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Newsletter

Market Comment

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Bombardier Discussed “Certain Business Opportunities” with **Airbus**, but the Europeans called off negotiations after *Reuters* reported that they were taking place. **Bombardier** had made an offer where **Airbus** would help the Canadians complete development of the CSeries in exchange for a controlling stake in the program. **Bombardier** was willing to trade its independence for an infusion of cash and **Airbus**’ help selling the 110-130 seat regional jets to the world’s major airlines. **Bombardier** confirmed it had held talks about “certain business opportunities” with **Airbus**, but the discussions ceased. The Canadian airframer said it would continue to “explore initiatives, such as a potential participation in industry consolidation,” but details were not forthcoming. Presumably, it is talking with **Boeing** and Chinese investors as well as the possibility of selling shares in the company’s rail and business jet units, sources said. The CSeries program’s development costs nearly tripled from an anticipated \$2 billion to \$5.4 billion to date. The manufacturer has 243 firm orders, which is short of the 300 firm orders they want by the time the aircraft enters service in 2016. As of June 30, **Bombardier** had run up \$9 billion in long-term debt and had \$3.1 billion in cash on hand. It consumed approximately \$808 million in free cash flow in the second quarter. The talks with **Airbus** came at the most vulnerable phase of the CSeries’ development – after huge one-off costs, but before revenues from deliveries come rolling in, and it does not have the cushion of airline deposits that would come with a bigger order book. **Airbus** and **Boeing** have all but ceded the bottom of the trunkliner market to **Bombardier** and **Embraer**. The A319 carries 124 seats in two-class configuration, and there are only 22 A319ceos and 49 NEOS in backlog. **Boeing** quit building the 123-seat, 737-600 after selling only 69 of them.

Analysts speculated that a **Bombardier/Airbus** deal would have been good for both partners. **Airbus** would have bought a fully developed plane, which has exceeded its performance targets, at a discount to its development cost. It could have then ditched the slow selling A319neo and saved on the costs of bringing it to market in mid-2017. **Bombardier** would have gained the funding needed to deliver the first CS100s, and benefited from the powerful **Airbus** sales organization led by **John Leahy**, who recently praised the **Bombardier** CSeries as a “nice little plane”. The two could also have benefited from cost savings from combining supply chain management and procurement. The deal would have also kept the CSeries out of Chinese hands, which are seen

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as a long-term, well-financed competitor with **Airbus**. Apparently, **Bombardier's** talks with a Chinese investor ended a month ago. The plane maker is looking at selling more stock in its rail unit or a possible cash injection by Quebec's public pension fund manager. The new management has also considered offering steep discounts to major airlines to win a huge order, something the previous managers refused to do.

Analysts were surprised by the **Airbus** talks and saw them as the precursor of the CSeries' doom, but perhaps they are an illustration that the new management, led by **Alain Bellemare**, is willing to seek new options and opportunities to save the program.

Airbus Orders

Airbus Sold 121 Single-Aisle and Widebody Aircraft in September, and delivered 49 jetliners from across its current production range. **Wizz Air** firmed the commitment for 110 A321neo aircraft that was signed in June at the **Paris Air Show**. This was the biggest single order for the A321neo and came from the largest low-cost carrier in Eastern and Central Europe. The airline dropped 10 previously ordered A320neos. **Croatia Airlines** exchanged four A319ceo orders for four new A320neos. These orders raised the A320neo Family backlog above 4,300, and the total number of customers to 76. **Airbus** sold six A330s in September. **BOC Aviation** ordered two A330-300s and **Standard Chartered Bank Pembroke** signed for another two A330-300s. The four **GE Aviation** CF6-powered aircraft will be leased to **EVA Airways**. The **BOC** A330s will be delivered in 2017. **RwandAir** signed a firm contract for one A330-300 and one shorter-fuselage A330-200. The Rwandan national flag carrier is a new **Airbus** customer and the first East African client for the A330. **Groupe Dubreuil's** acquisition of an A350-900 brought total A350 XWB orders to 783 from 41 customers. The **Groupe** is the parent of **Air Caraïbes**, France, and it intends to launch a new low-cost long-haul carrier named **Sunline** in June 2016 with one A330-300 that was ordered in July 2015. It is assumed that the new A350 will also be delivered to **Sunline**, since **Air Caraïbes** already has ordered three A350-1000s.

The Airframer has a backlog of 6,755 aircraft, which accounts for 10 years of production at current rates, and it has sold more than 16,000 jetliners to date, and the 815 net bookings in 2015 have surpassed the company's sales objective for this year.

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Airbus' gross orders reached 875, but it lost 60 existing orders for a net of 815, when cancellations are taken into account. Deliveries were from its current product line during September, comprising 37 A320 Family aircraft, nine A330s, one A350, and two A380s. Deliveries included the first 242-metric ton MTOW A330s for **Air China** and **Scandinavian Airlines (SAS)**. **Airbus** said the increased MTOW allows airlines to operate longer-range routes at improved operating costs, and the latest evolution of the A330 Family will serve as the platform for the new engine option A330neo.

Wizz Air, the largest low-cost carrier serving Eastern and Central Europe, firmed-up the commitment for 110 A321neo aircraft that it signed at the **Paris Air Show** in June. This was the largest single order for the A321neo, and the deal pushed firm NEO orders to 4,307 aircraft. The new A321neos will be delivered from 2019 to 2024 and fitted with the **Airbus Cabin Flex** configuration featuring 239 18-inch wide seats.

RwandAir firmed up a commitment for one A330-200 and one larger A330-300 in September. The agreement was announced earlier this year, and the aircraft will be delivered in the second half of 2016. The airline will deploy its new flagship aircraft on medium and long-haul routes serving destinations in Europe, the Middle East and Asia. The A330s will be equipped with **Rolls-Royce** Trent 772B engines. To date, the A330 Family has attracted 1,554 orders, and 1,204 A330s are flying worldwide with over 100 operators.

Airbus Orders, Deliveries and Backlog September 2015

SEP ORD	SEP DEL	SEP CANX	TOTAL ORD	TOTAL DEL	BACK LOG
			A318		
-0-	-0-	-0-	80	80	-0-
			A319		
-0-	1	-4	1,473	1,451	22
			A319neo		
-0-	-0-	-0-	49	-0-	49
			A320		
-0-	23	-10	4,765	4,050	715
			A320neo		
4	-0-	-0-	3,282	-0-	3,282
			A321		
-0-	13	-0-	1,617	1,156	461
			A321neo		
110	-0-	-0-	976	-0-	976
			A330		
6	9	-0-	1,409	1,224	185
			A330neo		
-0-	-0-	-0-	145	-0-	145
			A350		
1	1	-0-	783	6	777
			A380		
-0-	2	-0-	317	171	146
This Month			This Year		BL
121	49	-14	815	446	6,755

Airbus sold 16,086 aircraft and delivered 9,331 as of September 30, 2015. Sixty orders were cancelled. Total orders, deliveries and backlog include cancellations and order changes.

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Singapore Airlines (SIA) was the launch customer for **Airbus'** new Ultra-Long Range A350-900ULR in October. Seven of **SIA's** 63 A350-900s will now be delivered with the capability to fly for up to 19 hours. The carrier also ordered four more A350-900s, raising its total firm A350 XWB orders to 67. The first A350-900ULR aircraft is scheduled for delivery in 2018. The Ultra-Long Range A350 will feature an increase to the fuel carrying capacity (from 141,000 liters to 165,000 liters), an increase in Maximum Take-Off Weight (MTOW) to 280 metric tons, plus aerodynamic improvements. The ULRs will be deployed on non-stop service to the U.S. West Coast, as well as to New York. The New York service will be the world's longest non-stop, commercial passenger route, at a distance of approximately 8,700 nautical miles, and a flight time of up to 19 hours. **Singapore Airlines** previously operated non-stop services from its home base to New York and Los Angeles between 2004 and 2013 using the A340-500. Its customers had been clamoring for the resumption of non-stop services so the airline chose the A350 to relaunch the routes. The A350-900ULR can be reconfigured to the standard long-haul A350-900 specification should their operators require it. As of September 30, 2015, **Airbus** had sold 783 A350 XWBs to 41 customers. **Singapore** is the largest customer for the A350 XWB in East Asia, and will take deliveries of the first of its 67 aircraft in the first quarter of 2016. **SIA's** first A350-900 exited the paint shop at Toulouse in the airline's livery, in October. The aircraft is now set to move to the next stages of production, including the installation of engines and cabin furnishing, before starting ground and flight tests.

Boeing Orders

Boeing Sold Two 787s and 27 737s in September. An **Unidentified Customer** ordered two 787-9s, and **Jet2.com Ltd.** bought 27 737-800s. As of September 30, **Boeing** had 507 new orders, having lost 60 existing orders, including 30 737s, four 747s and 26 787s, resulting in 447 net orders.

U.K. Leisure Airline Jet2.com finalized an order for 27 Next Generation 737-800s, worth approximately \$2.6 billion (\$96.3 million each) at list prices. The carrier said it chose the 737-800 rather than the re-engined MAX because it negotiated "significant discounts" from the sticker price. **Jet2.com** will take delivery of the first aircraft in September 2016 and will accept the last in April 2018. It operates a fleet of 17 737-800s, 29 737-300s and a dozen 757-200s. The new aircraft will replace the 737 Classics. The airline is a subsidiary of **Dart Group PLC**, and it is based in **Leeds-Bradford Airport**.

Boeing Sold Two 787-9s to an unidentified customer in mid-September. Unidentified customers have purchased 36 787s in 2015. So far this year, **Boeing** sold 52 new 787s and lost 26 existing orders for a net total of 26. Un-named customers have also bought 91 737s and 17 777s.

Boeing Deliveries	Third Quarter	Year-to-Date
Major Programs	2015	2015
Commercial		
Airplanes Programs		
737	126	375
747	4	13
767	5	14
777	27	77
<u>787</u>	<u>37</u>	<u>101</u>
Total	199	580
Defense, Space & Security Programs		
AEW&C	-0-	-0-
C-17 Globemaster	2	5
C-40A	-0-	1
<u>P-8 Models</u>	<u>4</u>	<u>10</u>
Total	6	16

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In October, Gol Linhas Aéreas Inteligentes (GOL Airlines) converted nine 737-800 orders into 737 MAX aircraft. The Brazilian carrier now has eight 737-800s in backlog while its 737 MAX orders have grown to 69.

Oman Air (SAOC) ordered 20 737s in October. In March, the airline said it planned to double its fleet to 70 aircraft by 2020. The order includes both the 737 Next Generation, which will be delivered from 2017, as well as the re-engined 737 MAX that will be available from 2019. Ten of the 737s will come directly from **Boeing** and the rest from leasing companies, the airline said. **Oman Air** currently has one 737-900ER and five more 787-8s on order. It took delivery of its first 787-8 in October.

