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## Lessors still committed to A320 model

A ircraft leasing companies placed orders for 32 Airbus A320s last year, representing a total of 36% of Airbus orders for the current engine option model.

On 28 December, GECAS placed a direct order for 10 aircraft of the type. During the year, Aviation Capital and BOC Aviation committed orders for eight units while CALC booked a total of 14 orders.

Their marketshare could further increase as some of the direct orders placed by airlines such as Airasia, Vueling, Viva Air/Viva Aerobus, Peach Airlines and Spirit Airlines could be the subject of sale-and-leaseback financing deals.

However only two aircraft orders were placed for the A321

model, according to the Airbus figures. Lessors' appetite for the new-engine option model was more significant.

Those accounted for 210 gross orders for the A320neo, representing 38% of Airbus' total for the type.

GECAS committed for 100 A320s during the year, while CALC placed orders for 52 aircraft. CDB Leasing and AerCap also put in significant orders during 2017 with 30 and 25 units, respectively.

Lessors' marketshare on the A321neo model was only 12% last year with 56 orders. AerCap was the lessor with the largest order at 25 units, but CDB Aviation and Air Lease also placed orders for 15 and 12 aircraft, respectively. The only lessor order in the widebody category was placed by Air Lease at the end of the year. The US-based lessor ordered two additional A330-900s and currently has 29 aircraft of the type.

Unidentified customers accounted for another 63 narrowbodies and nine widehodies

Lessors placed as many orders for Airbus as Boeing models in 2017, with 302 aircraft each.

Overall they accounted for 24.6% of Airbus gross orders. This compares with 28.7% for Boeing orders in 2017.

#### **Deliveries**

Lessors received 31.3% of Airbus direct deliveries last year compared with 16.5% for Boeing models.

Their share of the A320 model almost reached 40% while on the A320neo type, it accounted for 42.2% of Airbus deliveries.

In the A321 market, lessors represented 13 of the 20 A321neos (or 65%) and 24% of the 183 A321 deliveries.

Of the 49 A330-300s deliveries in 2017, lessors accounted for 15 units, or 30.6%. Their marketshare of the A350-900 was 15% with 12 deliveries.

Aircraft production rates will be debated at our Inaugural Southeast Aerospace and Defence Conference in Mobile, Alabama on 25-27 June 2018. A



### Lessors take a third of Boeing orders

Aircraft leasing companies placed orders for 302 Boeing aircraft last year.

Boeing had 1,053 orders but recorded 141 cancellations and conversions, meaning 912 net orders in 2017.

Therefore lessors accounted for 33% of the US manufacturer's net orders.

In the narrowbody category, aircraft lessors accounted for 258 orders, or 30% of Boeing's gross orders.

In 2017 there were Boeing 737 orders from Air Lease (12 aircraft), Alafco (20 aircraft), Avolon (75 aircraft), Aviation Capital (24 aircraft), BOC Aviation (12 aircraft), CALC (50 aircraft), CDB Aviation (48 aircraft), GECAS (four aircraft), JIA (10 aircraft) and SMBC Aviation Capital (three aircraft).

Unidentified customers accounted for another 316 orders.

Lessors placed widebody orders for 44 units, representing 41% of Boeing's gross widebody orders.

AerCap continued to increase its share in the 787 market and placed an order for 30 units at the Paris air show. The lessor had already taken delivery of 55 787s and had a further 67 aircraft of the type on backlog, including those acquired from airlines in sale-and-leaseback transactions.

Air Lease ordered two 787s, while BOC Aviation and CDB Leasing placed orders for four and eight 787s, respectively. Unidentified customers accounted for another 18 orders.

#### **Deliveries**

Leasing companies received 16.5% of Boeing deliveries last year.

Intrepid Aviation received two new 777-300ERs for lease to Philippine Airlines, while Eva Air took delivery of five new 777-300ERs acquired by Air Lease, BOC Aviation and GECAS. Air Lease placed its second delivery with KLM Royal Dutch Airlines.

Lessors represented 22 of the 136 787 deliveries in 2017.

