

Orders, orders everywhere... what they mean and what they *really* cost

Hundreds of orders for the Airbus A320 family Neo: that's probably what most people will remember the 2011 Air Show for, says IBA Group senior analyst Jonathan McDonald, in his in-depth analysis of the Le Bourget order book

YES, THERE WERE ONE OR TWO other little bits best forgotten about, Airbus making a little imprint on the Embraer offices with an A380 wing fence for starters!

John Leahy, Airbus' ever-colourful face of sales, told us all that the Neo would pass the 500-mark by the Paris Air Show. As things stand, if MOUs and commitments are considered, the figure is more like 1,000; and that's before Air Asia said they want to increase their Neo order from 200 to 300.

So there you go, Airbus, you can pop out the Veuve Clicquot and give yourself a nice big pat on the back and nobody can deny you the credit for a really good start. But despite this Neo phenomenon, was the 2011 Paris Air Show all about the Neo? Should we call it the Neo show? Well in IBA's mind, absolutely not. Here's why; If we're honest, we all knew there would be reams and reams of Neo orders anyway so the hundreds that came were of little surprise. A number of other good things (a lot of it Airbus – but a lot of it also from other manufacturers) came out of Le Bourget this year, so here's a summary of what we think was positive:

The Airbus A380

1) Regardless of how good the Airbus A380 is, there is STILL this sceptism among many in the industry that the A380 presents a potential problem should an operator default. Sure, we all know that some of the existing operators would happily take default aircraft if this situation were to arise, but the reconfiguration costs could be a worry. The good thing is that the order backlog for the A380 has just risen by two operators, *merci* Hong Kong Airlines and *merci* Skymark, taking the potential airline operator base from pre-Paris levels of 16 passenger airline operators to 18. Okay, so that's a rise of around 12% on the operator base, and on total units, that's about a 7% to 8% increase. It's not that long ago that the A380 was regarded as having a select and limited operator base – well, with these recent orders, circa 236 firm orders among 18 customers does not sound too select any more, certainly not to us here at IBA Towers. That can only be a positive thing.

2) The next good thing is that Airbus has finally got a serious commitment from a Japanese car-

rier for the A380, so that breaks new ground for the program. Japan has always been a very hard nut to crack for Airbus, particularly with wide-bodies. Yes, they've done it in the past, such as when they flogged new A300s to TDA/JAS, but like it or not, since the mid-1990s, when McDonnell Douglas last put new MD-11s in to JAL, the Japanese new wide-body market has been heavily dominated by Boeing. The selection of the A380 by Skymark can only boost Airbus' confidence in the extremely important Japanese market. Of course the Hong Kong Airlines order for A380s is encouraging but not as 'icebreaking' as the Skymark deal, as Airbus has been selling dozens and dozens of A330,

A340 and now A350 widebodies to Cathay, Dragonair and Hong Kong Airlines for years now, so there was no 'nut' to crack in the first place. A few more orders came in for A330/A350 but really as far as Airbus is concerned, we think it's the A380 where more pats on the back are deserved.

Okay, Airbus, you've had plenty of credit but it's not all about you, a lot of good things came from, surprise, Boeing.



Jonathan McDonald

Paris Air Show 2011 - Airbus orders					
Customer	Model	Number	Remark	IBA value: each	IBA value: deal
AirAsia	A320neo	200	Firm order	\$44,000,000	\$8,800,000,000
GECAS	A320neo	60	Firm order	\$44,000,000	\$2,640,000,000
CIT Aerospace	A320neo	50	MOU	\$44,000,000	\$2,200,000,000
JetBlue	A320neo	40	MOU	\$44,000,000	\$1,760,000,000
Air Lease	A320neo	36	MOU exc 14 opts	\$44,000,000	\$1,584,000,000
Air Lease	A330	11	Firm order	\$100,000,000	\$1,100,000,000
AirLease	A321	1	Firm order	\$49,500,000	\$49,500,000
Alfaco	A320neo	30	MOU	\$44,000,000	\$1,320,000,000
Republic	A319neo	40	MOU	\$37,500,000	\$1,500,000,000
Republic	A320neo	40	MOU	\$44,000,000	\$1,760,000,000
SAS	A320neo	30	Exc 11 options	\$44,000,000	\$1,320,000,000
Garuda Citilink	A320neo	10	MOU	\$44,000,000	\$440,000,000
Garuda Citilink	A320	15	MOU	\$40,000,000	\$600,000,000
TransAsia	A321neo	6	Firm order	\$53,500,000	\$321,000,000
Indigo	A320neo	150	Firm order	\$44,000,000	\$6,600,000,000
Indigo	A320	50	Firm order	\$40,000,000	\$2,000,000,000
GoAir	A320neo	72	Firm order	\$44,000,000	\$3,168,000,000
LAN	A320neo	20	Firm order	\$44,000,000	\$880,000,000
AviancaTaca	A320neo	33	MOU	\$44,000,000	\$1,452,000,000
AviancaTaca	A320	18	MOU	\$40,000,000	\$720,000,000
Skymark	A380	2	Exercised opts	\$218,000,000	\$436,000,000
Hong Kong Airlines	A380	10	Firm order	\$218,000,000	\$2,180,000,000
Air Lease	A330	7	Firm order	\$90,000,000	\$630,000,000
Saudi Arabian	A330-300	4	Firm order	\$98,500,000	\$394,000,000
Alfaco	A350-900	6	Firm order	\$129,500,000	\$777,000,000
IBA Total Airbus appraised value					\$44,631,500,000