An Un-named Customer dropped six 737 orders in mid-October, raising the number of cancelled 737s to 45.

Norwegian finalized an order for 19 787-9 Dreamliners, list priced at more than \$5 billion (\$263.2 million each). The order includes options for 10 more 787-9s, as the carrier looks to significantly grow its existing long-haul fleet into the next decade. This was the largest single order for 787-9s from a European airline to date. **Norwegian** currently operates eight 787-8s and contracted to lease 11 787-9s from leasing companies. The low-cost, long-haul carrier is headquartered in Oslo, and it will operate 38 787s in the coming years. **Bjørn Kjos, Norwegian's** CEO, said, "After two years of operating low-cost long-haul flights, our load factors have averaged in the nineties, which proves the demand for affordable flights between Europe and the U.S., and Europe and Asia. Future growth and competitiveness in the long-haul market depends on the fuel-efficient, state-of-the art 787 Dreamliner. Not least, the Dreamliner offers the best passenger experience." **Norwegian** serves more than 130 destinations across Europe, North Africa, the Middle East, the USA and Southeast Asia, with a fleet that includes 90 Next-Generation 737-800s and eight 787-8s, and 37 737-800s and 100 737 MAXs on order.

Boeing September 2015 Orders, Deliveries

SEP ORD	SEP DEL	SEP CANX	TOTAL ORD	TOTAL DEL	BACK LOG
737					
27	51	-2	10,099	8,725	1,374
737 MAX					
-0-	-0-	-0-	2,869	-0-	2,869
747					
-0-	2	-4	1,537	1,514	23
767					
-0-	2	-0-	1,162	1,081	81
777					
-0-	11	-0-	1,575	1,340	235
777X					
-0-	-0-	-0-	306	-0-	306
787					
2	11	-0-	1,097	329	768
This Month			This Year		BL
29	77	-6	447	580	5,656

Boeing sold 26,175 aircraft and delivered 20,519 as of September 30, 2015

The Current Program includes sales and deliveries of 737s, 747s, 767s, 777s and 787s.

Sales totals include 60 cancellations.

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EVA Airways intends to purchase or lease up to 24 787-10 Dreamliners and two additional 777-300ER jetliners, valued at more than \$8 billion at current list prices. The Taiwan-based carrier will become one of the launch customers for the 787-10 aircraft. **EVA** will modernize its long-haul fleet and replace aging aircraft. The new airplanes will allow the airline to expand into new markets, particularly in Southeast Asia, Oceania and North America. The airline currently operates 32 **Boeing** widebody airplanes, including three passenger 747-400s and 21 777-300ERs. Four of the 777s were delivered in 2005 and 2006 and another eight are more than five years old. The commitment has revived interest in the 787-10 Dreamliner which was launched in 2013 with 143 orders, but only three were purchased since then. The 787-10 retails for \$306.1 million before customary discounts. **EVA** is a subsidiary of the **Evergreen Line** container-shipping company, and it announced five 777 freighter orders at the **Paris Air Show** in June. **EVA** also has unfilled orders for 15 777-300ERs.

The Boeing Company's third quarter deliveries earned a bonus of cash and 787 Dreamliner costs grew less than projected. Deliveries rose by 7 percent to 199 airplanes, which included a record 37 Dreamliners. Since aircraft are paid for in full when they are handed over, the manufacturer's free cash flow rose to \$2.3 billion, which surpassed analysts' \$1.8 billion estimate. Commercial aircraft revenue rose 10 percent to \$17.7 billion, but earnings from operations dropped 2 percent to \$1.77 billion. Its operating margin fell 1.2 points to 10 percent from the previous year, because **Boeing** delivered more of its unprofitable 787s. **Boeing's** defense, space and security unit revenues rose 6 percent to \$8.35 billion, and its profits increased 19 percent. The company's total revenue rose 9 percent to \$25.8 billion. **Boeing** still loses money on each Dreamliner it builds, but the losses are shrinking. Dreamliner costs rose \$577 million to \$28.3 billion, according to **Boeing**, but that was slightly better than the predicted \$700 million cost increase. The manufacturer expects to complete 12 787s per month in 2016, which will drive down its production costs. Total company backlog as of September 30, was \$485 billion, down from \$489 billion at the beginning of the quarter, and included net orders for the quarter of \$22 billion. **Boeing** said in its press release, "During the quarter, the

Delta Air Lines CEO **Richard Anderson** said he expects prices for used twin-aisle jets to fall, and that the weakness will spread to single-aisle planes, presenting airlines with "some huge buying opportunities." Apparently he thinks the value of a 10-year-old 777 will drop to \$10 million. The cost of a 10-year-old 777-200ER or A330-200 is currently at about \$47.5 million and prices have fallen about 12 percent and 5 percent respectively over the last year. **Delta** has tapped the used market for cheap lift and will continue to use that business model. Some airlines are taking advantage of low fuel prices to buy less efficient aircraft rather than pay extra for expensive, fuel-sipping, new models. Buying cheap used planes will allow airlines to wait to buy the next generation of 777Xs or A330neos. The "bubble" in the used airliners market and slowing sales for the 777 may force **Boeing** to cut the plane's production rate. The manufacturer needs to secure orders for about 200 more 777s to maintain its current 8.3 plane-per-month production rate, before the 777X enters service in 2020. Sales of the 777 fell from 194 in 2011 to 63 in 2014, and to 34 this year. A production cut will reduce profits and cash flow from the lucrative program. Prices for 777-200ERs fell by 20 percent over the last year, which is making new sales more difficult. Approximately 7 percent of the global 777 fleet is out of service and 40 777s are for sale. Some A330s have entered the market so **Airbus** cut planned production rates twice recently, due in part to the introduction of the fuel-efficient A330neo in 2017. So far, the manufacturers have avoided deep discounting to preserve their profit margins for new planes and are hoping airlines will be willing to pay a premium for the most efficient planes available.

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company began final assembly and achieved power-on of the first 737 MAX airplane. The 737 program has won nearly 2,900 firm orders for the 737 MAX since launch. Also during the quarter, the company completed firm configuration for the 777X. The 777X program is on schedule for first delivery in 2020. **Commercial Airplanes** booked 166 net orders during the quarter. Backlog remains strong with nearly 5,700 airplanes valued at \$426 billion.”

Boeing May Cut 777 Production by 15 Percent to seven per month, and it is considering a jump in 737 production, despite **CFM International’s** concern that it cannot build enough engines to match the rising rate. **Boeing** has so far failed to sell out all of its 777 production slots, prior to the introduction of the 777X in 2020. **Delta Air Lines** CEO **Richard Anderson** said prices for used 777s were falling, which makes selling new 777s much more difficult. **Boeing** CEO **Dennis Muilenburg** said 777 production was “essentially” sold out through 2016 and for more than half of 2017, and “the value of the 777 is holding up very well.” He did not “see any scenario that would take us below seven a month.” A decision may come early next year and take effect in 2018, he said. **Boeing** expects the 787 to be cash positive in the fourth quarter. The company lost \$15.5 million on each 787 that left the factory in the third quarter. **Boeing** increased its forecast for this year’s jet deliveries by five units, from 750 to 755 to between 755 and 760.

Regional Report

Bombardier’s CS100 Test Aircraft successfully completed over 90 percent of the certification program and is now in the final stage of flight testing that will include a few weeks of function and reliability tests, the company said. **Bombardier** also confirmed that they have ramped-up CSeries production. **Fred Cromer**, President, **Bombardier Commercial Aircraft**, said, “We’re in the final stage of certification. Following a comprehensive flight test program, we’re now on the cusp of validating that the CS100 aircraft is ready for operation with [launch customer] **SWISS**. We’re proud to announce that this last phase of flight testing puts us on track to certify by the end of 2015.” The CSeries will be delivered to **SWISS** in the first half of 2016. **Rob Dewar**, VP of the CSeries Aircraft Program, said “The function and reliability test flights, which will be conducted using typical airline flight routings and operational procedures, will include about 15 representative airports in Canada and 20 in the United States.” The CSeries aircraft can fly up to 3,300 nautical miles (6,112 km), which is 350 NM (648 km) more than originally targeted. **Bombardier** has booked firm orders for 243 CSeries aircraft and commitments for 360 more. The CSeries is powered by **Pratt & Whitney** PurePower PW1500G engines. The aircraft is delivering more than a 20 per cent fuel burn advantage compared to in-production aircraft, and a greater than 10 percent advantage compared to re-engined aircraft. This means that one CSeries aircraft could reduce an operator’s carbon emissions by up to 6,000 tons each year. The CSeries will also emit 50 percent less nitrogen oxide than the **CAEP 6** NO_x emission standards, **Bombardier** said.

ATR, a European turboprop aircraft manufacturer, obtained **European Aviation Safety Agency (EASA)** certification for its passenger-cargo ATR 72-600 combi. The new cabin replaces the forward seven seat rows with a cargo section that accommodates four containers. The rear section seats 44 passengers. The aircraft features a cargo volume of more than 19 cubic meters and can carry nearly 3,000 kilograms in weight. The combi version design can be retrofitted on the existing aircraft. **DAE Capital** will lease the first combi aircraft (SN 1287) to **Airlines PNG** of Papua New Guinea by the end of the year. **Airlines PNG** has ordered eight combi aircraft.

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Montreal-Based Bombardier redoubled its efforts to win a landmark order for the CSeries and is trying to sell the jets to airlines in North America. Sources said **Bombardier** was pitching **Southwest Airlines** and **American Airlines Group** as well as other U.S. airlines. The manufacturer is also pushing to sell the large regional jets to Chinese airlines, and they are in advanced discussions, according to its spokeswoman **Marianella de la Barrera**. **Air Canada**, is an obvious customer for the CSeries, but it and **American** declined to comment. In 2014, **Air Canada** decided to keep its **Embraer** planes after considering the CSeries as an alternative. A **Southwest** spokesman said, “We have nothing in the works that would have our customers expecting to see anything but a **Boeing** bird when they walk up to a **Southwest** gate.” The manufacturer is also in talks about a possible order with **JetBlue Airways**. **JetBlue** currently flies A320 Family aircraft and **Embraer** E190s. An airline spokesman said, “We do not have any comment specific to **Bombardier’s** CSeries, but it is routine for us to meet with aircraft manufacturers.” In 2013, **JetBlue** delayed delivery of its last 24 E190s until 2022, saying it wanted to focus on the larger, more fuel-efficient A321. This gives the CSeries an opening. **Republic Airways Holdings** is the only North American airline to have ordered the CSeries, but in 2014, it said there was “no place” in its business model for the CSeries. The order for 40 CS300s is still considered firm.

Bombardier believes that a major order from a large U.S. airline would help restore confidence in the CSeries program, which has not won a new firm order in more than a year. Analysts say that the plane maker will need to offer steep discounts to lure mainline carriers away from **Airbus** and **Boeing**, and to pry the airlines from the long-term relationships they have with the big airframers, which have cut prices to protect their market share.