Air Lease and CIT Aerospace received three 787s each, while AerCap took delivery of 16 units during 2017.

In the narrowbody market, the leasing companies accounted for 95 deliveries, or 18% of Boeing deliveries.

Chinese lessors had 52 deliveries, or 55% of leasing companies' total.

BOC Aviation received 23 units during the year while Bocomm Leasing and CDB Aviation received 16 and 12 aircraft, respectively. Boeing says Everbright Financial Leasing took delivery of a single unit during the year.

Russian lessors received 20 aircraft, with Sberbank Leasing taking 10 aircraft and Avia Capital Leasing receiving another 10.

Air Lease received 11
narrowbodes, Aviation Capital
received four aircraft, GECAS
received 13 units, Standard
Chartered received seven
aircraft and Skyways Leasing
received two units. A

A irbus racked up a total of 841 aircraft gross orders in December to surpass Boeing in last year's tally.

However, the Chicago-based manufacturer won the battle for widebodies with 169 net orders against Airbus' 57 net orders.

Airbus announced 1,229 gross orders in 2017, but 120 orders were cancelled. Still the 1,109 net order figures is 197 more aircraft than Boeing.

The new business comprised 1,160 bookings for Airbus' A320-family aircraft, with 1,054 being net orders.

The A320 versions recorded 646 gross orders but 79 cancellations means a 12% cancel rate.

There were only seven net orders for the A319 models while sales for the A321 reached 506 orders.

Demand for A330 products was weak with 21 net orders for the A330 and the A330neo families. Airbus recorded 44 orders for the A350 models in 2017, but announced eight cancellations.

By comparison Boeing racked up nearly 100 net orders for the 787 family while the 767 programme had 15 orders and the 777 family captured 60 net orders.

Airbus deliveries reached 718 during the year, including 558 narrowbody aircraft, 67 A330s, 78 A350s and 15 A380s.

Interestingly Airbus handed over as many A321s as A320s to customers. However A320neo deliveries reached 161, versus 20 A321neos – an aircraft type which was introduced to service in 2017.

As of 31 December, Airbus' overall backlog of aircraft stood at 7,265 aircraft – a new industry record. At the end of 2016, its backlog was 6,874 aircraft.

Boeing delivered more commercial aircraft than any manufacturer for the sixth consecutive year and set an industry record with 763 deliveries in 2017.

over 529 737 family to customers along with 12 747-8s, 10 767s, 74 777s and 136 787s. Its backlog stood at 5,864 aircraft, including 4,668 737s, 12 747-86,08 7375, and

The manufacturer handed

Its backlog stood at 5,864 aircraft, including 4,668 737s, 12 747-8s, 98 767s, 428 777s and 658 787s, as at 31 December 2017.

#### Airbus annual orders summary

|      |                             | A320 Family | A330 | A350 | A380 | Total |
|------|-----------------------------|-------------|------|------|------|-------|
| 2017 | Gross orders                | 1,160       | 25   | 44   | 0    | 1,229 |
|      | Net in year of cancellation | 1,054       | 21   | 36   | -2   | 1,109 |
| 2016 | Gross orders                | 790         | 106  | 51   | 2    | 949   |
|      | Net in year of cancellation | 607         | 83   | 41   | 0    | 731   |
| 2015 | Gross orders                | 1,015       | 156  | 16   | 3    | 1,190 |
|      | Net in year of cancellation | 945         | 136  | -3   | 2    | 1,080 |
| 2014 | Gross orders                | 1,545       | 174  | 57   | 20   | 1,796 |
|      | Net in year of cancellation | 1,321       | 154  | -32  | 13   | 1,456 |
|      |                             |             |      |      |      |       |

