



COMMERCIAL AIRCRAFT ORDERS REPORT

# FARNBOROUGH 2018

## SUMMARY

Total firm-order, tentative-commitments and option announcements during the Farnborough air show, at nearly 1,500, outstripped any major air show since Paris 2013, though the number of new firm orders are lower than last year.

While the precise number of new firm orders will not be clear until the dust has settled from the show and all orders resolved against those already in the backlog, preliminary analysis indicates a figure of a little over 200.

Notable factors this year include the more than 400 aircraft covered by tentative deals for unidentified customers. At the same time, potentially as many as 200 of the firm orders announced were mere unveilings of customers that airframers had previously booked the without attribution.

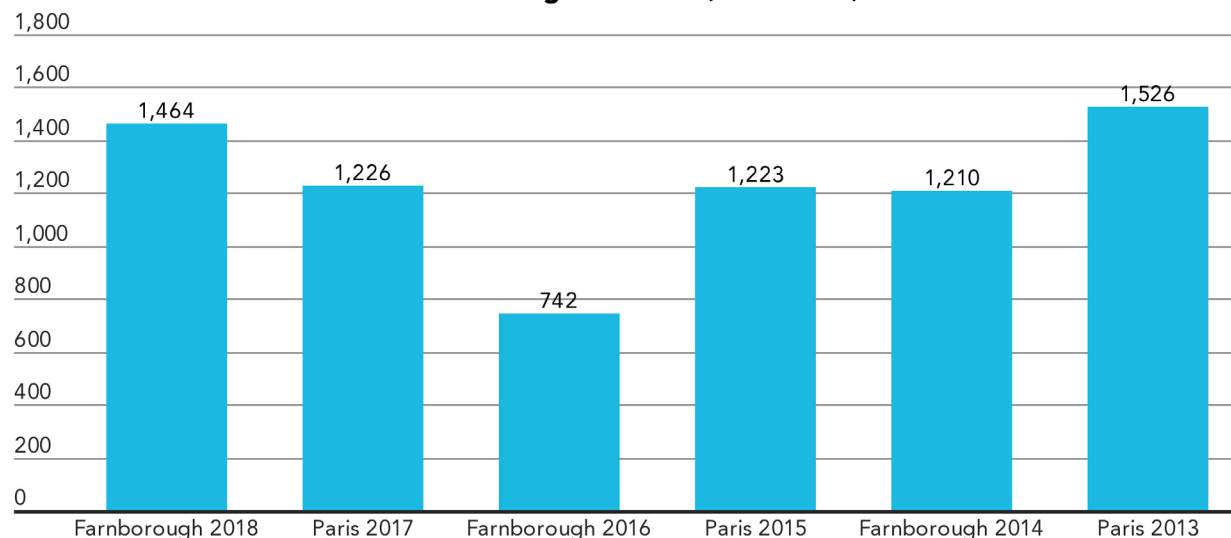
Lessors, Asian low-cost carriers and narrowbodies again made up a large chunk of the types and customers involved in Farnborough business – at least those that were disclosed. There were also a large chunk of regional-aircraft deals, largely from Embraer. There were relatively slim pickings for passenger widebodies, however, though Boeing enjoyed a pick-up in widebody freighter deals.

EVENT TYPE	QUANTITY	SHARE
Firm order	400	27%
Order Lol/MoU	863	59%
Option	10	1%
Option Lol	191	13%
<b>TOTAL</b>	<b>1,464</b>	<b>100%</b>

NOTE: Figures exclude existing order conversion announced during the show, include orders from customers identified at the show previously booked as unattributed

## Total order commitments and options

Farnborough and Paris (2013-2018)



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## BIGGEST ORDERS

Republic Airways, VietJet, Air Lease, Jet Airways, AirAsia X, Uganda Airlines and the still-to-be-named US start-up backed by David Neeleman were among the highest-profile deals revealed during the show.

VietJet signed preliminary deals covering follow-on orders for 150 more narrowbodies – 100 Boeing 737 Max jets and 50 A320neos.