Embraer delivered 21 commercial jets and 30 business aviation aircraft, for a total of 51 in the third quarter. This was 50 percent higher than in the same period last year, when 19 commercial and 15 executive jets were delivered. On September 30, the firm order backlog totaled \$22.8 billion. The largest order announced during this period came from **SkyWest** for 19 E175 jets, with an estimated list price value of \$800 million. **Embraer** also delivered the first Legacy 500 midsize jet to **Transpais Aereo**, a subsidiary of the **Lomex Group Aeronautics Division** in Mexico. Furthermore, the business mid-light jet Legacy 450 has received type certification this quarter from the aeronautical authorities of Brazil, United States and Europe, opening up prospects in a new niche.

SkyWest, Inc. signed a firm order for an additional 19 E175s jets. The aircraft will be

Embraer September 30, 2015 Orders & Deliveries

Type	Total Orders	Total Options	Total Deliveries	Current Backlog
E170	193	7	188	5
E175	477	332	311	166
E190	586	92	518	68
E195	165	2	141	24
E175-E2	100	100	-0-	100
E190-E2	77	85	-0-	77
E195-E2	90	80	-0-	90
Total	1,688	698	1,158	530

Type	3rd Quarter Deliveries	2015 Deliveries
Light Exec Jets*	21	57
Large Exec Jets**	9	18
Embraer 170	-0-	-0-
Embraer 175	20	62
Embraer 190	-0-	3
Embraer 195	1	3
Total	51	143

*3 Phenom 100, 18 Phenom 300,

**3 Legacy 500, 6 Legacy 650 and -0- Lineage 1000

Deliveries and firm order backlog include orders for the Defense & Security segment placed by State-run airlines

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flown by **SkyWest's** wholly-owned subsidiary, **SkyWest Airlines**, under a **Capacity Purchase Agreement (CPA)** with **Delta Air Lines**. The first aircraft is expected to be delivered in August 2016, with all 19 aircraft entering service by mid-2017. The transaction will be included in **Embraer's** 2015 fourth-quarter backlog. All the E175s will be configured with 12 First Class seats, 20 Delta Comfort+ seats, and 44 Main Cabin seats, and will operate under the **Delta Connection** brand. The E175s feature a new wingtip with other technical enhancements, which improves aerodynamic performance and cuts fuel consumption by 6.4 percent when compared with first-generation E175s.

Embraer's first prototype E190-E2 (PR-ZEY) is on the final assembly line at Sao Jose dos Campos, Brazil. The aircraft's fuselage join and wing-to-body have been completed and the plane is resting on struts. The **Pratt & Whitney** PW1900G geared turbofan engines and horizontal stabilizer have yet to be attached. The aircraft is painted in **Embraer's** blue, yellow and grey livery. The E190-E2 is scheduled to enter service in 2019 and the first E175-E2 will follow in 2020. **Embraer** has been showing off the E190-E2 to more than 50 potential customers, and 40 suppliers and trading partners.

Mitsubishi Aircraft's Mitsubishi Regional Jet (MRJ) first flight will happen during the second week of November. The flight was delayed for two weeks because engineers have to replace a faulty pedal in the flightdeck. The manufacturer hopes the first flight of Japan's first passenger airplane in 50 years will stimulate interest from prospective customers in Europe. The MRJ seats less than 100 passengers and competes directly with well-established **Bombardier** and **Embraer** products, and with the Chinese ARJ-21 and Russian SSJ100. **Yoshihisa Kumagai**, president of **Mitsubishi Aircraft Europe** said, "We believe in the European market, we are carefully marketing the plane. We hope the first flight will lead to a lot of requests from Europe." The region is the world's second largest market for regional jets after the United States, and **Mitsubishi** sees the MRJ as a good candidate for airlines looking to replace older fleets of turboprop planes and the previous generation of regional jets made by **Avro** and **Fokker**. The company missed the opportunity to sell the MRJ to the Irish regional carrier, **Cityjet**, which ordered 15 **Sukhoi** Superjet SSJ100s, worth \$1 billion, to replace its fleet of Avro RJ85 jets. **Mitsubishi** currently has 223 firm orders for the \$47 million, list-priced MRJ, and holds options and purchase rights for another 184. The first production plane will be delivered to **All Nippon Airways**, Japan, in the second quarter of 2017.

CityJet Airlines, the Irish-based regional airline, announced that it ordered 15 of the 98-seat **Sukhoi** Superjet 100s (SSJ100) to replace its fleet of older regional jets. The agreement was signed by **Sukhoi Civil Aircraft Company**, **SuperJet International** and **CityJet** for 15 aircraft plus 10 options at the **European Regions Airline Association (ERA) General Assembly** in Berlin. The firm order and optioned SSJ100s, and service contract, are list priced at more than \$1 billion (\$40 million each). The first delivery is scheduled for the first quarter of 2016, and the airline will accept three more SSJs in 2016 and the other 11 throughout 2017. **SuperJet International** is a joint venture between **Finmeccanica** — **Alenia Aermacchi** of Italy and the **Sukhoi Holding**, Russia. The SSJ100 will be certified for **London City Airport** operations by the end of 2016. **Cityjet** will use the SSJ100 as to replace the fleet of 18 **Avro** RJ85 that it operates across Europe, and to **London City** in 2017. The airline signed up for "SuperCare" after-sales support for its new Superjet 100 aircraft for a 12-year term. The **CityJet** SSJ100 fleet will be supported by **SuperJet International** with "this tailored after-sales solution beginning with the aircraft's entry into service," **Sukhoi** said. In addition, **CityJet** crews are going to start their training on SSJ100 by the end of the year, utilizing the aircraft's Full Flight Simulator at the

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Training Center in Venice, Italy. **Cityjet** will be the first airline in Western Europe to operate the SSJ100. **CityJet**, owned by **Intro Group**, also contracted to buy eight used **Bombardier** CRJ900s which will be wet-leased to **SAS**.

Order Changes and Cancellations

Airbus Reported Wizz Air dropped 10 previously ordered A320neos when it bought 110 A321neos in September. **Croatia Airlines** converted its outstanding order for four A319-100s into four A320neos. The A319ceos were originally ordered in 2008 and were scheduled to be delivered in 2013. The new A320neos are scheduled to arrive in 2021. The Croatian carrier operates four A319-100s, and two A320-200s.

Gol Linhas Aéreas Inteligentes (Gol Airlines) converted nine 737-800 orders into 737 MAX aircraft in October. The Brazilian carrier has eight 737-800s, and 69 737 MAX in backlog.

Boeing Cancellations in September: An unnamed customer dropped two 737 orders, raising the 737 cancellation total to 30 as of September 30. **Nippon Cargo Airlines (NCA)** dropped four orders for 747-8F freighters (SN 37395, 37396, 37397 & 37398) valued at \$1.5 billion, on September 1. This left the plane maker with zero net orders for the jumbo jet this year. **Nippon Cargo** still has two of the jets (SN 36142 & 36143) on order and has taken delivery of eight 747-8F freighters since July 2012. **Boeing** has only eight 747-8Fs and 15 747-8I passenger planes on firm order. **Boeing** will cut production of the 747 to one plane per month in March 2016. The 747 still has some sales prospects. **Cargolux** said it plans to buy five new 747-8Fs for a new Chinese subsidiary, **Cargolux China**, and **Volga-Dnepr Group**, the parent of **AirBridgeCargo Air-lines**, signed a Memorandum of Understanding for 20 747-8Fs. The **U.S. Air Force** needs an unspecified number of 747s for its **Air Force One** Presidential fleet.

Customers Push Back Against U.S. Export-Import Bank Closing. **Ethiopian Airlines** Chief Executive **Tewolde GebreMariam** told **Boeing** in the letter dated October 3, that uncertainty about the future of the bank put the manufacturer “at a competitive disadvantage relative to manufacturers in other countries that continue to support their export credit agencies.” The airline also said it was concerned about its ability to take delivery of 21 airplanes on order (worth more than \$2.5 billion at current list prices) and would be forced to reevaluate future orders. The airline officially has 20 737 MAX and one 777 freighter listed on **Boeing’s** website, and it is expected to order 15 to 20 777X aircraft before year-end. **Ethiopian Airlines** plans to double its fleet to 150 aircraft by 2025, and Mr. **GebreMariam** said it could turn to Europe’s **Airbus Group** for new airplanes. He also said **Ex-Im** financing allowed the airline to fund large, long-term acquisitions and borrow in its own currency, which lowered exchange rate risk. He added that the airline had never defaulted on any **Ex-Im** guarantees. **Comair Ltd.**, South Africa, also sent **Boeing** a similar letter about its orders for 11 737s worth \$1.1 billion. It said that if the bank does not resume lending, **Comair** would have to launch a new tender for aircraft finance, which could drive up the cost, and would undermine the “long-term viability of acquiring **Boeing** aircraft.” It has three 737-800 deliveries scheduled between October and November 2016, and said lack of export financing could force the airline to borrow money in a foreign currency, exposing it to “too great an exchange rate risk.” The airline stated it will reconsider its orders for eight 737 MAX 8 aircraft scheduled for delivery from 2019 to 2021. **Comair** Chief Executive **Erik Venter** said “**Comair** needs to take an urgent decision on whether to proceed with this order, before the pre-delivery payments commence next year, [and it] will need to begin negotiations with **Airbus** and with the European [export credit agency] for financial support.” **Boeing** said it lost two orders since the **Ex-Im Bank’s** charter

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lapsed at the end of June, halting its lending, loan guarantees and trade insurance. Spokeswoman **Kate Bernard** said **Boeing** expected to see more letters from other airlines in the near future. "Customers have come to us with their concerns and they want to know what they can do to help," she said. **Ex-Im Bank** supporters say the bank produced \$675 million in profit for the **Federal Government** and helped U.S. companies to sell their products overseas. A small group of **Republicans** have described the bank as "corporate welfare" for **Boeing** and other large manufacturers. There will be a vote to resuscitate the bank in coming weeks through a rarely used procedural maneuver known as a discharge petition. The vote is contingent on House Speaker **John Boehner** allowing the vote before he leaves Congress at the end of October. Industry executives said they have the needed votes in the House and Senate to revive the bank, but it remains unclear if Mr. **Boehner** will allow a vote before he leaves.

Joao Miguel Santos, **Boeing Commercial Airlines'** Director of Sales for Africa, told journalists that Africa will need 1,170 airplanes over the next 20 years, and they will be worth \$160 billion. **Boeing** predicts that 960 airliners will be used for growth and the remaining will replace older aircraft. The market requires 830 single-aisle aircraft, 260 will be small widebody airliners (A330 or 787) and there is a need for 40 medium widebody airliners (A350 or 777) worth \$10 billion. The company sees no market for the 747-8 or A380 in Africa. Mr. **Santos** undercut the call for **Ex-Im Bank** reauthorization when he said, "Financing is available for African airlines, which is good. We can find funding for most of our African customers."