Source: Airbus

#### **Boeing annual orders summary**

|      |                    | 737   | 747 | 767 | 777 | 787 | Total |
|------|--------------------|-------|-----|-----|-----|-----|-------|
| 2017 | Total gross orders | 865   | 6   | 15  | 60  | 107 | 1,053 |
|      | Total net orders   | 745   | -2  | 15  | 60  | 94  | 912   |
| 2016 | Total gross orders | 707   | 18  | 26  | 23  | 80  | 854   |
|      | Total net orders   | 550   | 17  | 26  | 17  | 58  | 668   |
| 2015 | Total gross orders | 666   | 6   | 49  | 58  | 99  | 878   |
|      | Total net orders   | 588   | 2   | 49  | 58  | 71  | 768   |
| 2014 | Total gross orders | 1,196 | 2   | 4   | 283 | 65  | 1,550 |
|      | Total net orders   | 1,104 | 0   | 4   | 283 | 41  | 1,432 |

Source: **Roeina** 

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## ATR and Bombardier unfazed by E3 programme

ATR and Bombardier are unfazed by Embaer's talk about a new turboprop programme.

At the Asia Pacific Airfinance conference in Hong Kong, Bombardier Commercial Aircraft's head of marketing for Asia Pacific and China Ross McKeand said it is very difficult to improve upon current generation turboprops that are in the market.

McKeand acknowledges that Embraer has some turboprop experience but stresses it is hard to bring the new current level of technology of narrowbody and widebody aircraft in to the turboprop market.

"You are not gaining any advantages in terms of aerodynamics because you are not pushing aircraft to the level of compressibility drag," he says.

"In terms of engines, a lot of the performance comes from the propellers that are already operating at very high efficiency. A new engine will be heavier and will not necessarily bring much overall fuel burn advantage. In terms of weight, you cannot beat today's aircraft. A new turboprop will be heavier.

"When you combine all those factors, it is very hard to compete against ATR and Q400 products," he adds.

#### Positive signs

ATR's head of leasing markets Jerome Gabory agreed. He believes another manufacturer will increase competition in the sector but also make life more "interesting for airlines" that see the turboprop technology as key on short-haul markets.

"It is a good sign that another manufacturer acknowledges that the turboprop is the aircraft of the future for short-to medium-haul sectors." he says.

Embraer held initial talks with airlines and engine manufacturers at its European

office, Amsterdam, in September to sound interest in a new turboprop aircraft (dubbed the E3 programme), *Airfinance Journal* understands.

The Brazilian manufacturer sees a potential market for a new-generation turboprop, though the priority is the entry into service of its E-Jet E2 programme, with deliveries starting in April 2018.

"Lessors and suppliers were invited," says one source. "I can see why they are exploring a turboprop. There has not been a new technology turboprop around for more than a decade," he adds.

Turboprops currently in production include the ATR42-600, ATR72-600 and the Q400 – all of which are upgraded derivatives of decades-old platforms.

"On the commercial aircraft side, the E2 family is nearing entry into service and on the military and business side, they don't have new projects in development. That leaves a slot for a commercial aircraft," he says.

Should Embraer penetrate this market, the Brazilian manufacturer would have to launch a "family of turboprops" says the source. "They would have to come to market with a 70-seater, a 90-seater and possibly a 110-seater," he says.

Another source says behind the E3 project could be a twoturboprop family: a baseline model that seats between 90 and 100 passengers and another aircraft that would accommodate between 50 and 60 passengers.

"Embraer is looking at two different concepts: one aircraft that has the wing between the ATR and Q400 models, or one aircraft that has engines mounted at the back," he adds.

The manufacturer is expected to make a decision on whether to launch a turboprop in 2018, sources say.  $\wedge$ 



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# **CSeries** flies into another interesting year

Bombardier's CSeries underwent its most turbulent year in 2017, as the Trump administration threatened the regional aircraft with punitive tariffs and Airbus agreed to take a majority stake in the programme.

Industry reaction to Airbus' October 2017 CSeries announcement was generally positive, and the sense of rejuvenation strengthened this year when Egyptair confirmed an order for 12 CS300 models on 3 January. Meanwhile, fellow North African carrier Tunisair is reportedly considering the aircraft.

Yet the CSeries is still haunted by past mistakes, with a 2014 order from Saudigulf Airlines in the balance due to missed delivery dates.

As of 30 September 2017 (before the Egyptair order), Bombardier showed 360 orders for the CSeries, with 237 for the larger CS300 and 123 for the CS100.