Another Asian low-cost carrier, long-haul operation AirAsia X, signed for 34 more Airbus A330neos. That takes its orders for the type to 100. Boeing also confirmed Jet Airways provisional deal for 75 more Max 8s, which the airline had first detailed last month.

David Neeleman's US start-up, which he revealed would not adopt its working title of Moxy, struck a preliminary deal for 60 Airbus 220s.

Republic Airways signed an letter of intent for 100 firm Embraer 175s and took options on a further 100. Uganda interestingly signed an MoU for two Airbus A330-800s, the first commitment for the variant since its backlog was wiped out when the only customers cancelled their orders.



BillyPix

VietJet signed a memorandum of understanding covering 100 more Boeing 737 Max jets during the show

	<p>TOTAL <b>200</b></p>	<p>Embraer 175 100 Lol/MoU 100 option Lol</p>
	<p>TOTAL <b>150</b></p>	<p>Boeing 737 Max 100 Lol/MoU  Airbus A321neo 50 Lol/MoU</p>
	<p>TOTAL <b>78</b></p>	<p>Boeing 737 Max 8 20 firm and 55 option Lol  Boeing 787-9 3 firm</p>
	<p>TOTAL <b>75</b></p>	<p>Boeing 737 Max 8 75 firm</p>

## REGIONALS

On the regional side Embraer grabbed the headlines, with order commitments for 300 aircraft.

That was driven by US carrier Republic Airline placing a letter of intent for 100 more Embraer 175s and purchase rights on an additional 100. Embraer chief commercial officer Arjan Meijer says the airline has the ability to convert the aircraft to the E175-E2 if major US airlines attain scope clause relief in their pilot contracts.

Other deals included an order for 25 Embraer 175s from United Airlines and a letter of intent covering 21 Embraer 195-E2s from Azul. The Brazilian carrier already has 36 of the type on order.

Kuwaiti carrier Wataniya Airways ordered 10 Embraer 195-E2s and taken purchase rights on 10 more, while Helvetic Airways committed to a dozen E190 E2s and took 12 more options.

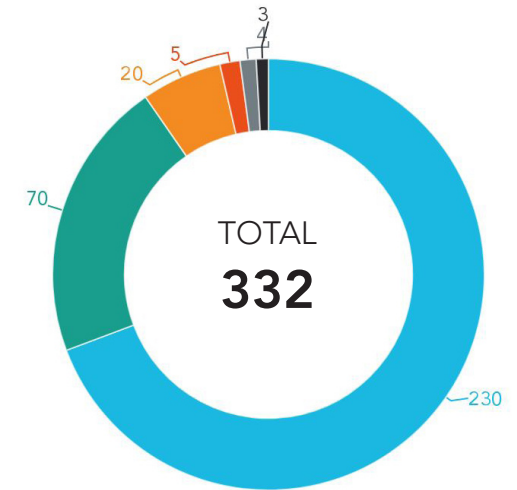
Other deals included a firm order for two E175s from Mauritania Airlines, an Lol with Nordic Air Capital for three E190S and an Lol for up to five E195 E2s from an undisclosed Spanish customer.

Uganda National Airlines has placed a firm order for four Bombardier CRJ900s. Operating under Uganda Airlines branding, it will be the first carrier to operate the new CRJ-series Atmosphere cabin in Africa.

Colombian carrier EasyFly signed a memorandum of understanding for three ATR 72-600s and a pair of ATR 42-600s. JAL subsidiary Hokkaido Air System signed an MoU for two 42-600s with an option for a third.

While these marked the first ATR announcements during the show, it had it detailed a clutch of small deals on the eve of the show.

**Regional aircraft: orders and options**



● E-Jet ● E-Jet E2 ● ARJ21 ● ATR 42 ● CRJ ● ATR 72



Republic Airlines commitments for up 200 aircraft led a glut of deals for Embraer at the show

## UNDISCLOSED CUSTOMERS

A much larger share of the business announced at the air show was attributed to undisclosed customers.

Preliminary deals covering more than 400 aircraft were attributable to unidentified customers. That compares to 215 aircraft covered by announcements at Paris last year – itself a relatively high amount given there were just 30 at Farnborough two years ago.

