AVMARK INC.®
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WORLDWIDE AVIATION MARKETING AND MANAGEMENT SERVICE

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# Newsletter

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## Market Comment

**Now That the Nuclear Agreement Has Been Signed** and financial sanctions are to be lifted from Iran, the country is expected to go on an aircraft buying spree. The country has 80 million people who have a pent up demand for travel. Its airlines fly a fleet of well used commercial aircraft that have an average age of 23 years. In the short term Iranian airlines are acquiring newer used aircraft. Analysts estimated that the country will need to purchase 400 commercial aircraft over the next 10 years. Acting Director of Iranôs **Civil Aviation Organization**, **Mohammad Khodakarami,** told the state news agency ***IRNA*****,** ñIran will buy a total of 80-90 planes per year from the two aviation giants in the first phase of renovating its air fleet. We will purchase planes from **Boeing** and **Airbus** in equal numbers.ò The agreement between Iran and six world powers will make it possible that both banking and trade sanctions currently imposed on Iran would be lifted, and perhaps as soon as the end of the year. If and when, sanctions are lifted, Iran intends to fund the purchases through a variety of leasing, foreign loans and state funds. As part of the deal, Western governments will release approximately $100 billion in oil sales money that were embargoed during the sanctions regime. The **United States Congress** still must raise many of its restrictions on trade with Iran. This may take a long time, considering the hostility to the nuclear deal by members of the Republican Party and some Democrats. So far the sanctions, some of which date back to the early 1980s, have prevented **Boeing** and American engine manufacturers from selling new aircraft, engines and spare parts to Iranian operators. The restrictions on engine sales have also prevented **Airbus** from satisfying Iranian demand for new aircraft. The horse race for new sales is about to begin but the **U.S. Congress** holds the starting gun.

## Airbus Orders

**Airbus Sold 26 Aircraft** in July, and delivered 49 A320 Family, A330 and A380 aircraft. An **Undisclosed Customer** ordered 25 A321neo aircraft, and the **Groupe Dubreuil** acquired an A330-300 in the latest 242 metric ton maximum take-off weight configuration. **Groupe Dubreuil** is the parent of **Air Caraibes** and it said it would start a new operation named **Sunline**, with an A330-300 next year. **Singapore Airlines** canceled seven A350-900s delivery slots, leaving the airline with 63 A350 orders. After cancellations, the net sales for 2015 rose to

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367 aircraft, and the backlog of aircraft to be delivered totaled 6,400 jetliners as of July 31.

**Airbus** delivered 45 A320 Family aircraft, two A330s and two A380s in July. This included the first A321 to a new **Airbus** operator**, Transaero Airlines,** which leased the plane from **ICBC Leasing Company**. So far this year, **Airbus** delivered 353 airplanes to 72 customers, including 15 A380s and four A350s. In the same period last year, it delivered 352 new jets.

**Airbus Announced** a firm order for 25 A321neo jets from an undisclosed customer on July 31, the airframer did not identify the customer nor did it disclose a powerplant choice or the delivery dates for the jets. **Asiana Airlines,** Korea, stated it intended to acquire 25 A321neos. Their A321s will be operated by **Asiana** or by its low-cost subsidiary, **Air Busan.**

**International Airlines Group (IAG)** signed a firm order for 31 **Airbus** aircraft in early August. The order was for eight A350-900s, three A330-200s, and 20 A320neos. The A350s and A330s were slated to modernize **Iberia's** fleet and will also be used to open new long-haul routes. The A320neos will be allocated to the groupôs three airlines for fleet replacement. **IAG** converted its existing options for A320, A330 and A350 aircraft into firm orders. The A320 and A350 options were reserved in 2013 and it firmed up three A330ceo options from a contract signed last year. With this latest order, **IAG** and its airlines have ordered nearly 450 aircraft from **Airbus. IAG's** airlines, **British Airways, Iberia** and **Vueling**, operate nearly every aircraft in **Airbus'** current product range, from the 125-seat A318 to the wide-body A380.

**IndiGo Airlines,** Indiaôs largest domestic airline by market share, ordered 250 A320neo Family aircraft on the airlineôs ninth anniversary of its founding. This was the largest order in **Airbus** history in terms of numbers of aircraft purchased and the agreement was signed on the 69th Indian Independence Day on August 15, 2015. The contract firmed up a Memorandum of Understanding (MOU) signed in October, 2014, and the list price for the order was $26 billion. **Aditya Ghosh,** President of **IndiGo** said, ñThis new order further reaffirms **IndiGo's** commitment to the long-term development of affordable air transportation in India and overseas. The additional fuel efficient A320neo aircraft will enable us to continue to bring our low fares and courteous, hassle-free service to more customers and

markets and will create more job opportunities and growth. The **IndiGo** team is even more energized and excited than ever before to herald this new phase of our growth for many years to come.ò **IndiGo** ordered its first 100 A320s in 2005 and they have been delivered. In 2011, the low cost carrier became a launch customer for the new engine option A320 Family when it purchased 180 A320neos, bringing their total to 280 **Airbus** aircraft. With todayôs announcement, **IndiGo** has ordered 530 A320 Family aircraft. The delivery dates were not announced. The A320neo order backlog was catapulted to over 4,100 aircraft.