That total was reached roughly nine years after Bombardier formally launched the aircraft programme. While the manufacturer had envisioned more orders in that period, comparisons with other aircraft sales efforts are difficult since the CSeries occupies the relatively unexplored gap between 100-seat regional jets and mainline narrowbody aircraft.

Herein lies the key question about the CSeries' future:
Despite the family's impressive technical credentials, do airlines want aircraft that can seat from 110 to 160 passengers? "It reminds me of the great debate over 100-seat jets," says Richard Aboulafia, vice-president analysis at Teal Group.

"Some believed that this segment was a no-man's land, always destined to doom any new competitors. Others believed that the right jet could stimulate demand. Ultimately, the experience of Embraer's E190/195 and E2 shows that the right jet can make any segment bear fruit."

The perception that the

CSeries occupies a capacity dead zone has been reinforced in recent years by narrowbody orders that have tended towards the larger variants of the Airbus A320 and Boeing 737 families.

Take the A319, which has roughly the same capacity as the CS300: Launched in the mid-1980s, the current engine option (ceo) version of aircraft won 1,409 orders, versus 4,769 for the A320ceo, according to *Airfinance Journal*'s Fleet Tracker. In comparison, the A319neo has just 51 orders, versus 3,684 for the A320neo.

On that analysis, the CSeries is in trouble; if Airbus can not even sell its own small narrowbody, what chance would it have with an excompetitor's aircraft that lacks commonality with its in-house products?

The answer is likely to be superior operating economics. The CS300 is about 6,000kg lighter than the A319neo and shares that aircraft's geared turbofan engine technology from Pratt & Whitney.

Mike Yeomans, head analyst for commercial aircraft & leasing at consultancy IBA, believes the CSeries offers an alternative to ever-larger narrowbodies for airlines intent on driving down seat costs.

"It is not all about having a larger aircraft, although there are issues of congestion at some airports," he says.

"If the CSeries can deliver a comparable, or better, operating cost per seat to a larger aircraft such as an A320neo or 737 Max 8, then it makes a strong case for itself – particularly on routes with thinner traffic demand."

Aboulafia agrees, up to a point. He believes oil's current (10 January) price of around \$65 per barrel is "good for the CSeries", but cautions

that a dip below \$40 would discourage orders. "The real question is whether airlines will decide to optimise their fleets in the name of fuel efficiency, even if that means losing commonality with larger jets and complicating their fleet planning," he says.

#### Airbus influence

If airlines are to be won over to the CSeries then Airbus, with its extra marketing clout, has a better chance than Bombardier alone. In October 2017 the European manufacturer agreed to take a controlling 50.01% stake in the programme "to strengthen and accelerate the C Series' commercial momentum" and use its supply chain experience to generate "significant CSeries production cost savings".

Some analysis has suggested that Airbus will not realise the cost savings it needs to offer CSeries aircraft at a price airlines will accept.

Bernstein analyst Doug Harned reckons that CSeries suppliers will not cut prices so long as they expect a limited production run for the aircraft, though Aboulafia disagrees.

"Airbus will be able to mandate that suppliers reduce their prices because it has a great deal of leverage with its other products," he says, adding: "Most suppliers were smart enough to know that the A380 would be a dog. but they had to play along on pricing because of all of Airbus' successful jets." In his analysis Harned likened the CSeries to the Boeing 717, a similarsized aircraft for which Boeing struggled to cut costs due to low orders.

However, the CSeries already has twice the orders of the 717, and is being marketed at an airline market radically different from 20 years ago.

"The future of the CSeries looks stronger with Airbus on board," says Yeomans.

"There are some comparisons to draw between the CSeries and the 717, but these are two very different aircraft programmes."

#### **Backlog and US production**

Although the CSeries has outsold the 717, some of its backlog is rather fragile. In addition to the Saudigulf order, for instance, it includes 10 CS100s for Odyssey Airlines, a proposed UK-based all-business-class carrier, which only exists on paper.

Then there is Delta Air Lines, which accounts for a fifth of the CSeries backlog with an order for 75 CS100s.