Aside from five Embraer E2s for an undisclosed Spanish airline, the aircraft covered by deals involving unnamed customers were pretty evenly split between Airbus and Boeing, both logging deals covering more than 200 units.

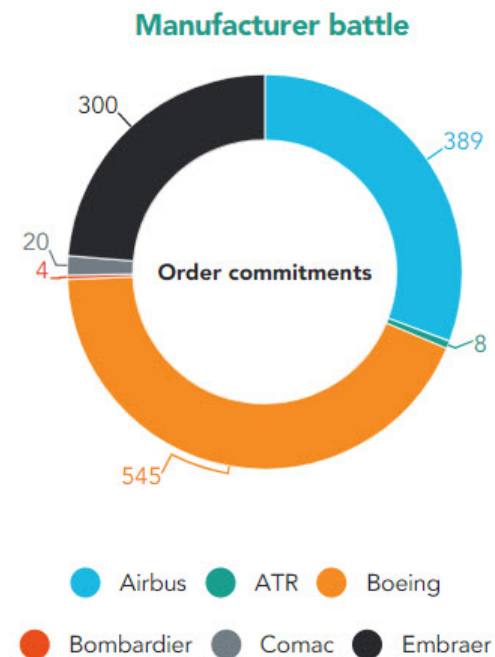
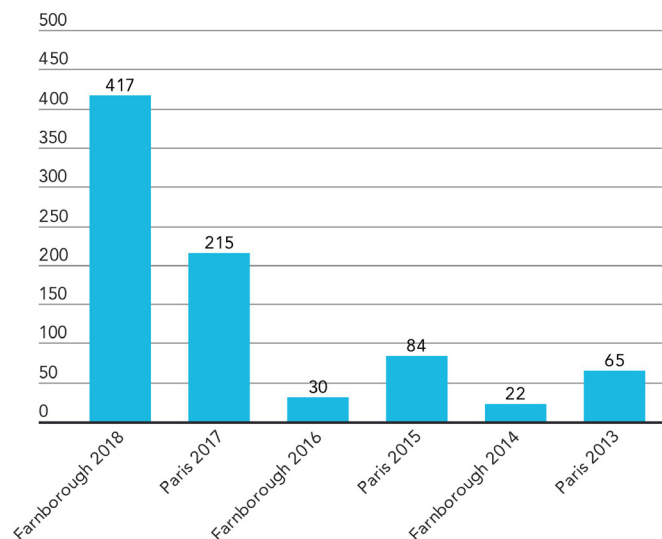
Government sensitivity over trade relationships,

particularly in Asia, is responsible for the high number of orders being attributed to undisclosed customers, Airbus says.

Speaking to investors during the event, Airbus chief commercial officer Eric Schulz said: “We don’t like undisclosed orders. But we have to respect customers.”

Without naming US president Donald Trump directly, Schulz referred to the influence of messages transmitted via social media “from one side of the Atlantic” – and particularly the threats of trade conflict. “That is putting a lot pressure [on] airlines, putting a lot of pressure [on] governments,” he says. “And some of our customers have asked us not to fuel the [trade war] and all of these things.”

Undisclosed customers (2013-2018)



## AIRCRAFT SEGMENT

Narrowbody aircraft once again dominated the order announcements. These accounted for 64% of all commitments, including options, announced at the show.

The most commitments were announced for Boeing 737 Max aircraft, though its lead over the rival A320neo was aided by the relatively higher number of unveiled unattributed orders included in its number.

A busy show for Embraer helped drive regional aircraft, which was the second largest sector by type.