**China Eastern Airlines** intends to order 15 A330s, worth approximately $3.6 billion. The first seven will be delivered in 2017 and the other eight will arrive in 2018, the airline said in a statement to the **Shanghai Stock Exchange**. ñThe company is purchasing 15 **Airbus** A330 planes to help to replace older planes that it will retire over the next few years. It will also help to meet rising passenger demand for mid and long routes,ò **China Eastern** reported. The airlineôs first-half net profit rose sharply to 3.56 billion yuan ($557 million) from only 15 million yuan a year earlier, due to lower fuel prices and strong travel demand.

## Airbus Orders, Deliveries and Backlog July 2015

| JUL ORD | JUL DEL | JUL CANX | TOTAL ORD | TOTAL DEL | BACK LOG |
|---|---|---|---|---|---|
| | | | **A318** | | |
| -0- | -0- | -0- | 80 | 80 | -0- |
| | | | **A319** | | |
| -0- | 2 | -0- | 1,472 | 1,450 | 22 |
| | | | **A319neo** | | |
| -0- | -0- | -0- | 49 | -0- | 49 |
| | | | **A320** | | |
| -0- | 23 | -0- | 4,773 | 4,012 | 761 |
| | | | **A320neo** | | |
| -0- | -0- | -0- | 2,976 | -0- | 2,976 |
| | | | **A321** | | |
| -0- | 20 | -0- | 1,613 | 1,126 | 487 |
| | | | **A321neo** | | |
| 25 | -0- | -0- | 866 | -0- | 866 |
| | | | **A330** | | |
| 1 | 2 | -0- | 1,380 | 1,205 | 175 |
| | | | **A330neo** | | |
| -0- | -0- | -0- | 145 | -0- | 145 |
| | | | **A350** | | |
| -0- | -0- | -7 | 774 | 5 | 769 |
| | | | **A380** | | |
| -0- | 2 | -0- | 317 | 167 | 150 |
| **This Month** | | | **This Year** | | **BL** |
| 26 | 49 | -7 | **367** | **353** | 6,400 |

**Airbus sold 15,638 aircraft and delivered 9,238 as of July 31, 2015. Forty-one orders were cancelled. Total orders, deliveries and backlog include cancellations and order changes.**

**Airbus Group** reported strong second-quarter earnings, due to higher airliner deliveries. Quarterly operating profit before one-off items jumped 15 percent to ú1.23 billion ($1.43 billion). The group saw its earnings rise at least 20 percent in airliner and helicopter profits which overcame a ú159 million ($184.4 million) loss in military and space, due to problems with the A400M. The first half operating profit before one-offs rose to ú1.88 billion ($2.18 billion), on revenue of ú28.89 billion ($33.51 billion), both were 6 percent higher. **Airbus**

wrote off another ú290 million ($336.4 million) due to new A400M development delays following an A400M crash in May. The company has set aside ú5 billion ($5.47 billion) against the program to date. The crash delayed the delivery schedule and low inflation also pushed a system for price adjustments into the red the company said. **Airbus** intends to deliver up to 17 military transports this year. **Airbus** told its customers that some of the defense systems and other military features will be delayed. **Airbus** will decide whether to further increase production of the A320 family by the end of the year. **Tom Enders** said, ñThe momentum of commercial aircraft is still clearly there.ò The A320 program is **Airbus**ô biggest money maker and an increase in production should cause an equal increase in profits. **Airbus Group** booked a ú748 million ($867.7 million) gain from the sale of 18.75 percent of **Dassault Aviation** and said it intends to sell its remaining 23.4 percent by the end of 2016.

**SpiceJet,** an Indian budget airline, is talking with **Airbus** and **Boeing** about an order for 100 new narrowbody jets, worth approximately $11 billion at list prices. The airline currently leases one A319, and 16 737-800s and four 737-900s. Chief Financial Officer **Kiran Koteshwar** said the airline wanted to buy A320neo and more 737 MAX aircraft to rebuild its business after it almost collapsed last year. ñWe have to place an order so we have a long-term business plan in place. The focus is now on sizeable growth,ò he said. The contracts could be signed by the end of the financial year, and **SpiceJet** will look to raise new equity or debt to pay for the planes. It will also rely on sale and leaseback transactions. The airline was bailed out by its new chairman **Ajay Singh** in January, after cutting its fleet by nearly 50 percent and seeing its market share drop 12 percent. Mr. **Koteshwar** said, ñ**SpiceJet** has always been constrained by the lack of long-term orders. This will give us economies of scale and for our vendors and suppliers to see that we are growing.ò The airline reported a 718.5 million rupee net profit for the three months ending in June, a huge improvement from the 1.24 billion rupee loss last year.