However, that order would fall if a December decision by the US Department of Commerce to impose import tariffs is upheld. Final say on the matter rests with the US International Trade Commission, which will decide around 1 February 2018.

"Airbus has stated that the tie-up with Bombardier is not driven by specific customers or markets, but without the Delta order, or the prospect of selling more units into the US, the deal looks less attractive," comments Yeomans.

A possible way around any tariffs is to produce the CSeries at Airbus' A320 assembly line in Mobile, Alabama, although Boeing - the driving force behind the tariffs - might lobby hard to maintain them anyway, especially if its recently announced talks with Embraer yield some kind of partnership.

"If the Airbus deal does not solve the tariff issue, this could threaten the future of the CSeries programme," notes Yeomans. Thus, it appears the CSeries is destined for another interesting year. \(\Lambda\)

## A330-200 find more homes in Spain

Spanish carriers are adding more new and used Airbus A330-200 units to their fleets, sources indicate.

International Airlines (IAG) has mandated the financing of two upcoming Airbus A330-200 deliveries for its start-up scheduled carrier Level following the latter's launch in Barcelona. The group has selected the A330-200 as its preferred aircraft to further expand operations.

IAG placed an order in the summer for an additional three units, with deliveries to start in 2018

Level began operations in June 2017 with flights from Barcelona to Los Angeles, San Francisco (Oakland), Buenos Aires and Punta Cana, with two new A330-200s fitted with 293 economy and 21 premium economy seats.

#### **Used aircraft**

Spanish charter operator Wamos

is in the process of taking two A330-200s under leases from AerCap, sources indicate.

The 2002-vintage aircraft are equipped with Pratt & Whitney PW4168A engines and were previously operated by Air Berlin.

The Madrid-based carrier currently operates seven Boeing 747-400s for flights to the Caribbean as well as ACMI and wetlease services.

It introduced the A330-200 a year ago with two ex-Monarch aircraft powered by Trent 772B-60 engines. A third aircraft was added in the summer.

One source says the ex-Monarch aircraft were added for capacity diversity in the carrier's ACMI offering. "They will continue 747 operations but the Air Berlin aircraft from a configuration and economic perspective were too good to miss and I believe will be incremental," the source says.

Evelop Airlines is also adding



capacity with the A330-200 model.

The Madrid-based carrier operates two A330-300s along with a single A320 under lease agreements, and is taking a 2006-vintage A330-200 unit previously operated by Air Berlin.

The unit is leased from Avolon, sources say.

Other Air Berlin A330s have found a home with Malaysia Airlines. In late September the Malaysian carrier signed a letter of intent with AerCap to lease six A330-200s powered by PW4000 engines. The A330-200s, which will be leased for six years from 2018 to 2023, were formerly in service with Air Berlin, confirms AerCap.

Airfinance Journal understands that Virgin Atlantic is also taking five A330-200s under lease agreements with different lessors.

Air Berlin's A330-200 fleet included 17 units when the German airline filed for insolvency on 15 August.



## **A330-800:** Is there a future?

Does the Airbus A330-800 have a market? Can it outperform the Boeing 787-8?

The A330-800 entered the final assembly line in December at the Airbus production plant in Toulouse, France, amid doubts in the industry that the aircraft will be produced beyond the prototype.

There is only one order for the sub-type, six from Hawaiian Airlines—and Hawaiian is expected to cancel the order. The airline is running a competition between the Airbus A350-900 and the Boeing 787-8/9, according to market intelligence.

#### Smaller is better

Hawaiian's outgoing chief executive officer, Mark Dunkerley, is known to prefer a smaller-capacity aircraft in the size of the A330-800 or Boeing 787-8. Hawaiian had been one of the few customers for the A350-800, but was persuaded by Airbus to switch to the similarly-sized, but slightly shorter range, A330-800 when Airbus sought to de-risk the A350 programme, reduce development costs and concentrate on the more profitable A350-900/1000

At the peak, the A350-800 had 161 orders. The A330-800 had about a dozen at its peak.