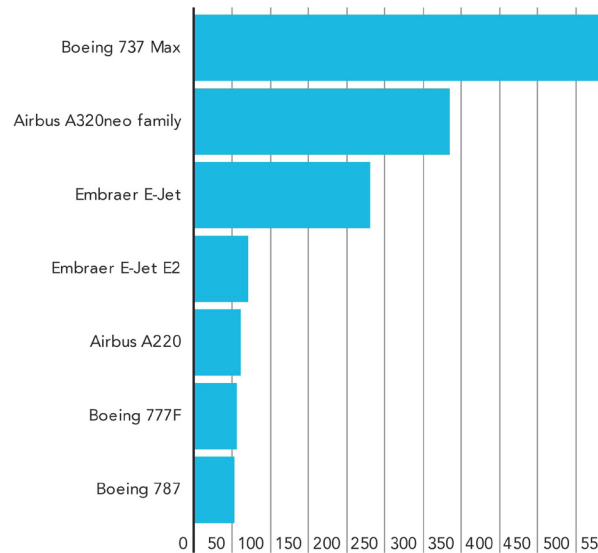
Though passenger widebodies make up a relatively small number of the overall commitments during the show, it was a stronger performance than seen in recent years in the cargo sector. There were deals covering 55 freighter widebodies announced during the show – all for Boeing types - including commitments from DHL Express, Volga Dnpre, CargoLogic and Qatar Airways.



Airbus

Golden Falcon Aviation, the exclusive aircraft provider of Wataniya Airways, confirmed an order for 25 Airbus A320neo family aircraft. The order followed an earlier MoU announced at last year's Dubai air show

### Orders and options by aircraft type



EVENT TYPE	QUANTITY	SHARE
<b>Narrowbody</b>	<b>937</b>	<b>64%</b>
<b>Widebody</b>	<b>195</b>	<b>13%</b>
<b>Regional jet</b>	<b>324</b>	<b>22%</b>
<b>Turboprop</b>	<b>8</b>	<b>1%</b>
<b>TOTAL</b>	<b>1,464</b>	<b>100%</b>






NOTE: Figures exclude existing order conversion announced during the show, include orders from customers identified at the show previously booked as unattributed

# MANUFACTURER BUSINESS

Embraer's commitments for 300 aircraft made it the clear third biggest airframer behind Airbus and Boeing, in terms of deals announced at the show. Embraer's announcements included firm orders covering 37 units. ATR, Bombardier and Comac also all announced business at the show.

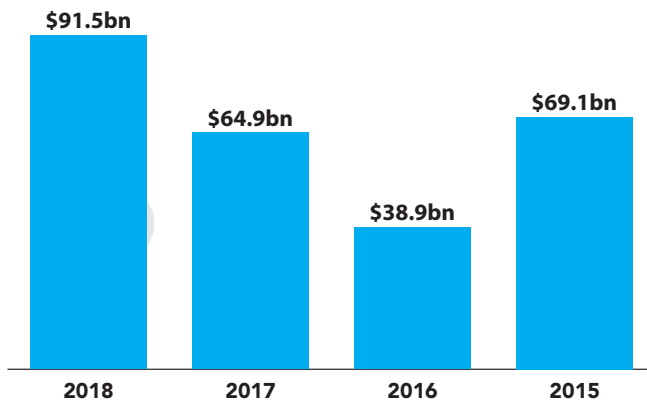
Boeing led the way in the battle with Airbus. It made show announcements covering around 650 aircraft - as well some conversions - though the figure also includes 145 aircraft that were already in the backlog as unattributed customers.

Airbus had 483 announcements at the show and 137 firm orders - though that latter number also includes some previously logged aircraft. The airframer's commitments also includes one commitment for the latest addition to its product line, in the form of a 60-strong tentative deal for A220s for David Neeleman's planned US start-up.

	Firm order	Order Lol/MoU	Option	Option Lol	Total	Values (\$bn)
 <b>BOEING</b>	222	351	10	66	649	45.4
 <b>AIRBUS</b>	137	346			483	36.8
 <b>EMBRAER</b>	37	139		124	300	8.7
 <b>COMAC</b>		20			20	0.4
 <b>ATR</b>		7		1	8	0.1
<b>BOMBARDIER</b>	4				4	0.1
<b>TOTAL</b>	<b>400</b>	<b>863</b>	<b>10</b>	<b>191</b>	<b>1,464</b>	<b>91.5</b>

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## Order commitment by value



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Indian carrier Vistara agreed to order six 787-9 Dreamliners, with options for four more jets



Oman's first budget airline, SalamAir, placed a firm order for a single A320neo aircraft, and will lease five more

# AIRCRAFT LESSORS

Leasing companies have been one of the mainstays of the large order announcements of recent years and were again prominent at this year's show, accounting for around a fifth of all business.