Leasing & Finance

AerCap Holdings N.V. will lease three **Airbus** A321neos and one A320neo to **Air Astana**, Kazakhstan. The jets will be operated on the airline's domestic and international networks, but when they will be delivered was not stated. **AerCap** CEO **Aengus Kelly** said, "**AerCap** is delighted to work with **Air Astana** to support the carrier's expanding network in the region, particularly on longer range routes to Asia and Europe, with the most modern, fuel-efficient equipment." **Air Astana** will also lease five A321neos and two A320neos, from **Air Lease Corporation**, with deliveries scheduled between 2016 and 2019. The airline currently operates 13 **Airbus** A320 Family aircraft, five **Boeing** 757-200s, three 767-300ERs, and nine **Embraer** E190s.

AerCap Holdings announced its signed lease agreements for 12 widebody and 34 narrow-body aircraft, and purchased one **Boeing** 787-8, one 787-9, and five 737-800s during the third quarter 2015. The lessor sold or parted-out 17 aircraft, including two **Airbus** A320-200s, four A330-200s, one A340-300, two **Boeing** 757-200s, two 777-200ERs and two 777-300ERs from its owned portfolio, and one A321-200, one 737 classic, one 757-200 and one **McDonnell-Douglas** MD-83 from **AerCap's** managed portfolio. The company continues to manage 10 aircraft that were sold from its owned portfolio. During the first nine months of 2015, **AerCap** leased, purchased or sold 306 aircraft. It signed lease agreements for 54 widebody and 162 narrowbody aircraft, and purchased four A321s, one A330, one A350, 11 787s, and 18 737-800s. During the period, the lessor sold or scrapped 55 aircraft, including 15 A320 Family, five A330s, three A340s, eight 737 Classics, two 747-400s, a dozen 757s, two 767s, four 777s, two 787s and two other makes. **AerCap** CEO **Aengus Kelly** said, "As we continue to meet the needs of our global customer base, we lease or sell an aircraft every 24 hours, consisting of two widebody and five narrowbody aircraft transactions per week." **AerCap's** portfolio consisted of approximately 1,730 aircraft that were either owned, managed, or under contract to purchase.

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Avolon Aerospace's shareholders voted in favor of the previously announced merger agreement, dated September 3, 2015 with **Bohai Leasing**. The leasing company will become a wholly-owned subsidiary of **Bohai**. The company's shareholders also voted in favor of the proposals to amend and restate the articles of association and to decrease and amend the company's authorized share capital. The parties currently expect to complete the merger no later than the first quarter of 2016, subject to the satisfaction of all conditions set forth in the merger agreement. **Avolon** will become a privately held company and its common shares will be delisted from the **New York Stock Exchange**.

The Bank of China will spin off its aviation leasing unit by selling no more than 40 percent of **BOC Aviation** through a listing of new and old shares on the **Hong Kong Stock Exchange**, the bank said in a statement. It will sell 90 percent of the offered shares to international investors and 10 percent to Hong Kong investors, and it will remain the controlling shareholder of the leasing company. The funds will be used to purchase new aircraft and for supplement working capital, their statement said. The bank did not announce the timing of the share issue or the amount to be raised. **BOC Aviation** is one of the world's larger aviation leasing operations and it owns 236 aircraft and manages 20 aircraft as of June 30. It held total assets of \$11.4 billion and recorded a profit after tax of \$309 million in 2014, **Bank of China** said in its annual report.

BOC Aviation will sell 24 aircraft to **Shenton Aircraft Investment I Ltd.** and affiliates. **Shenton** issued two tranches of notes, valued at \$747.4 million and \$60.5 million to finance a portion of the cost of the aircraft. The notes are backed by the 24 aircraft and they will be repaid by the lease income. The 11 **Airbus** A320 Family aircraft, two A330s, seven **Boeing** 737NGs, two 777s, and two **Embraer** E190s are currently on lease to 21 airlines in 18 countries. The portfolio has a weighted average age of 4.6 years and weighted average remaining lease term of 5.7 years.

FLY Leasing Limited acquired one **Boeing** 737-800 in a sale and leaseback transaction with a European airline with which **FLY** has a long-standing relationship. **FLY** acquired its second new 777-200LRF aircraft in a sale and 12-year leaseback transaction with a leading flag carrier. They bought the first -200LRF in September. **FLY** is managed and serviced by **BBAM LP**, a worldwide leader in aircraft lease management and financing.

Engines

BOC Aviation selected **General Electric** CF6 engines to power two new **Airbus** A330-300 aircraft, which will be delivered in 2017. The two aircraft have been placed on long-term lease with **EVA Airways Corporation**.

GE Aviation assembled the 1,000th GENx engine, a mere five years after starting production at **GE's** Durham, North Carolina, plant. The first GENx engine entered service on a **Boeing** 747-8 aircraft in 2011, and the engine program has accumulated five million flight hours and 900,000 cycles. Last year, **GE** delivered 280 GENx engines and 270 engines are due to be delivered in 2015. The GENx

Rolls-Royce sold engines and services to **HNA Group** worth \$2.4 billion. **HNA Group** operates 33 Trent 700 powered A330s and has ordered 24 more A330s, five A330Fs and 15 A350-900s. The agreement covers: Trent 700 engines and **TotalCare** service support for the A330s and **TotalCare** service support for Trent XWB engines that will power the A350s. **HNA Group** is the parent of **HNA Aviation** which operates and manages **Hainan Airlines**, **Tianjin Airlines** and **Capital Airlines**. The airlines serve more than 250 cities and carry 72 million passengers annually.

is the sole engine for the 747-8 and is an option on the 787. **GE** is also looking at possible technology enhancements to ensure the GENx engine remains a leader in its class. This year, they tested a GENx demonstrator engine that contained lightweight, heat-resistant ceramic matrix composite (CMC) components in the high-pressure turbine (HPT) and combustor along with next-generation HPT stage 1 blades with advance cooling technology and lightweight low-pressure turbine titanium aluminide (TiAl) blades produced using a 3D additive manufacturing process, **GE** said. The demonstrator engine is part of the technology maturation program for the GE9x engine. Results re-affirm **GE's** CMC technology and could lead to future improvements on the GENx engine.

Airline News

Arke Fly, the Netherlands, was the first carrier in the **TUI Group** to rebrand under its international oneBrand campaign. The name was changed to **TUIfly** on October 1, and its 787-8 (SN 37228) was the first aircraft in its fleet to be painted in the revised livery. In May, the German multinational travel and tourism firm said it would rebrand all of its five carriers under a single “**TUI**” master brand to help improve consistency as well as overall international recognition. The next airline to be rebranded will be **Jetairfly** (Belgium), followed by **TUIfly Nordic** (Sweden) and **Thomson Airways** (U.K.). According to **TUI Group**, its French subsidiary, **Corsair International**, will retain its name. The group will streamline costs and administrative overhead by consolidating those functions into one central organization employing a singular “engineering and maintenance function.” All five carriers will continue to operate under separate Air Operator Certificates (AOC).

Congo Airways started flying on Friday, October 9 with VIP flights from **Kinshasa N'Djili Airport** to Lubumbashi and Goma in the Democratic Republic of Congo (DRC). Each route was operated by one of the airline's two ex-**Alitalia** A320-216s (SN 3362 & 3412). The carrier now serves Gemena, Kananga, Kindu, Mbandaka, and Mbuji Mayi since it inaugurated commercial flights on October 20. The airline will acquire another A320-200 and its first Dash 8-400 in January 2016. It will receive two more Dash 8s by December 2016.

Fastjet Zimbabwe secured its Air Operators Certificate (AOC) from the **Civil Aviation Authority of Zimbabwe (CAAZ)** in October. The airline obtained its Air Service Licence from the **Zimbabwean Ministry of Transport** in March, can now apply for international routes. It launched operations on its Harare-Victoria Falls route, on October 28, with A319-131 (SN 2281) leased from **ICBC**. **Fastjet Zimbabwe** will compete with state-owned carrier **Air Zimbabwe** and the low-cost carrier **Zimbabwe flyafrika**, which launched domestic and regional operations in 2014.

International Air Transport Association (IATA) Posts October 2015 Jet Fuel Prices.

The association updates the world's average jet fuel prices each week. On October 9, the world's average price of fuel was \$1.511 per gallon, 2.6 percent higher than the September 2015 price of \$1.430. Fuel was also 39.7 percent less than it was in October, 2014. The price of fuel is affected by location. It was only \$1.436 in the Middle East region and was \$1.548 per gallon in Latin America. In Asia, fuel cost \$1.497 per gallon. Fuel rose to \$1.496 in Europe, and to \$1.539 in North America, which was the second highest priced region. Since last year, fuel costs in those regions dropped by 40.9 and 38.2 percent respectively. **IATA** estimated that the global airline industry's aggregate fuel bill will total \$69.5 billion in 2015, a savings of \$86.2 billion from the previous year.

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AirAsia Japan secured its Air Operators Certificate (AOC) from the **Japan Civil Aviation Bureau**, ahead of its planned launch in Spring 2016 with flights from **Chu-bu Centrair Airport**, Nagoya, to Chitose, Sapporo, Sendai and **Taoyuan International Airport**, Taipei, Taiwan. **AirAsia Group** CEO **Tony Fernandes** said, “We are very excited to be back in Japan. We have fantastic partners here and we are united in the vision to change the way people travel in Japan. **Centrair Airport** is a fantastic base and with our new routes, we look forward not only to enable the Japanese to enjoy our direct destinations, but to connect them to the rest of Asia and beyond on our extensive network.” **AirAsia** will transfer 10 new **Airbus A320-216/Ws** to **AirAsia Japan**. The airline is a joint venture between **AirAsia Group** (49 percent), **Octave Japan Infrastructure Fund** (19 percent), **Rakuten** (18 percent), **Noevir Holdings** (9 percent), and **Alpen** (5 percent). The original **AirAsia Japan** was a 49/51 joint venture between **AirAsia** and **ANA All Nippon Airways** that collapsed in June 2013, when **ANA** bought out its partner’s shareholding and established its own wholly-owned venture, **Vanilla Air**. The two partners cited differences in management style among other issues that caused its demise.