#### Orphan aircraft

The A330-800 is an orphan aircraft today, a status that is making it hard to sell. One major airline to which Airbus is making a pitch says it isn't interested because it doesn't want an orphan. Airbus counters that if this carrier ordered the aircraft, it will make a market for it, market intelligence indicates. So far, the pitch is no sale.

#### Market will come

Airbus officials say they aren't worried. The market will come as soon as 2020 as in-service A330-200s age. The long-haul, low-cost carriers and China present opportunities, Airbus says.

Crawford Hamilton, head of A330 product marketing, acknowledges the demand

is slow for the -800 today, in part because of low fuel prices but principally because the in-service A330-200 fleet's average age is less than 10 years old. (There is no relation between Hamilton and this writer.)

"We have 95 operators [of the A330]," Hamilton says, "so that's lot of opportunities. We would concur they don't want an orphan aircraft," he says of the major airline that expressed concerns. "We have a lot of [potential sales] activity on -800. If things go well, we won't have an orphan aircraft.

Hamilton sees good LCC market potential—"we know where our customer base is—" and he believes the A330-800 is the right size for it.

"If you want range, a very good solution is the 330 at 251 tonnes," Hamilton says. "Long haul is very risky. The A330-800 has low break-even cost and interesting high density layouts. It can take 386 seats 6,000-6,500 nautical miles (nm). It's a good niche that we have."

Leeham's analysis concludes that the A330-800 has 500nm more range than a similarly loaded 787-8.

"The great thing is the adaptability and flexibility. European charter guys like this and have been doing this for years. It has a very good seat count advantage against the [Boeing] 787-8, up to 30 more seats. This is a massive amount of revenue you can get on the upside."

The -800 would be configured at nine abreast to achieve this capacity.

#### A330-800 vs the Boeing NMA

Airbus argues that the -800 covers the top of the Middle of the Market and with the A321neo, covers this sector. Boeing continues to study a new aircraft but is not close to launching the programme. Leeham's analysis of the Boeing NMA gives it a significant economic advantage over the -800, but the latter is available now. The entry-into-service date of the Boeing NMA, if launched next year or in early 2019, is a moving target.

Boeing officials continue to publicly say entry into service is targeted for 2024-2025 but *Leeham News and Comment* revealed that Boeing is now telling suppliers and the customer base 2027 seems more likely.

This works to Airbus' advantage, says Hamilton.

"[The NMA] is possible competition in the future," he says. "There is a value of time. How long are people going to wait for it?

"There are about 1,600 aircraft flying [in the MOM sector]," Hamilton says. "We have 95 operators for 330-200. The problem is the fleet is really, really, young. The average age is only nine years. There aren't that many aircraft to replace today. These start to kick in beyond 2020. It would have been silly for us to develop the A330-900 and wait three or four years to develop the 800.

"The cherry on the cake is the 767-300/400, which are 15 years older," Hamilton says. In the short term is the 767 market. Longer term are the 330-200s.

#### If not the NMA, then the 767

If airlines must wait 6-7 years, or worse, nine, for the Boeing NMA, what does Boeing do in the meantime?

It's now been confirmed Boeing is studying whether to relaunch the 767-300ER passenger model as an interim aircraft, principally for American and United airlines but possibly others.

Hamilton sees plenty of challenges for Boeing to restart the line.

"It's going to be difficult; it's a 30-year old aircraft and an interim solution," he says. "You have to get seating standards up to 2025. What happens if the fuel price goes up? "You haven't had a cabin in production for three years now and it will be another 2-3 before delivery." The passenger service unit (PSU) and in-flight entertainment equipment are of old design. Even overhead bins are, by today's standards, antiquated.

#### A330-800 vs 787-8

Hamilton isn't worried about

the 787-8, either, noting that in recent years Airbus sold, 85 A330-200s versus 26 787-8s.

Boeing's plan is to produce about one 787-8 per month from 2020, the supply chain tells *Leeham*, preferring to concentrate on the more profitable 787-9/10, which also have 95% commonality between the types versus about 50% between the -8 and its larger brethren.