Commitments announced at the show covered at least nine lessors and 275 aircraft – the exact number is unclear given the number of undisclosed customer MoUs, but at least one of the four customers Boeing says have tentatively signed for Max jets is a lessor.

Half of these commitments are firm orders, predominantly for Airbus and Boeing narrowbodies, some of which were previously logged to unattributed customers. These firm deals include top-up orders from Air Lease and Aviation Capital Group, as well a first direct order from a manufacturer from Jackson Square Aviation, and deals from both manufacturers from Goshawk.

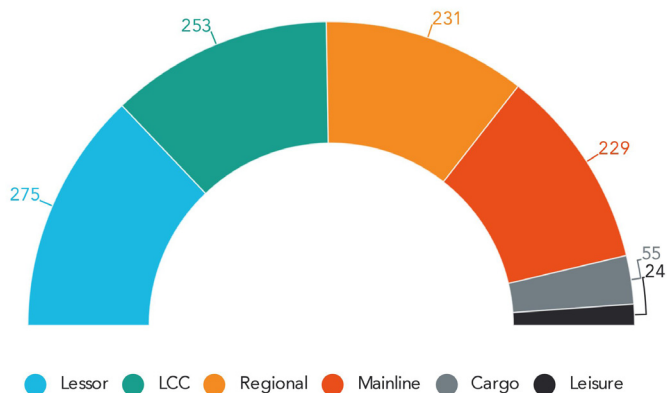
The biggest single lessor commitment was for 80 A320neos from an undisclosed lessor.



Goshawk Aviation Limited, the 50/50 joint venture between Hong Kong-based conglomerate NWS Holdings Limited and Chow Tai Fook Enterprises Limited, placed a firm order for 20 A320neo aircraft

Airbus

## Orders and options by customer type





# COMMITMENTS AND OPTIONS: FULL LISTING

Buyer	Buyer category	Event type	Quantity	Aircraft model	Engine type	Note
Republic Airline	Regional	Order Lol/MoU	100	E175		New
Republic Airline	Regional	Option Lol	100	E175		New
Undisclosed customer		Order Lol/MoU	100	737 Max	Leap	New
Undisclosed lessor	Lessor	Order Lol/MoU	80	A320neo		New
VietJet Air	LCC	Order Lol/MoU	80	737 Max 10	Leap	New
Jet Airways	Mainline	Firm order	75	737 Max 8	Leap	Previously unidentified
Undisclosed customer		Order Lol/MoU	75	A320neo	-	New
US airline start-up		Order Lol/MoU	60	A220-300	PW1100G	New
Air Lease	Lessor	Option Lol	55	737 Max 8	Leap	New
Undisclosed customers		Order Lol/MoU	53	737 Max 8	Leap	New
VietJet Air	LCC	Order Lol/MoU	50	A321neo		New
Undisclosed customer		Order Lol/MoU	40	737 Max 8-200	Leap	New
AirAsia X	LCC	Firm order	34	A330neo	Trent	New
Jackson Square	Lessor	Firm order	30	737 Max 8	Leap	Previously unidentified
Gol	Mainline	Swap	30	737 Max 10	Leap	
Volga-Dnepr	Cargo	Order Lol/MoU	29	777F	GE90	New
Golden Falcon Aviation	Mainline	Firm order	25	A320neo		New
United Airlines	Mainline	Firm order	25	E175	CF34	New
Undisclosed customer		Order Lol/MoU	25	A321neo	-	New
Viva Aerobus	LCC	Firm order	25	A321neo		New
Azul	LCC	Order Lol/MoU	21	E195-E2	PW1100G	New
Goshawk	Lessor	Firm order	20	A320neo	-	Previously unidentified
Urumqi Airlines	LCC	Order Lol/MoU	20	ARJ21		New
Macquarie AirFinance	Lessor	Firm order	20	A320neo		Previously unidentified
Goshawk	Lessor	Firm order	20	737 Max 8	Leap	Previously unidentified
Air Lease	Lessor	Firm order	20	737 Max 8	Leap	New
Aviation Capital Group	Lessor	Firm order	20	737 Max 8	Leap	New
VietJet Air	LCC	Order Lol/MoU	20	737 Max 8	Leap	New
Viva Aerobus	LCC	Swap	16	A321neo		
Gol	Mainline	Firm order	15	737 Max 8	Leap	New
Undisclosed customers		Order Lol/MoU	15	787-9		New
Vistara	Regional	Order Lol/MoU	13	A320neo		New
Starlux Airlines	Mainline	Order Lol/MoU	12	A350-1000	Trent	New
Helvetic Airways	Leisure	Order Lol/MoU	12	E190-E2	PW1100G	New