Boeing 737NG

We still don't know how Boeing will respond to the Neo, that's for another time. Boeing racked up close to 87 firm orders / MOUs / commitments from Le Bourget for the existing 737NG. That's a fraction of what the Neo got but look at it from this point of view. We all knew that Le Bourget 2011 was going to be the Neo show anyway, and we would have been naive not to assume the huge spike of orders that came for it. With that out of the way, nigh on 100 commitments within four working days is still no mean feat for 737NG program. Airbus will tell you that they're outselling the NG big time, and at the moment with the recent ordering spree of Neos, they're probably right. But let's not forget that Boeing have still taken orders for around 230 737NGs in the space of six months. That sounds like a perfectly respectable figure and represents a production rate of around 38 aircraft a month.

Boeing 747-8 Intercontinental

If we're honest, this has not exactly been Boeing's bestseller and we would be surprised if the 747-8I ever gets anywhere near the sales success of its illustrious 747-400 forebear. Up until Le Bourget, Boeing had orders from Lufthansa for 20 and Korean Air for five. Air China has agreed to acquire five, 'subject to final approval'. There are also around eight VIP examples on back order, thus taking the backlog to around 38 aircraft, or 33 until the outcome of the Air China order is better known. At Le Bourget, Hong Kong Airlines signed a commitment for up to 17 B747-8Is, (2 firm / 15 MOUs), hardly enough to set the sales records alight, but at least some hint of sales momentum for the otherwise slow seller.

Boeing 747-8F, 767, 777, 787

Okay, so there weren't hundreds and hundreds of orders from hundreds of customers for these Boeing wide-bodies, but large players such as GECAS enforced their commitment with MOUs for 777-300ERs and 747-8Fs, while the ever-growing operator base for the 777-300ER expanded with Aeroflot's order. Even our old friend the 767-300ER notched up an order from MIAT.

Bombardier

Perhaps one of the most positively-viewed products from the Bombardier stable is the turbo-prop Q400; were any orders announced during Le Bourget for the Q400? *Non!* but still no matter. The world does not revolve around one air show. We liked the fact that Korean Air has made some form of commitment to between 10 and 30 CSeries depending on how you interpret their order. Orders for CSeries have not exactly been coming out of the woodwork recently so we are pleased that a world class airline has stepped forward with its intention to order. We see this as a positive for the program

and for Bombardier's sake, hope it steamrolls some more orders.

Embraer

One product that just happens to be doing very well for Embraer is the 190, so it's good to see commitments (excluding options) for another 37. It's also good to see Kenya Airways' potential commitment to 20 Embraer 190s. Kenya Airways is a good airline that just happens to operate in rather a nice neck of the woods. Much of the Kenya Airways fleet is still the preserve of Boeing, but Embraer has gradually been putting 170s into Kenya so this commitment to the larger 190 shows positive growth and a greater market distribution for Embraer. The Air Lease order is further proof of the investment community's confidence in the 190 while Air Astana's order keeps a successful program topped up. The Indonesian market is an important one but as far as new aircraft orders go, it's been a bit Airbus and Boeing recently. So again IBA says well done to the Embraer team for penetrating the Indonesian market with the Sriwijaya Air order.