Bankruptcy of the Month

Transaero Airlines’ Future in Doubt. **Aeroflot**, Russia’s state-owned flag airline, declined to take over its largest competitor **Transaero**. They were to pay one rouble for 75 percent plus 1 share, under a government sponsored rescue plan, but balked at acquiring its 250 billion rouble (\$4 billion) debt. Russian Prime Minister **Dmitry Medvedev** approved bankruptcy proceedings for **Transaero**. An unnamed federal official said to the Russian press, “The bankruptcy will proceed according to Russian law. There are two considerations: first, who will inherit **Transaero’s** debts and how much of them, second, how it will affect the airline’s smaller creditors, the passengers and airline employees.” The airline was ordered to cease all ticket sales. **Transaero** pre-sold millions of cheap tickets in the past year in an attempt to raise cash, with the hope that the **Russian Government** would bail the airline out. The Russian **Interfax** news agency reported that bankruptcy became inevitable for three reasons: The airline’s shareholders could not consolidate the 75 percent plus one share that were to be transferred to **Aeroflot**. Also, **Transaero** creditors refused the **Sberbank**-proposed debt restructuring plan and the Russian **Ministry of Finance** back pedaled on the previously promised 85 billion rouble (\$1.3 billion) in state guarantees to restructure the airline. The banks are opposed to the bankruptcy because they hold much of the exposure. **Aeroflot** refused to fuel **Transaero’s** planes on October 1. First Deputy Prime Minister **Igor Shuvalov** promised the government would help the 10,000 employees who will lose their jobs, and the passengers who hold now-worthless, pre-purchased tickets. **Domodedovo Airport Commercial Agency** filed a claim for 839 million roubles (\$13 million), **Pulkovo Airport**, St. Petersburg, is seeking 182 million roubles (\$2.9 million), **RN-Aero**, an airport refueling firm, is claiming more than 3.4 billion roubles (\$55.03 million) for unpaid fuel bills, and **Tekhnik**, Voronezh, a subsidiary of **Ilyushin Finance** also sued for 182 million roubles (\$2.9 million). **Transaero** was brought down by the recession and the sharp devaluation of the rouble, which killed travel and raised the cost of airplane leasing, which

Offer to Rescue Transaero. **Vladislav Filev**, co-owner and CEO of **S7 Airlines**, Russia, signed an agreement to buy at least 51 percent of the beleaguered airline on October 21. **Transaero’s** two of its main creditors, **Sberbank** and **Alfa Bank**, had filed bankruptcy suits against the airline. One day later, **Sberbank** First Deputy Chief Executive **Maxim Poletaev** said the bank does not believe the indebted airline could be saved even if it changes owners. The creditor has not withdrawn its lawsuit to declare **Transaero** bankrupt, but was still talking with Mr. **Filev**.

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was denominated in dollars or euros. According to **TASS** new agency, **Transaero** had 150 billion roubles (\$2.4 billion) in leasing obligations, and owed 20 billion roubles (\$325 million) to airports and fuel companies, and it took multi-billion-rouble loans from major Russian banks. The **Russian Government** let the company go bankrupt on October 1, and 650,000 passengers were inconvenienced. **Aeroflot** and other Russian airlines will fly **Transaero** passengers until December 15 and the other ticket-holders will be reimbursed. The airline had four A380 and four 747-8I jumbojets, and eight A320neos on order and it contracted to lease six new A321s from **ICBC Leasing**, and a dozen 737-800s from **Sberbank Leasing**. The airline leases or owns 31 737s, 19 747-400s, 13 767s and 14 777s, many of them from Russian banks and leasing companies – **VTB**, **VEB** and **Sberbank**. The 18 737 Classics and the 747s will probably be grounded and eventually scrapped. All the 767s and 777s were delivered before 2000 and the owners may have a hard time finding new lessees for them as well. **Transaero** operates 13 737-800s, which range from nearly new to 17 years old. Most of them will find new operators. **VTB Bank** is owed 52 billion roubles (\$841.77 million) for back rent and credit lines. It is considered selling off the 21 aircraft **Transaero** leases from it. **VTB** may establish a new carrier with the **Transaero** fleet, and it said the new airline should be able to fulfil a part of **Transaero's** obligations if it is provided with state support. The reformed carrier could retain all of **Transaero's** traffic rights, duty-free import of aircraft and simplified access to domestic and international flights. **Transaero** will keep operating its own aircraft until October 26. The federal aviation regulator **Rosaviatsia** conducted a two-week inspection of the airline and concluded that **Transaero** does not have the ability to service its debts and fully fund its continuing operations. **Rosaviatsia** ruled that the carrier “does not meet” **Russian Federal Aviation Regulations (FAR)**, including safety and consumer-rights concerns, and it will revoke the airline’s operating certificate on October 26. Further, **Transaero's** “acute shortage” of funds, could jeopardise provision of simulator training for pilots and timely maintenance of its aircraft. **Transaero** canceled dozens of flights this month, typically around 70 services daily, with passengers being moved to other operators. **Aeroflot** agreed to find jobs for about half of **Transaero's** workforce after it shuts down.

Technical

Lufthansa Technik's Completion Center, Hamburg, Germany, finished the first of three VVIP **Boeing 747-8s** to be converted after more than two years of work. The 747-8Z5(BBJ) (A6-PFA, SN 37500) was re-delivered to the **Abu Dhabi Amiri Flight** in October. **Walter Heerdt**, head of the **VIP & Executive Jet Solutions** division, said the project was one of the most complex undertaken by **Lufthansa Technik** owing to the 747's 440 square meter cabin and the wide ranging requirements on the part of the customer in terms of equipment and quality. “The completion of this 747-8 allowed us to demonstrate all of our skills and competencies. It is the most extraordinary aircraft that we have completed to date, featuring an unprecedented high level of elegance. It is only thanks to the many years’ experience, professionalism and passion of our employees that we are able to deliver such unique products to our customers.” There are six

The Commercial Bank Guinea Ecuatorial's (CBGE) owner sued the **Equatorial Guinean Government** for payment of a \$77 million judgement and seized the flag carrier **CEIBA Intercontinental's** 777-2FBLR (SN 60116) as collateral in July. The airplane was being fitted with a VIP cabin at **Amac Aerospace Switzerland** at the **Basle/Mulhouse/Freiburg Airport**. A court in Mulhouse, France, ruled that **CBGE** had not adequately proven the **Equatorial Guinean Government's** ownership of the airline and therefore **CEIBA** could not be held responsible for its debts. The aircraft was now free to return to Central Africa after refurbishment.

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747-8Is that have been built and are undergoing cabin completions for their governmental customers in the Middle East.

Jet Aviation Basel delivered ACJ A340-642 (4K-A108, SN 779), that it outfitted with a VIP cabin interior, to **AZAL Azerbaijan Airlines**. This was the 18th **Airbus** delivery from the **Basel Completions Center** since 1999. **Jet Aviation** said the ACJ A340-600 was equipped to carry up to 121 passengers in comfort and style, and it features a forward galley, dining and lounge areas, a master bedroom and in-suite bathroom with shower, a second bedroom with its own bathroom, an office, first class seating and dining areas, a mid-galley complex, a staff seating area and an aft galley. A comprehensive humidification system has been integrated to heighten comfort during long-haul flights. In addition, the aircraft interior includes an extensive in-flight entertainment system, including satellite TV, and a wireless local area network linked to primary and alternate satellite communication systems with high speed data.

Cargo Pallet

FedEx Corporation is Buying TNT Express N.V. for €4.4 Billion (\$4.8 Billion). The **TNT** shareholders voted in favor of the offer, during the Extraordinary General Meeting on October 5. **FedEx Acquisition B.V.**, an indirect, wholly-owned subsidiary of **FedEx Corporation**, will buy all issued and outstanding ordinary shares including ordinary shares represented by American depositary shares of **TNT Express**. The Dutch postal service **PostNL N.V.**, which holds a 14.7 percent stake in **TNT**, already assented to the deal. The deadline for acceptance of the offer was October 30, 2015, and a minimum of 80 percent of outstanding ordinary share capital had to accept the offer. The **European Commission (EC)** is currently examining the takeover bid and will announce its decision by December 7, 2015. The EC had said it had concerns about competition so **TNT** and **FedEx** are expected to make a number of concessions to help secure **EC** approval. There are several European markets where they would compete with their only two remaining rivals, **UPS** and **DHL**. The EC opened a full-scale investigation on July 31, because it worried the merger which could mean less competition, resulting in businesses and consumers paying higher prices. The **European Union** antitrust enforcer was supposed to complete a price analysis of the bid by October 16 and decide whether to make a statement of objections listing out problematic issues to **FedEx**, but they missed the deadline. The deal is expected to close in the first half of next year.

IATA Said Air Freight Volumes Edged Up 0.2 percent compared with the previous year. This followed a 0.6 percent decline in July. Rising volumes in the Middle East, Africa and Europe helped offset a slide in the Americas and Asia-Pacific. The problems that led to declines in June and July still pose a risk for the coming months, **IATA** said. "Some of the key reasons for the earlier weakness – for example, downgraded growth expectations in emerging Asia, and the rebalancing of the Chinese economy toward domestic consumption, are still there," **IATA** Director General **Tony Tyler** said.

Aeronautical Engineers (AEI) received **European Aviation Safety Agency (EASA)** approval for the MD-80SF freighter conversion. The original **FAA** STC for the MD-80SF was received in February of 2013. The MD-80SF comes with an **Ancra Cargo Loading System** capable of carrying 12 88 inch by 108 inch containers and depending upon the particular aircraft model, has a main deck payload capability of up to 46,600 lbs. (21,137 kg). **AEI** is the only conversion company that offers a passenger to freight conversion for the MD-80 series aircraft.

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Antonov Chose Pratt & Whitney Canada PW150A Turboprop Engines to power the An-132 prototype that they are developing for Saudi Arabia. The An-132 is derived from the Cold War-era An-32 which uses Ukrainian-made **Progress** AI-20DM powerplants. The PW150A is currently fitted on the **Bombardier** Q400. **Antonov** estimates a market for as many as 200 aircraft in the An-132 class between 2018 and 2025, said **Antonov** First Vice President **Aleksandr Kotsiuba**. Saudi Arabia's **Taqnia Aeronautics** will assist **Antonov** with the development and manufacturing of the updated An-132. The **King Abdelaziz City of Science and Technology** will also participate in the program. The new An-132 will carry up to 9.2 tons of payload, 1.7 tons more than the An-32.

Military Market

Japan Air Self-Defense Force (JASDF) Picks KC-46A. Just weeks after its first flight, Japan selected the **Boeing** KC-46A Pegasus to supplement its fleet of four KC-767 tankers. This is the first KC-46 sale to a foreign buyer, in a market dominated by the **Airbus** A330 Multi-Roll Tanker Transport (MRTT). The **JASDF** will procure three tankers for delivery in approximately five years at a cost of more ¥20.8 billion – about \$173 million per tanker. According to **Boeing**, the Japanese chose the KC-46 because it can refuel the **JASDF** fleet of **Bell-Boeing** MV-22 Osprey helicopters. The Pegasus tanker is near the end of its development program, having flown on September 25, from **Paine Field**, Washington, following a roughly nine-month delay. **Boeing** built four 767-2C-based prototype tankers and will enter low-rate production in 2016. **Boeing** still aims to deliver 18 operational aircraft to the **U.S. Air Force** by August 2017. The **U.S.A.F.** plans to order 179 tankers. **Airbus** withdrew its offer of the A330 MRTT after it determined that it could not meet the requirements of the Japanese Request for Proposals in September, saying “It would be an inappropriate use of shareholders’ funds and company resources to bid on this contract and accordingly the company will not be competing,” because the RFP was clearly intended for the **Boeing** KC-46.