As a consequence, *Leeham* believes Boeing won't be aggressive in 767 or A330 replacement campaigns with the 787-8

The A330-800 has more capacity and range than the 787-8. For LCCs which load the aircraft with 350+ passengers, this capacity and range advantage will be real.

At normal load-factors and cabins, one could discuss how many airlines need the 7,500nm or 15 hours capacity of the A330-800 or 787-8. But with LCC cabins, the payload reduces the capability to typically 10-12 hours of the long-range leisure destination and there the A330-800 (in its 251t version) is a stronger aircraft than the 787-8.

#### Conclusion

The A330-800 has a market. A long-range LCC is perhaps the best chance outside domestic China (where the A330-200R and -300R dominate for now).

The dense cabins increase the payload to the level where the range of the A330-800 is in the bracket of a normally-loaded A330-300 or -900. The A330-900 is then a less-than-10-hour aircraft

When configured for a long-range LCC, the A330-800 outperforms the 787-8 both in seating and range. The difference in fuel consumption is small enough (around 3% more) for the LCC to not take a risk with a A330-800 instead of the more costly (to buy or lease) 787-8.

With an amortised production line, the A330-800 can be sold at the prices needed to make long-range LCC work.

Article contributed by Scott Hamilton, Leeham Company. Additional reporting by Bjorn Fehrm, Leeham Company. A



# KBRA CONTINUES TO LEAD THE AVIATION MARKET





# Appraisers views for 2018

# What was the most important event that affected aviation in 2017?

### Ascend's global head of consultancy Rob Morris: "It

is hard to be specific about any one major event because there is not one single discreet event that has had fundamental impact. But in the macro sense, continued lower oil prices have been a key driver to continued strength of demand, which is also underpinned by continued improvement in regional economies. And then for singleaisle markets continued engine delays at Pratt & Whitney and CFM for the new programmes has resulted in that demand translating into demand for used/new examples of current aircraft programmes. This means that bankruptcies at Monarch, Air Berlin, etc... have not resulted in significant value or lease rate dislocations in 2017 as aircraft have been picked up by alternative operators quickly."

## Collateral Verification's vice president, commercial aviation services, Gueric Dechavanne:

"The announcement that Airbus would be purchasing the CSeries from Bombardier in 2018."

IBA's chief intelligence officer
Stuart Hatcher: "There are a
number of things here. I would
say the CSeries taxation action
that hit in September was a
significant event for the year,
plus the push by Airbus to march
in leading to the inevitable
Boeing/Embraer discussions.
Trump has tried to hit the top
of the list by attempting to
shape Middle Eastern traffic by
imposing PDA restrictions."

#### ICF's principal Stuart Rubin:

"The major event of 2017 has been the continuing trend towards the acquisition of large leasing platforms by Chinese interests. Still to play out and fraught with obstacles, but of considerable interest, is the Airbus acquisition of a majority stake in the CSeries as well as the potential tie-up of Boeing and Embraer."

Oriel's Olga Razzhivina: "It appears 2017 has been devoid of any single tremendous event to affect our industry despite quite a few people in the industry have been nervously expecting some 'black swan' trigger sending whole world into turmoil. It appeared more of a 'steaming ahead' year."

## What will be the major event(s) in 2018?

Morris: "Again it is hard to be specific. Traffic growth is likely to be slower this year than it was this, but not fundamentally so (IATA are predicting 6% in 2018 and if the experience of 2017 is anything to go by, where they were predicting 5.1% at this time last year compared to the 7.7% we had to end October, then that could prove pessimistic). With demand remaining strong it is hard to see any clouds on the horizon at present."

**Dechavanne**: "Potential announcement by Boeing of the middle of the market aircraft."

Hatcher: "On one side, we could see a pre-emptive nuclear strike on North Korea, or a presidential impeachment – but more likely the overall question on the A380 sustainability in the market and viability of the production line will see some movement. More importantly. Chinese liquidity is still in question - specifically related to companies such as HNA which may lead to a downstream effect. If we see less push from the Chinese market in general to invest in aviation then pricing and rentals may start to re-establish themselves in a more sensible place. On the leasing side, we may see some pretty big movements if GECAS is put up for sale. It will also be interesting to see how Ryanair deals with a new unionised structure to handle pilot dissent."