Sukhoi

Just how the 24 MOUs split between PT Sky Aviation and Blue Panorama for Superjet 100 series aircraft actually pans out in the future; we frankly just don't know. There is still this reluctance on behalf of western, non-CIS banks to invest money into Russian aviation programs, but again circumstances may improve in the future. Many previous announcements by non-CIS countries for the Superjet 100 seem to have stalled, so it is very difficult to get a true measure of where the backlog lies with this aircraft. This time around, though, the orders have been announced not on a paper aircraft,

or one that is still in the development phase, but on a real revenue-earning product. Remember that both Armavia and Aeroflot are both using Superjets on revenue services now. On this improved basis, we reckon these 24 MOUs may just work out this time round and that this may springboard further sales opportunities.

ATR

So far all we've talked about is jets but what about turboprops? During Le Bourget, GECAS, repeat GECAS, firmed 15 orders for the ATR72-600 and put in options for another 15, the first foray by the iconic leasing company into new ATRs. This can only be a good thing as it cements the financial community's confidence in what is already a very successful family of turboprops.

Money, Money, Money

Having provided our thoughts on this year's Le Bourget, IBA will now aim to assess the process more from a numeric point of view. Browse through any recent press relevant to the show and what you will see is that somewhere in the region of \$119 billion worth of metal was ordered at Le Bourget. The thing is, that figure is based on list prices; and the real value of the deal bears little resemblance to the vastly inflated list price – not even a hint of one. So as appraisal just happens to form a very major part of IBA's services, just where do we see the true value of Le Bourget? It's impossible to give a definitive answer as the appraisal industry is subjective by its own nature. But we still reckon we can give it a pretty good shot.

In all, we reckon around \$59,400,000,000 – yep nigh on \$59.5 billion's worth of metal was ordered at Le Bourget if you take it at market value appraisal value in today's pricing. That's a very

Paris Air Show 2011 - Boeing orders					
Customer	Model	Number	Remark	IBA value: each	IBA value: deal
Qatar Airways	777-300ER	6	Prev unidentified	\$150,000,000	\$900,000,000
Norwegian	737-800	15	Firm order	\$43,500,000	\$652,500,000
Norwegian	787	3	Firm order	\$109,000,000	\$327,000,000
Malaysia	737-800	10	Exercised option	\$43,500,000	\$435,000,000
Aeroflot	777-300ER	8	Prev unidentified	\$150,000,000	\$1,200,000,000
Undisclosed	747-8	17	2 Firm 2 MOU	\$145,000,000	\$2,465,000,000
Air Lease Corp	737-800	20	MOU	\$43,500,000	\$870,000,000
Air Lease Corp	777-300ER	5	MOU	\$150,000,000	\$750,000,000
Air Lease Corp	787-9	4	MOU	\$128,000,000	\$512,000,000
UTair	737-800	33	MOU	\$43,500,000	\$1,435,500,000
UTair	737-900ER	7	MOU	\$48,000,000	\$336,000,000
GECAS	747-8F	2	MOU	\$188,000,000	\$376,000,000
GECAS	777-300ER	8	MOU	\$150,000,000	\$1,200,000,000
MIAT Mongolia	767-300ER	1	Firm order	\$62,000,000	\$62,000,000
MIAT Mongolia	737-800	2	Firm order	\$43,500,000	\$87,000,000
IBA Total Boeing appraised value					\$11,608,000,000

broad brush view but all things considered, fleet discounts will be offset by price escalation.

IBA have had to use various assumptions. First, we have taken out fleet discounts as it would over-complicate the process. Second, we have used non-inflated or today's pricing because at this stage we don't yet know when all the deliveries will occur. Third, we have stripped options out as it is impossible to speculate whether they will be exercised or not. Therefore our evaluation is based on firm orders and MOUs, and market value as well. The assessment is performed by manufacturer and, *quelle surprise*, let's start with our friends from Toulouse (see *Airbus orders table on page 17*).

What's interesting is that out of the \$44 billion worth of appraised value, around \$35.75 billion worth of appraised stock was attributable to the Neo – hmm, that's 80% of Airbus' order appraised value, and 60% of our appraisal of the entire air show order book!

While that's all well and good and impressive numerically, nothing is always a bed of roses. Before Airbus even firmed up on the Neo late last year, influential lessors kept saying to Airbus – "don't do it, guys, you'll hurt the residuals of the existing A320". Plus the Neo itself could depreciate rapidly if either Airbus or Boeing, or both, bring out newer products some time soon.