Lockheed Martin may win a multi-year contract to build 72 C-130Js for the **U.S. Air Force**, and six KC-130J tankers for the **U.S. Marine Corps**. The agreement includes five optioned aircraft which will be delivered to the **U.S. Coast Guard** as HC-130H search-and-rescue aircraft. The **Air Force** order could include stretched-fuselage C-130J-30 tactical transports and AC-130J gunships. If signed, the multi-billion-dollar deal would call for production of 16 to 17 aircraft per year, which would allow the production line in Marietta, Georgia, to build 24 aircraft annually. The C-130Js would be delivered over the next five years and a bulk order like this one would provide a 10 percent saving to the government over previous contracts. Unfortunately, the military budget maintains spending at fiscal year 2015 levels, which precludes the **Air Force** from making multi-year purchases until a final budget agreement is reached between the

Alenia Aermacchi is completing the **Italian Air Force's** new P-72A maritime patrol aircraft test and evaluation phase. The **Air Force** took delivery of two ATR 72-600s (SN 940 & 1031) in 2011 and 2012 respectively. The planes are currently at Caselle for mission-system integration and testing, having received airframe modifications at Naples. **Alenia** installed a **Selex Seaspray 7200** search radar, **Selex ATOS** mission system, a **FLIR** electro-optical/infrared sensor, bubble spotter windows, openable rear door, a defensive aids suite, and four stations to eventually allow the addition of hard points for the carriage of torpedoes. The **Air Force** will eventually operate four P-72A MPA aircraft which will replace its remaining **Dassault Breguet** ATL-1 Atlantics. The first mission ready P-72A will be delivered in March 2016. A future P-72B-model, anti-submarine warfare variant may eventually be purchased by Italy, but they have not ordered it yet.

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President and **Congress. Lockheed Martin** has delivered more than 340 C-130Js to 16 nations to date. The Marietta plant is currently building J-models for India, Iraq, Israel, Kuwait, Oman, South Korea and Tunisia.

AIRCRAFT DELIVERIES & SALES

Airbus

Airbus A319. One **Airbus A319** was delivered in September, the 14th and final -115/W (SN 6716) for **Tibet Airlines**. The manufacturer has only 22 A319ceos and 49 A319neos in backlog. **SMBC Aviation Capital** said they sold two A319-100s to a leasing company based in Europe.

Airbus A320. **Airbus** delivered 23 A320s during September, including two -214/Ws to **Avianca** and its affiliate. **Avianca** leased -214/W (SN 6746) from **Grupo TACA**, and **Avianca Brasil** leased -214/W (SN 6712) from **Synergy Aerospace**. **Spring Airlines** accepted two -214/Ws (SN 6765 & 6786), and **Tianjin FAL** delivered two -214/Ws (SN 6661 & 6668) to **China Eastern Airlines**. **Loong Air** received -214/W (SN 6789) and leased -214/W (SN 6714) from **CLC CDB Leasing**, China. **China Aircraft Leasing Co. (CALC)** leased the fourth -214/W (SN 6724) to **Air India** for 12 years. The airline will lease another -214/W (SN 6803) from **CALC** by December. The second -214/W (SN 6654) delivered to **CALC** in September, was built at the **Tianjin FAL**, and leased to **Sichuan Airlines**. **Sichuan** also acquired -214/W (SN 6677) from **Tianjin FAL**. **Shenzhen Airlines** leased -214/W (SN 6728) from **SMBC Aviation Capital**, and **Capital Airlines** received -214/W (SN 6730). **BOC Aviation** leased the seventh of 20 -232/Ws (SN 6735) to **Vistara**, India, and **AWAS** leased -232/W (SN 6771) to **Royal Brunei Airlines**. **Garuda Indonesia** leased -214/W (SN 6753) to its subsidiary **Citilink**, and **Lion Air** transferred a second -214/W (SN 6722) to its leasing subsidiary, **Transportation Partners**, for lease to **Batik Air**, Indonesia. **Qatar Airways** leased -214/W (SN 6717) to its Saudi Arabian subsidiary, **Al Maha Airways**. **Avolon** purchased the third of four new -232/Ws (SN 6750) from **VivaAerobus** and leased it back. **Avolon Aerospace** also bought its first -214/W (SN 6779) from **VietJet Air** and leased it back to the airline. **CEBU Pacific Air** acquired -214/W (SN 6741), and **Air New Zealand** received -232/W (SN 6706). **Hong Kong Aviation Capital (HKAC)** long-term leased the second of seven -233/Ws (SN 6778) to **Volaris**, Mexico, after buying it from the airline.

SMBC Aviation Capital reported they bought a second new A320-214/W from **Lion Air** and leased it to **Batik Air**. The lessor will buy four more A320s from **Lion Air** for leaseback. The lessor bought the first of four new A320-232/Ws (SN 6755) from **VivaAerobus** and leased it back. **SMBC** purchased one new A320-200/W from **Asia Aviation Capital Limited** and leased it back as

Frontier Airlines leased its first A321-211/W (SN 6793) from **GECAS** in October. Last year, the airline placed firm orders for 19 current engine option A321ceos to fill a need for the largest A320 Family member in its route system. All 19 A321s will be equipped with 230 seats in a single class, Sharklets and CFM56-5B engines. **Frontier's** current fleet includes 35 A319s and 22 A320s. The airline also has 18 A321s, two A320ceos, 18 new engine option A319neos, and 62 A320neo aircraft on backlog. **Frontier's** new A321s will be used on their routes from Orlando to Philadelphia, Denver, Cleveland and Detroit. The airline opened a new crew base in Orlando to support the A321 this autumn.

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part of a four aircraft Sale and Leaseback transaction.

Airbus A321. Airbus delivered 13 A321s in September, including two -231/Ws (SN 6766 & 6781) to **Turkish Airlines (THY)**, two -231/Ws (SN 6761 & 6783) to **American Airlines**, and one -211/W (SN 6762) and one -231/W (SN 6774) to **China Eastern Airlines**. **JetBlue Airways** obtained its 21st of 46 -231/Ws (SN 6757), and **Spirit Airlines** acquired the third of 30 new -231/Ws (SN 6770). **LATAM Airlines Group** accepted one -211/Ws (SN 6780) and it is operated by **LAN Airlines**. **BOC Aviation** leased the third of four -231/Ws (SN 6768) to **Asiana Airlines**, and **Avianca Holdings** leased -211/W (SN 6767) to **Avianca**. **Transaero Airlines** leased the third of six -211/Ws (SN 6756) from **ICBC Leasing**, China. The fourth -211/W (SN 6817) is stored and awaiting a resolution of the airline's troubles. **Etihad Airways** acquired its fifth of seven ordered -231/Ws (SN 6760).

Finnair took delivery of the first of 19 A350 XWBs on order, when it leased -941 (SN 018) from **GECAS** in October. It is the first European operator and the third operator worldwide of the all-new airliner. The aircraft is configured in a premium three-class layout, with 297 seats, comprising 46 Business Class, 43 Economy Comfort and 208 Economy. The A350 XWB will enter service on November 21, 2015, on non-stop long-haul from Helsinki to Shanghai. To date, **Airbus** recorded a total of 783 firm orders for the A350 XWB from 41 customers worldwide.

Airbus A330. Airbus delivered four -200s and five -300s during September. **China Eastern Airlines** received two -243s (SN 1655 & 1664), and **CIT Aerospace** leased its fifth -243 (SN 1662) to **Sichuan Airlines**. **Airbus Defense & Space** delivered one -243 (SN 1667) to the **Republic of Singapore Air Force**. It will be converted into a Multi Roll Tanker Transport (MRTT) by **Airbus** in Spain. **Scandinavian Airlines (SAS)** became the first European airline to receive the new 242-ton Maximum Take-Off Weight A330 when it leased two -343s (SN 1660 & 1665) from **Bank of Communications (BoComm) Leasing**. **SAS** has two more high-gross weight -300s on order. **Air China** became the first Chinese carrier to operate the 242-ton Maximum Take-Off Weight A330 when it purchased -343 (SN 1658). The aircraft featured a special livery to mark it as the airline's 50th A330. **Hainan Airlines** bought -343 (SN 1663) and has two more on order. **Singapore Airlines** leased its 15th and last -343 (SN 1666) from an unannounced customer. The airline ordered the 15 A330s in 2011 for delivery from 2013 to 2015 and the press said the A330s would be leased from **Airbus** for a minimum of six years.

Airbus A350. **CIT Aerospace** leased -941 (SN 15) to **Vietnam Airlines** in September. The aircraft was powered by **Rolls Royce** Trent XWB engines. The airline leased a second -941 (SN 16) from **AerCap** in October and it will lease its second -941 (SN 17) from **CIT** in the next several months. **CIT** ordered 14 A350s.

Airbus A380. **Emirates** received its 66th and 67th -861s (SN 188 & 190) in September. The airline has 73 more on order and **Airbus** has 146 more on backlog.

Boeing

Boeing 737 NG. **Boeing** delivered 51 737s in September, including five -900ERs to three U.S. airlines. **United Airlines** received two -924ER/Ws (SN 42193 & 42194), and now it has four more on

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order. **Alaska Airlines** bought its 30th and 31st -990ER/Ws (SN 36350 & 44107), and it has 34 on order, and **Delta Air Lines** acquired its 46th of 100 ordered -932ER/Ws (SN 31957). **Boeing Business Jet** received -82Z/W BBJ2 (SN 60686). The customer was not named. The **United States Navy** accepted two more -8FV/W -P-8A Poseidon aircraft (SN 44150 & 44152). They will enter service once the electronic equipment is installed.

October Leases. **Avolon Aerospace** leased a second 737-8GP/W (SN 39875) to **Malindo Air** in October. The plane was purchased from **Lion Air** and leased to the carrier. **SMBC Aviation Capital** delivered one 737-8V3/W (SN 39967) on lease to **COPA Airlines**, from its direct order book.