Buyer	Buyer category	Event type	Quantity	Aircraft model	Engine type	Note
Helvetic Airways	Leisure	Option Lol	12	E190-E2	PW1100G	New
DHL Express	Cargo	Firm order	10	777F	GE90	Previously unidentified
Sichuan Airlines	Mainline	Firm order	10	A350-900	Trent	Previously unidentified
Wataniya Airways	Mainline	Firm order	10	E195-E2	PW1100G	New
Wataniya Airways	Mainline	Option Lol	10	E195-E2	PW1100G	New
Undisclosed customer		Order Lol/MoU	10	A320neo		New
Hawaiian Airlines	Mainline	Firm order	10	787-9		New
Hawaiian Airlines	Mainline	Option	10	787-9		New
Undisclosed customer		Order Lol/MoU	8	A350-900	Trent	New
DHL Express	Cargo	Option Lol	7	777F	GE90	New
Vistara	Regional	Order Lol/MoU	6	787-9		New
Undisclosed customer		Order Lol/MoU	6	A330neo	Trent	New
Starlux Airlines	Mainline	Order Lol/MoU	5	A350-900	Trent	New
Qatar Airways	Mainline	Firm order	5	777F	GE90	New
Tarom	Mainline	Firm order	5	737 Max 8	Leap	Previously unidentified
Volga-Dnepr	Cargo	Firm order	5	747-8F	Genx	New
DHL Express	Cargo	Order Lol/MoU	4	777F	GE90	Previously unidentified
United Airlines	Mainline	Firm order	4	787-9		Previously unidentified
Vistara	Regional	Option Lol	4	787-9		New
Uganda Airlines	Mainline	Firm order	4	CRJ900		New
Novus Aviation Capital	Lessor	Order Lol/MoU	4	777-300ER		New
Air Lease	Lessor	Firm order	3	787-9		New
Undisclosed Spanish customer		Order Lol/MoU	3	E195-E2	PW1100G	New
Nordic Aviation Capital	Lessor	Order Lol/MoU	3	E190		New
Easyfly	Regional	Order Lol/MoU	3	ATR 72-600		New
Peach Aviation	LCC	Swap	2	A321LR		
IAG	LCC	Firm order	2	A330-200		Previously unidentified
Undisclosed Spanish customer		Option Lol	2	E195-E2	PW1100G	New
Mauritania Airlines	Mainline	Firm order	2	E175		New
Hokkaido Air System	Regional	Order Lol/MoU	2	ATR 42-600		New
Easyfly	Regional	Order Lol/MoU	2	ATR 42-600		New
Uganda Airlines	Mainline	Order Lol/MoU	2	A330-800neo	Trent	New
SalamAir	LCC	Firm order	1	A320neo	-	New
Hokkaido Air System	Regional	Option Lol	1	ATR 42-600		New

NOTE: Figures include orders from customers identified at the show previously booked as unattributed. Existing order conversion announced during the show are identified as swap

The logo for FlightGlobal features the word "FlightGlobal" in a bold, black, sans-serif font. A small, light blue square is positioned above the letter 'i' in "Flight".

# FlightGlobal

Pioneering Aviation Insight

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