**Airbus A320neo Flights Resumed** after a three-month grounding. The first PW1100G-powered A320neo is still scheduled to be delivered to launch customer **Qatar Airways** in December 2015, despite the flight test delay. A 25.4 cm (10 inch)-diameter snap ring in the center of the engine combustor module failed, causing the delay. **Pratt & Whitney** said it failed to pre-stress the snap ring so that it would not change shape when exposed to the intense heat around the combustor module. The manufacturer corrected the problem and returned the engine to service. **Airbus** is currently flying two A320neos and the flight-test program should be completed around September. Certification is expected to come in November. The first deliveries to **Qatar** were rescheduled for December, after a two-month delay. **Pratt & Whitney** intends to ship approximately 36 PW1100 engines to **Airbus** this year.

# Boeing Orders

**Boeing Sold 101 Aircraft in July. An Unidentified Customer** (possibly **China Eastern Airlines**) ordered 50 737s. **FedEx** bought 46 767Fs and **EVA Air** purchased five 777F freighters. An un-named customer dropped two 737 orders, raising the 737 cancellation total to 20. **Boeing's** gross orders were 426 and net orders after 44 cancellations were 380 thus far in 2015. The airframer delivered 37 737NGs, two 767-300Fs, seven 777s and 12 787s in June, for a total of 58 aircraft.

**In Early August, Boeing** sold one 767 to an unidentified customer that was identified as **FedEx** two weeks later. The package carrier has ordered 48 767Fs in 2015, and raised its 767F orders to 100. In late August, **Boeing** reported that **SilkAir** bought six 737s and an **Unidentified Customer** ordered two 737s.

**Enter Air,** Poland, revealed its previously undisclosed order for one 737. The manufacturer reduced its net 737 orders by eight, raising the number of 737 cancellations to 28.

**EVA Air** finalized its order for five 777 Freighters, valued at more than $1.5 billion at list prices. These will be the first 777 Freighters to be operated by a Taiwanese airline. The airline plans to use the new freighters to bolster its fleet of eight 747-400Fson trans-Pacific and Asian routes to meet growing demand in the air cargo market. **EVA** currently operates 21 777-300ERs, and it has 13 more 777-300ERs on order from the manufacturer and lessors. **EVA** will become one of the largest 777 operators in the world and it plans to grow its twin-aisle fleet to more than 60 airplanes by the end of 2025.

**Boeing July 2015 Orders, Deliveries**

| JUL ORD | JUL DEL | JUL CANX | TOTAL ORD | TOTAL DEL | BACK LOG |
|---|---|---|---|---|---|
| | | | **737** | | |
| 50 | 37 | -2 | 10,069 | 8,636 | 1,433 |
| | | | **737 MAX** | | |
| -0- | -0- | -0- | 2,831 | -0- | 2,831 |
| | | | **747** | | |
| -0- | -0- | -0- | 1,541 | 1,510 | 31 |
| | | | **767** | | |
| 46 | 2 | -0- | 1,161 | 1,078 | 83 |
| | | | **777** | | |
| 5 | 7 | -0- | 1,575 | 1,320 | 255 |
| | | | **777X** | | |
| -0- | -0- | -0- | 306 | -0- | 306 |
| | | | **787** | | |
| -0- | 12 | -0- | 1,095 | 304 | 791 |
| **This Month** | | | **This Year** | | **BL** |
| 101 | 58 | -2 | **380** | **439** | 5,730 |

**Boeing sold 26,108 aircraft and delivered 20,378 as of July 31, 2015**
**The Current Program includes sales and deliveries of 737s, 747s, 767s, 777s and 787s.**
**Sales totals include 46 cancellations.**

**FedEx Express** officially ordered 46 new 767-300F freighters from **Boeing** in July and took options to purchase another 50 767Fs. This was in the biggest order for the type, and it was valued at $199.3 million each at list prices. The airline probably won significant price concessions from **Boeing.** The firm-order aircraft will be delivered from fiscal 2018 through fiscal 2023. With this order, **FedEx Express** held a total of 99 firm orders for 767Fs for delivery through fiscal 2023. It also has eight 777 freighters on backorder. Chief Executive **David Bronczek** said, ñAcquiring additional 767F aircraft... will enable us to reduce structural costs, improve our fuel efficiency and enhance the reliability of our global network.ò **FedEx** had a fleet of 641 freighter aircraft as of June 1. The 767Fs will replace a number of older freighters, including **McDonnel Douglas** MD-10Fs and MD-11Fs, and **Airbus** A300F-600s and A310Fs, which will be retired in the coming years.