Hainan Airlines bought four -84P/Ws (SN 41383, 41384, 41385 & 41387) in September, but the airplanes are still parked in Washington State. **Xiamen Airlines** acquired four -85C/Ws (SN 39915, 39916, 41392 & 41396). Three -89P/Ws (SN 41477, 41486 & 41488) were delivered to **China Eastern Airlines**. **Lion Air** took delivery of three -8GP/Ws (SN 39862, 39864 & 39872). The first was sold to **GECAS** and leased to **Malindo Air**, and the second was transferred to **Thai Lion Air**. **Norwegian** acquired another three -8JP/Ws (SN 41140, 42070 & 42078), for a total of 63, with 37 more on order. **Air Lease Corp. (ALC)** took delivery of three -800/Ws, and leased one -8SH/W (SN 41335) to **China Airlines** and a second -8SH/W is scheduled for delivery in fall of 2015, and the third in spring 2016. **ALC** leased -8SH/W (SN 41346) to **Jin Air**, and -8SH/W (SN 61424) to **Mandarin Airlines**. Taiwan. **AerCap** purchased three -800/Ws in September and one of them, -8Q8/W (SN 41810), was not assigned to a lessee and put into storage at **Goodyear Airport**, Arizona. **AerCap** leased -81B/W (SN 41612) to **China Southern Airlines**, and leased one -84P/W (SN 41811) to **Lucky Air**. **Lucky Air** also leased -8MB/W (SN 43883) from **ICBC Financial Leasing**, which **Boeing** listed as an "unidentified customer". Several airlines acquired two -800/Ws each, including **Air China** which accepted two -89L/Ws (SN 44921 & 44922). **American Airlines** received -823/Ws (SN 31225 & 31226), and **Donghai Airlines** obtained two -83Z/Ws (SN 61268 & 61269). **Ryanair** bought two -8AS/Ws (SN 44703 & 44704), and **SunExpress Airlines** purchased two -8HC/Ws (SN 61173 & 61174). **Avia Capital Leasing (ACS)** leased the third -8LJ/W (SN 41211) to **Orenair**, Russia. **Bank of Communications (BoComm) Leasing**, China, leased -8LY/W (SN 44382) to **Kunming Airlines**, and **Sberbank Leasing** leased the second of 12 ordered -8MC/Ws (SN 44437) to **Transaero Airlines**, just before it declared bankruptcy. **Virgin Australia Airlines** received the 66th of 80 -8FE/Ws (SN 41028), and **Shandong Airlines** acquired -85N/W (SN 41627). **Silk Air** obtained -8SA/W (SN 44229), and **flydubai** accepted -8KN/W (SN 40272). The **Republic of Iraq** leased -81Z/W (SN 40087) to its flag carrier, **Iraqi Airways**. **GOL Airlines** took delivery of -8EH/W (SN 41170).

Boeing 747. **Korean Air** received its second of 10 -8B5 Intercontinentals (SN 40906) in September. Another three -8B5s (SN 40907, 40908 & 60407) will be delivered shortly. **Cargolux Airlines International** accepted its 13th -8R7F (SN 61169), and it has another one on order.

AWAS leased factory-built 747-47RF freighter (SN 25868) to **Kalitta Air**, in September. **AWAS** previously leased the aircraft to **Centurion Air Cargo**.

Boeing 767. **Federal Express** took delivery of its 22nd and 23rd new -3S2Fs (SN 42718 & 43547) in September. The cargo airline has 77 more 767Fs on order.

Boeing 777. **Boeing** delivered three 777Fs and eight 777-300ERs in September. **Ethiopian Airlines** obtained its third -F60 (SN 42033), then sold it to **FLY Leasing/Babcock & Brown Asset**

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Management and leased it back. **FedEx Express** took delivery of its 24th -F2S (SN 40675) and it has seven more on order. **Saudi Arabian Airlines** acquired its second -FFG (SN 60338). It was officially delivered to an “unidentified customer”. The Saudi flag carrier has at least two more -FFGs on order. **Turkish Airlines** received two -3F2ERs (SN 44123 & 44124), and **Emirates Airlines** took delivery of -31HER (SN 42322). **Thai Airways International** acquired -3D7ER (SN 42115), and **Singapore Airlines** obtained -312ER (SN 42241). **Korean Air** bought its 14th -3B5ER (SN 43816), and **Garuda Indonesia** leased -3U3ER (SN 40072) from **ICBC Financial Leasing** after selling it to the lessor. **Cathay Pacific Airways** took delivery of the airline’s 70th 777. It was also the 53rd -367ER (SN 60724) and the last of the airlines 777-300ER orders. **Cathay** is the largest 777 operator in East Asia and a launch customer for the 777X, and it has 21 777-9s on order.

Oman Air celebrated the delivery of its first **Boeing** 787-8 Dreamliner (SN 42378) in October. The airline ordered six 787-8s in November 2011, and it flew its first commercial flight from Muscat to Salalah on October 18. The airline will deploy its first 787 on service to Saudi Arabia and Europe. **Oman Air** contracted **Boeing** for a suite of services to support the upcoming entry into service of its 787 Dreamliners to minimize the time and cost of maintenance. The flag carrier recently ordered 20 737s and has one 737-900ER on backlog. **Boeing** currently has eight 787 customers in the Middle East with a total of 175 Dreamliners ordered and 140 in backlog.

Boeing 787. **Boeing** delivered five 787-8s and six 787-9s in September. **American Airlines** received 787-8 (SN 40628), for a total of 11, with nine more on order. **PrivatAir** took delivery of **Rolls-Royce** Trent-powered -8 (SN 37306) on behalf of an undisclosed customer. **Qantas** leased -8 (SN 36238) to its subsidiary **Jetstar Airways**, Australia. **Qatar Airways** bought its 23rd -8 (SN 38341), and has seven more on order. **Xiamen Airlines** purchased its sixth and final -8 (SN 41543). **United Airlines** accepted two -9s (SN 36406 & 36407), and has eight more on order. **LAN Airlines** took delivery of its second of 12 -9s (SN 38479), and **All Nippon Airways** received its eighth of 44 -9s (SN 34530). **British Airways** acquired its first of 22 -9s (SN 38616), and **Virgin Atlantic Airways** accepted its seventh of 17 -9s (SN 37972). To date, **Boeing** has delivered 329 Dreamliners and has another 768 on backlog.

Regional Jet

Bombardier delivered the last two of seven ordered CRJ900NGs (SN 15375 & 15379) to **Mesa Air Group** in September, and they will be operated for **American Airlines** under the **American Eagle** brand. **Nordic Aviation Capital** delivered two ex-PLUNA CRJ900s (SN 15165 & 15180) to **GoJet** on lease. These were the final two used aircraft of a group of seven jets to be delivered to the **American Airlines** in 2015. **Garuda Indonesia** leased of one new CRJ1000 (SN 19042) from **Nordic Aviation Capital (NAC)**. The plane is the 15th in **Garuda’s** fleet and the 10th to be leased from **NAC** as part of a 12 aircraft deal.

Irish Carrier, Cityjet, will acquire eight **Bombardier** CRJ900s from a long-standing customer that signed a firm purchase agreement for the CRJ900 aircraft and took options on an additional six. The regional jets will operate on **Scandinavian Airlines’ (SAS)** regional Swedish network after delivery in March 2016. The customer requested to remain unidentified at this time, **Bombardier** said. The agreement is valued at approximately \$369 million at list prices, and if all options are exercised, it could increase to \$651 million. The wet lease is part of **CityJet’s** purchase of **SAS** subsidiary, **Blue 1**, and the

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contract runs for three years. **CityJet** currently has a fleet of 18 RJ85 aircraft operating under its own WX code as well as a long-standing ACMI contract for **Air France**, and it serves more than 680 weekly flights all over Europe, and employs almost 500 staff, with over 300 based at its headquarters in Swords, County Dublin, and additional crew bases in **London City Airport** and Paris. The CRJs cannot operate on the short runway at **London City Airport**, so **CityJet** bought **Sukhoi** Superjet 100s to replace the airline's RJ85s.

Embraer. Embraer delivered three more EMBRAER 170-200 LRs (E175) (SN 17000504, 17000505 & 17000508) to **American Airlines** in September, for a total of 15 of the 60 ordered E175s. **Compass Airlines** will operate **American's** first 20 E175s under the **American Eagle** brand. **Republic Airlines** bought two E175s (17000506 & 17000507) for operation for **United Express**.

Estonian Air leased its first two ex-**Lufthansa CityLine** CRJ700 (SN 10083 & 10085) from **Regional One** in October. The lease term is two years and the regional jets replace four E170s which are being returned to **Finnair**. **Jan Palmér**, CEO of **Estonian Air**, said, "The plan is to operate altogether with five-six CRJ900 and CRJ700 regional jet aircraft on routes to/from Tallinn, and one smaller turboprop on Tallinn-Stockholm Bromma route from March next year. On top of that we hope to operate with another two-four CRJ regional jet aircraft as capacity providers to other companies."

Mesa Airlines signed an agreement to add 15 new E175s to **Mesa's United Express** fleet. The deal will raise the total number of **Embraer** aircraft that **Mesa** operates for **United Express** to 45. In addition to the E175s, Mesa operates 20 CRJ700s under the **United Express** brand.



ATR. **SATENA**, Colombia, leased its second of five 48-seat ATR 42-600s (SN 1201) from **Nordic Aviation Capital (NAC)**, in September. The third ATR 42 (SN 1203) will be leased to the **Colombian Government-owned** airline shortly. **Binter Canarias**, a Spanish carrier based on the Canary Islands, took delivery of the first of 12 ATR 72-600s (SN 1278) that were ordered in 2014 and 2015. **Bangkok Airways** accepted -600 (SN 1269), and **Wings**, Indonesia, received -600 (SN 1275). **AZUL Linhas Aereas Brasileiras** leased its ninth -600 (SN 1270) from **DAE Capital**. **Flybe** leased its first ATR 72-600 (SN 1260) from **Avation PLC**, and it will be operated for **Scandinavian Airlines (SAS)** from **Flybe's** base at Stockholm's **Arlanda Airport**. A total of five 70-seat ATR 72-600s will be leased from **Avation** in 2015 and 2016. The aircraft will serve **SAS** domestic and regional destinations under a six-year contract.

Bombardier delivered one new Q400 NextGen (SN 4503) to **Air Canada Express** in September. **GE Capital Aviation Services' (GECAS) Regional Aircraft Group** leased two new Q400 NextGen aircraft (SN 4504 & 4506) to low-cost carrier **Nok Air** after a purchase-and-leaseback transaction. **GECAS** completed a similar deal for two factory-new Q400NGs (SN 4455 & 4458) with the carrier in 2014. **GECAS Regional Aircraft Group** was formed in 2000, and leases nearly 400 turboprop and regional jet aircraft to airline customers worldwide. **Nok Air** currently operates a fleet of more than 20 aircraft, to 26 destinations.

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Bombardier Commercial Aircraft delivered two Bombardier 415 amphibious aircraft to the **Government of Newfoundland and Labrador**. The \$73.7 million order for the aircraft was announced in March 2014, and the first aircraft was delivered in May 2014. The second aircraft was delivered in September 2015.