**Rubin**: "Baring exogenous shocks, as in 2017, the major event of 2018 would be another acquisition of a large leasing platform by a Chinese bank/ insurance corporation. Further significant events would be continued interest rate rises, the curtailing of OPEC and non-OPEC oil production leading to higher fuel prices and the continuing failure of European airlines in a fragmented post-Brexit world.

"At an OEM level, the successful finalisation of the proposed 50.1% equity stake in the CSeries programme, and the Brazilian Government's approval of Boeing's proposed takeover of Embraer would dramatically change the aircraft production landscape."

**Razzhivina**: "Hard to tell. There are quite a few new type entries into service to gain their momentum in 2018 which could have an effect – even if shortlived – on the industry."

# Do you expect more airlines stopping operations in 2018? Why?

Morris: "The competitive environment in many airline markets has changed over the past few years and this is what results in less efficient models – Monarch Airlines, Air Berlin, potentially Alitalia, etc...to fail. This environment is unlikely to change in 2018 and thus it seems likely that there will be more failures. It is hard to predict specifically where though."

**Dechavanne**: "Yes, with so many airlines trying to gain market share by offering low fares, some are bound to fail and run out of cash."

Hatcher: "Definitely.
Competition is heating up,
lots of aircraft to deliver and
pressure on routes/fares will
weed out those that have been
operating on fumes for the past
year. I won't name names but
certainly a few in Europe are
under the spotlight, alongside
some well-known names from
around the globe. Operating
costs are going up, and yields
are still mediocre so pain is
on the horizon. If traffic starts
to slow, then the post summer

season will see a number of operators cease operations. Alitalia is still under a big question mark."

**Razzhivina**: "Europe is still a very crowded market as well as Southeast Asia. Further failures and mergers are to be expected."

# How will the leasing industry develops in 2018 in terms of consolidation?

Morris: "Following some relatively large transactions in the past couple of years, some further consolidation of smaller companies may follow, particularly amongst some of the newer Chinese entrants. In overall terms we expect the leasing market to remain highly liquid with continued trading of assets amongst current players. The current level of leasing, at around 42% of the overall fleet, is expected to remain relatively unchanged."

**Dechavanne**: "The only way for the top lessors to significantly grow is to acquire other platforms and their portfolios so I believe we will see more of this in 2018."

Hatcher: "Whilst there have been a large number of M&A movements in the past couple of years that begs the question whether there is anyone else to sell, GECAS and DVB come to mind – but also HNA liquidity concerns may see further movement there. Now we may see just an ordered sell-off of the older aircraft, a restructuring effort or it may all be smoke and mirrors - but there will be a large movement of aircraft in 2018 still within the lessor community. A couple may still come to market, but others may opt for a late charge into the capital markets arena."

Razzhivina: "It is clear that there is new interest from Asia in acquiring already existing platforms. The question is whether deals already concluded are setting the price bar too high?" ∧



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## 2018 Event Calendar

| Conference   | Date                 | Location    |
|--|----------------------|-------------|
| 20th Anniversary Global Airfinance<br>Conference           | 23-25 January 2018   | Dublin      |
| 2nd Annual Korean Airfinance Conference                    | 27-28 February 2018  | Seoul       |
| New York School of Aviation Finance                        | 10-13 April 2018     | New York    |
| 7th Annual Japan Airfinance Conference                     | 19-20 April 2018     | Tokyo       |
| 38th Annual North America Airfinance<br>Conference         | 15-16 May 2018       | Miami       |
| 16th Annual China Airfinance Conference                    | 14-15 June 2018      | Shanghai    |
| New: Inaugural Southeast Aerospace<br>& Defence Conference | 25-27 June 2018      | Mobile      |
| Summer School of Aviation Finance                          | 02-04 July 2018      | Cambridge   |
| New: Latin America School of<br>Aviation Finance           | 11-12 September 2018 | Mexico City |
| 14th Annual Latin America Airfinance<br>Conference         | 13-14 September 2018 | Mexico City |
|  |                      |             |

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