraer (2016)	
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
Airbus			
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
ATR			
ATR42-600	135	167	151
ATR72-600	165	216	191
Boeing			
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
Bombardier			
CRJ700	175	214	195
CRJ900	190	240	215
CRJ1000	210	260	235
Q400	180	240	210
Embraer			
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

Are we entering the magical world of no aviation cycles?

Enjoy the upturn while you can because it will not last, writes Adam Pilarski, senior vice-president at Avitas.

Any time I hear the words "this time it is very different, old laws no longer apply" or "we are entering a totally new reality" I get highly suspicious. This time it is John Leahy who marched Airbus straight from the desert to the land of milk and honey, or at least from an insignificant start-up to one of the two most potent aircraft manufacturers in the world.

Leahy's achievements are undeniable. Airbus's chief operating officer is the current holder of both the prestigious Wings Club and Istat achievement awards. He has sold more aircraft than any human in history and is arguably the individual who most transformed commercial aviation in our lifetime.

Aviation cycles are not a matter of US politics where some believe that because an individual is, say, an accomplished brain surgeon he would also be a great president. Leahy is incredibly accomplished and widely respected and even admired for his sales successes. This does not make him, though, a forecaster.

Here is what he said in March at the annual Istat conference: "It is very important for us not to have a cyclical industry, and at least for the last 20 years we've been managing that pretty well to keep cyclicality out", and "I think we're a little bit more sophisticated in order book management. This is no longer a cyclical industry. It really isn't".

Leahy is correct in pointing out the existing enormous backlog and the fact that the manufacturers do not produce white tails. The circa 10-year backlog, though, can be explained through rather straight-forward, old-fashioned thinking rather than the more esoteric "we live in a new reality now".

High oil prices and the low cost of money produced a unique situation where orders mushroomed. High oil prices, in addition to spurring airlines to procure more fuel-saving platforms, led to the launch of new aircraft/engine programmes, a development that historically leads to large orders of the new equipment. Ridiculously, low interest rates were sustained by the financial crisis, during which traditional aircraft funding dried up, leaving governments to step in. This funding was available only for new equipment, further inflating orders.

Recently another high-profile aviation executive expressed similar sentiments regarding the future of his element of the industry. At a maintenance, repair and overhaul conference in Dallas in April, Doug Parker, chairman and chief executive officer, American Airlines, said: "I think it's highly unlikely you'll ever see losses in this industry again. We are in a whole new world."

Again, Parker is a highly regarded airline executive and the US airline industry has been profitable for a couple of years. As a matter of fact, American Airlines last year recorded its highest profit.

But rather than claiming a totally new reality, special circumstances can explain the recent financial successes of airlines. The overall economy in the US has been doing well, though not spectacularly well, for more than seven years now, amounting to the fourth-longest expansion period in our economic history. The drop in oil prices reduced costs and allowed airlines to charge less, further stimulating traffic. And the US airline industry is protected by the government at unprecedented levels both internationally (restricting competition from Gulf carriers and Norwegian) and domestically (approval of all mergers), supporting a functioning oligopoly leading to high yields.

The myth that we are globally in a period of good things forever is fraught with danger. This does not mean that aircraft production and orders cannot continue to expand or that airlines cannot finally start making money on a consistent level.

Historically, orders depend on traffic and the profitability of airlines. The well-being of airlines depends on the state of the economy. Continuing prosperity assumes no future recession and no increased competition. The danger is that the present situation is because of special circumstances and does not necessarily mean we live in a world of new realities. We were in similar situations before when everything seemed to be great. Sometimes outside factors such as economic recession or terrorism and acts of war destroyed such a rosy situation. At other times, the various players managed to commit mistakes that led to disasters.

Accepting that John Leahy and Doug Parker are right assumes no bad things will happen again and no mistakes will be committed. I find this hard to believe, although I would love it to be true. My suggestion is that we should enjoy today's reality as long as it lasts, but not deceive ourselves by assuming it will continue forever.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