Aurora acquired its first Dash 8-400 (SN 4106) from **Nordic Aviation Capital (NAC)** in October. The Dash 8 was last leased to **Eznis Airways**, Mongolia. The Russian Far East carrier plans to operate a total of five Dash 8-400s by the end of the year. Three will be acquired through the airline's parent, **Aeroflot**, and the remaining two have been acquired by the **Government of Sakhalin Oblast**. **Aurora** plans to use the Dash 8s to fly to, and within, the Kuril Islands from its hub at Yuzhno-Sakhalinsk. The airline operates three Dash 8-200s and four -300s.

Antiques and Other Junque

Thai Airways International said it does not plan to dispose of its six A380-800s when it sells its 20 surplus A330-300s, A340-500s and -600s, 737-400s and 777-200ERs. **Thai** will continue to operate the A380s on key flagship routes to Frankfurt, London, Paris and Tokyo because the twin-deck aircraft made financial sense so long as all 507 seats are filled. The dozen 747-400s will also be retained for longer than originally expected, because cheap fuel coupled with plenty of available trained crews has rendered the type more appealing for the short term, the airline said.

Avtrade, U.K., purchased ex-**Flynas Embraer** E190LR (SN 19000232), minus engines, from its lessor. The serviceable aircraft was manufactured in December 2008 and has slightly more than 11,000 flight hours. This company recently bought ex-**Virgin Nigeria** E190 (SN 19000210), without engines, which was built in 2008 and flew 5,804 total hours. Both aircraft will be torn down for parts to provide **Avtrade** with dedicated inventory, certified by both **EASA** and **FAA**, for sale, loan or exchange. Components will be fully serviceable, tagged and ready for shipment for **Avtrade's UK Logistics Center**.

Accidents and Safety

From Aviation Safety Foundation

Egyptian Cargo Carrier, Tristar Air Airbus A300B4-203F (SU-BMZ, SN 129) made a forced landing near Afgooye, about 13 miles (24km) west of Mogadishu, Somalia, on October 12, 2015. The airline said the A300 made several failed attempts to land and the crew apparently force landed in the outskirts of Mogadishu. Approach to the airport was hampered by the night time conditions and the lack of aids that would allow the aircraft to land in those conditions. The freighter was operating a flight from Entebbe, Uganda, to **Mogadishu International Airport**, Somalia, carrying a cargo on behalf of the **African Union Mission in Somalia (AMISOM)**. The A300 was a total loss, but the two crew and six passengers survived the crash with minor injuries.

Starbow, Ghana, BAe-146-300 (9G-SBB, SN E3123) was substantially damaged in a landing accident at **Tamale Airport**, Ghana, on October 6, 2015. The plane failed to stop on the runway and hit a

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barricade that marked the beginning of runway extension work that was in progress. The nose landing gear collapsed.

United States Air Force Lockheed Martin C-130J Hercules (registration unknown) crashed at **Jalalabad Airport**, Afghanistan, on October 2, 2015, killing all six U.S. service members and five civilians on board, along with two people on the ground. The plane was assigned to the **774th Expeditionary Airlift Squadron**, part of the **455th Air Expeditionary Wing**.

Aviastar Mandiri De Havilland Canada DHC-6 Twin Otter (PK-BRM, 741) was destroyed when it hit Mount Latimojong, Sulawesi Island, Indonesia, on October 2, 2015. All seven passengers and three crew were killed. The wreckage was located on October 5.

Skydive Dubai De Havilland Canada DHC-6 Twin Otter (DU-SD4, 132) sustained damage in a landing accident at **Dubai-Palm Drop Zone Airstrip**. The airstrip stretches out into the water and the aircraft came to rest nose down off the end of the runway. The sole pilot was injured.

Peruvian Airlines Boeing 737-3K2 (OB-2040-P, SN 24329) landed at **Cuzco-Velazco Astete Airport** on October 23 and suffered a right hand main landing gear collapse. The aircraft was evacuated safely and there was no fire. The aircraft is 25 years old so it may be scrapped, even though the damage was described as “minor”. It is leased from **Aviation Capital Group**.

AVMARK CAPABILITIES

Since its establishment in 1962, AVMARK has been providing consulting management services to all sectors of the aviation community. From offices in Washington DC and Singapore, together with associates based in United States (North America), Ecuador (South America), Spain (Europe), Congo (Africa), New Delhi (India and Asian Market), we serve a worldwide clientele. Our staff is comprised of professionals with extensive, successful careers in technical, commercial and managerial areas of aviation enterprises; combining real world operational experience with sophisticated analytical tools to provide our clients with the most effective solutions to their problems.

ASSET MANAGEMENT PROGRAMS

Aircraft appraisal, inspection and technical monitoring; analysis of market conditions and forecast of values; assistance with aircraft acquisitions and placement; valuation of facilities, equipment and other assets.

AIRLINE IMPROVEMENT PROGRAMS

Our staff undertakes corporate reviews of entire airlines or specific aspects of airline operations, advising airline executive management, government and international organizations (i.e. World Bank), on various aspects of airline restructuring and/or privatization. Specific issues addressed include airline valuation, strategic planning, scheduling and fleet planning, market development, revenue management, operations and maintenance efficiency. We also provide a full range of services for start-up carriers.

ECONOMIC & TECHNICAL ANALYSES PROGRAMS

We prepare traffic/operation forecasts and financial analysis for airport and other facilities planning; competitive evaluation of performance/design characteristics and market potential for new aircraft; critical assessment of capability, marketing strategy and opportunities for suppliers of products and services; and air service needs related to tourism development.

PUBLICATIONS

We publish the *AVMARK Newsletter* monthly; containing market information, various analyses and commentary; also reports all orders, purchase sales and leases of new and used transport aircraft. We also publish several other statistical compilations from our extensive database on aircraft, carriers, traffic, costs and operations.

AVMARK's Transport Aircraft Values (TAV); reports current fair market values by year of build and projects the future value of all transport category aircraft.

AVMARK's Historic Jet and Turboprop Values; summary of the then current fair market values as published in the AVMARK Newsletter for all jets and turboprops in service.

AVMARK's Small Transport Aircraft Catalogue (STA); designed as an easy to use reference guide to compare the operating and cost parameters of 35 regional jet and turboprop aircraft.

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Available Aircraft

- Airbus A300B4-600R
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- Airbus A318
- Airbus A319-100
- Airbus A320-100
- Airbus A321-100
- Airbus A321-200
- Airbus A330-200
- Airbus A330-300
- Airbus A340-200
- Airbus A340-300
- Airbus A340-500
- Airbus A340-600
- Airbus A350-800
- Airbus A350-900
- Airbus A380-800
- Avro RJ-100
- Avro RJ-70
- Avro RJ-85
- BAe 111-200/300/400/500

Picture

Selected: Airbus A340-300

Description: Widebody 4 Engine Passenger

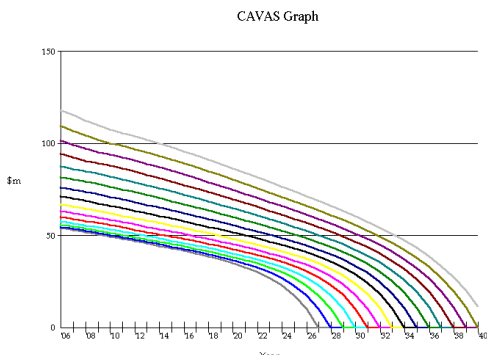
Manufactured: 1992 To 2006

Values: \$54.00m \$118.00m

Estimated Life: 35 years File No. 013

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CAVAS Figures

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
2006	54.00	54.61	55.83	57.66	60.10	63.14	66.80	71.07	75.94	81.43	87.52	94.23	101.54	109.47	118.00
2007	52.85	53.49	54.73	56.56	58.99	62.01	65.62	69.85	74.66	80.17	85.92	92.18	99.12	106.73	115.25
2008	51.68	52.36	53.61	55.43	57.85	60.84	64.42	68.69	73.65	79.18	84.76	90.48	96.97	104.20	112.39

Profit & Loss Report

Aircraft Type: Airbus A340-300

Period	1	2	3	4	5	6
REVENUES (US\$)						
Passengers	49,328,754	49,270,739	49,212,559	49,154,213	49,095,701	49,037,226
Freight & Mail	8,879,176	8,868,733	8,858,261	8,847,758	8,837,226	8,826,714
Other Revenue	986,575	985,415	984,251	983,084	981,914	980,744
TOTAL OPERATING REVENUE	59,194,505	59,124,887	59,055,070	58,985,055	58,914,841	58,844,684
VARIABLE EXPENSES						
Fuel	6,918,975	6,917,743	6,916,470	6,915,177	6,913,845	6,912,474
Landing Fees	3,021,823	3,021,823	3,021,823	3,021,823	3,021,823	3,021,823
Enroute Charges	392,440	392,440	392,440	392,440	392,440	392,440
Pax Commissions	7,399,313	7,399,313	7,399,313	7,399,313	7,399,313	7,399,313
Food & Supplies	3,993,194	3,993,194	3,993,194	3,993,194	3,993,194	3,993,194
Passenger Liability Insurance	379,590	379,590	379,590	379,590	379,590	379,590
TOTAL VARIABLE COST	23,443,212	23,443,212	23,443,212	23,443,212	23,443,212	23,443,212
SEMI-VARIABLE EXPENSES						
Crew Salaries & Expenses	5,177,760	5,177,760	5,177,760	5,177,760	5,177,760	5,177,760
Maintenance & Engineering	587,650	587,650	587,650	587,650	587,650	587,650

Profit & Loss Report

Aircraft Type: Airbus A340-300

Period	1	2	3	4	5	6
FIXED EXPENSES						
Station Overhead	346,597	345,923	345,249	344,575	343,901	343,226
Maintenance Burden	176,295	176,295	176,295	176,295	176,295	176,295
Other Overhead	0	0	0	0	0	0
TOTAL FIXED COST	522,892	522,218	521,544	520,870	520,196	519,522
TOTAL OPERATING COST	31,464,497	31,464,497	31,464,497	31,464,497	31,464,497	31,464,497
General and Admin. Allocation	1,573,225	1,573,225	1,573,225	1,573,225	1,573,225	1,573,225
TOTAL COST	33,037,722	33,037,722	33,037,722	33,037,722	33,037,722	33,037,722
OPERATING PROFIT OR LOSS	26,156,782	26,156,782	26,156,782	26,156,782	26,156,782	26,156,782
D-CHECK ADJUSTMENT						
Cumulative Hours	4,830	9,650	14,459	19,257	24,045	28,833
Cumulative Dollars	315,000	0	0	0	0	0
ADJUSTED CASH FLOW	25,841,782	25,841,782	25,841,782	25,841,782	25,841,782	25,841,782
AIRCRAFT LIFE ADJ. CASH FLOW	25,841,782	25,841,782	25,841,782	25,841,782	25,841,782	25,841,782

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