But Airbus did go ahead and launch the Neo about eight months ago and lord only knows how many hours have been consumed among lessors, banks, the investment community and appraisal firms mulling over residual value implications. The IBA line at the moment is: don't panic, look at how long it took 737 Classic values to bow to pressure long after the 737NG service entry. But there is a serious message out there - a lot of lessors who have ploughed massive funds into the current standard A320

are still worried about residual value exposure on the older product, regardless of how you try and sooth their thoughts with the precedent of 737 Classic / NG transition argument or the continued popularity of the current model.

No prizes for guessing who is next.....

We told you Le Bourget wasn't all about the Neo (see *Boeing orders table on page 18*). Nearly \$12 billion of appraised stock is no small figure and looks impressive in its own right. One or two of you might be surprised

pricing and price escalation. Remember the purpose of this exercise is not to give a precise value; that's impossible without knowing delivery schedules - rather, it's to give a flavour of the value of the deals.

Let's head south to Brazil now... (see *Embraer orders table, this page, second from top*). This table shows a perfectly solid performance by Embraer. Please be advised that these values are guideline only and subject to change if individual appraisals were ordered. Remember they do not take into account price escalation.

Now it's time for the long haul to Russia and a look at Sukhoi...(see *Sukhoi order table, this page, third from top*). We've already made our comments before but just a word on that value. Our CMV per unit errs on the cautious side, in our opinion. With some inflation and annual price escalation we can easily see that price creeping in to the mid-twenties in a few years time.

And last but definitely not least, it's back on French turf but hopefully a little sunnier in Toulouse... (see *ATR order table, this page, bottom*).

So in summary, the 2011 Paris Le Bourget could only be described as epic in terms of ordering sprees. But let's not forget at this early stage much of the ordering was only at the

MOU stage. The Neo was the most prominent talking point but we all saw that coming. Boeing did not tell us what they're going or not going to do with the 737NG or its successor. Air France / KLM did not reveal their hugely anticipated wide-body. All the major manufacturers got some orders in and new markets were explored for many.

Paris Air Show 2011 - Bombardier orders					
Customer	Model	Number	Remark	IBA value: each	IBA value: deal
Korean Air	CSeries	10	MOU	\$34,500,000	\$345,000,000
Korean Air	CSeries	10	Purchase option	\$34,500,000	\$345,000,000
Undisclosed	CS100	10	Firm order	\$34,500,000	\$345,000,000
IBA Total Bombardier appraised value					\$1,035,000,000

Paris Air Show 2011 - Embraer orders					
Customer	Model	Number	Remark	IBA value: each	IBA value: deal
Air Lease	E190	5	Firm order	\$29,250,000	\$146,250,000
Air Astana	E190	2	Firm order	\$29,250,000	\$58,500,000
Kenya Airways	E190	10	MOU	\$29,250,000	\$292,500,000
Sriwijaya	E190	20	Firm order	\$29,250,000	\$585,000,000
IBA Total Embraer appraised value					\$1,082,250,000

Paris Air Show 2011 - Sukhoi orders					
Customer	Model	Number	Remark	IBA value: each	IBA value: deal
PT Sky Aviation	Superjet 100	12	MOU	\$21,000,000	\$252,000,000
Blue Panorama	Superjet 100	12	MOU	\$21,000,000	\$252,000,000
IBA Total Sukhoi appraised value					\$504,000,000

Paris Air Show 2011 - ATR orders					
Customer	Model	Number	Remark	IBA value: each	IBA value: deal
Nordic Aviation	ATR 72-600	10	Firm order	\$19,200,000	\$192,000,000
TAME	ATR 42-500	3	Firm order	\$14,800,000	\$44,400,000
GECAS	ATR 72-600	15	Firm order	\$19,200,000	\$288,000,000
IBA Total ATR appraised value					\$524,400,000

by our conservative view of the 747-8 Intercontinental value but this is easily explained. Our intelligence is that Boeing has been selling these at 'keen' prices. Enough said.

Now let's head north across the border and see what our friends from Canada had to show (see *Bombardier orders table, this page, top*). We've no idea yet when Bombardier's CSeries aircraft will actually be delivered and we still are not clear which variant has been ordered. Thence the appraised value should be treated very much as indicative and 'neighbourhood', as the IBA formal value could be subject to change once we get a clearer view of delivery



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Commonwealth Bank**