**China Eastern Airlines** announced that it would purchase 50 737-800NGs. Some of the airplanes will be operated by its wholly-owned subsidiary, **China United Airlines.** The first 10 737s will arrive in 2017, another 25 will follow in 2018, and the last 15 will be delivered in 2019. The airline said the 737s

had a base price of $91 million, putting the deal at $4.55 billion, but **China Eastern** said it won ñsubstantive price concessionsò on the aircraft. In June 2014, the airline announced an agreement to take 20 737-800s and 60 737 MAX aircraft, list priced at $7.4 billion, but the order was attributed to an ñ**Unidentified Customer**ò. That order will be filled between 2016 and 2020.

**EL AL Israel Airlines** announced its intent to purchase or lease up to 15 787 Dreamliners, and will take purchase rights for 13 additional airplanes. The 15 new 787s will be delivered by 2020, and will be worth from $800 million to $900 million at list prices. The first of the 787-8s and 787-9s will enter service in the first half of 2017. The 787-9s will replace a fleet of six 747-400 and 787-8s will replace seven 767-300ERs. The Dreamliners will be operated on medium- and long-haul routes, including to North America and East Asia. **El Al** said it expects the negotiations will be completed in the next few weeks. The final price will depend on how many airplanes it decides to buy.

**Qantas Airways** announced its intention to convert five 787-9 Dreamliner options into firm orders, and it will switch three **Jetstar** 787-8 orders to 787-9s for **Qantas.** The eight **GE** GEnx-1B-powered 787-9s will be delivered in 2017 and 2018, and could be used to open up new routes for the airline. The carrier retains another 15 787-9 options for delivery from 2020 to 2025 and a further 30 purchase rights for delivery between 2017 through 2025. The order comes as **Qantas** posted a profit of A$975 million ($716.4 million) after last yearôs record A$2.8 billion loss. Revenue rose 3 percent to A$15.82 billion, underscoring the success of CEO **Alan Joyce's** aggressive cost-cutting that included cutting thousands of jobs, trimming capacity and overhauling frequent flyer scheme. **Qantas'** international division was profitable for the first time since the global financial crisis, with earnings before interest and tax (EBIT) of A$764 million. The airline also benefited from an A$597 million drop in fuel costs from the previous year. The profits now allow **Qantas** to replace its 11 long-haul 747-400s with the more fuel efficient 787-9s by June 2019.

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**Enter Air**, a Polish charter airline, announced its order for one previously undisclosed 737 in August. The airline operates eight leased 737-400s and nine leased -800s. The airline ordered two 737 MAX 8s and two 737-800s, at the **Paris Air Show** in June, but **Boeing** did not list the airline as a customer until late August.

**Xiamen Airlines** reportedly committed to buy four 787-9s as it starts its international expansion. The carrier also intends to acquire 10 more. The airline operates five 787-8s and launched operations from Xiamen to Amsterdam and will start flying to Australia in October.

**Royal Air Maroc (RAM)** intends to buy seven 737 MAX 8s and 787-8s from **Boeing.** They will be delivered by 2020. **RAM** had talked to **Airbus** about buying the A320 Family. With the exception of four **Embraer** E-190s, **Royal Air Maroc** operates **Boeing** aircraft including one 737-300(F), six 737-700s, 31 737-800s, one 747-400, four 767-300ERs, and two B787-8s, with three more on order.

**Boeing's Second-Quarter Revenue** increased 11 percent to $24.5 billion on record commercial deliveries. **Boeing** President and Chief Executive Officer **Dennis Muilenburg** said, ñRecord commercial airplane deliveries to customers worldwide drove solid revenue growth, and the strength of our overall portfolio and diligent focus produced significant operating cash flow during the quarter.ò Second quarter 2015 results included the previously announced $536 million after-tax charge on the KC-46A Tanker program for the **U.S. Air Force** reflecting higher than estimated costs. ñStrong operating

performance across our commercial and defense production programs partially offset the tanker charge,ò he said. The after-tax charge reflects higher estimated engineering and manufacturing costs to complete development, certification and initial production of the tanker aircraft, the company said. **Boeing** said, ñThe KC-46 tanker is being designed, developed and tested under a fixed-price **Engineering, Manufacturing and Development (EMD)** contract. Increased company investment in the program is primarily being driven by required rework on the airplaneôs integrated fuel system that was identified as **Boeing** prepared for and conducted test and verification of that system during the second quarter. The added investment will support the engineering redesign, manufacturing retrofit and qualification and certification of the fuel system changes, and the conclusion of ground and flight testing on the program.ò It is still committed to delivering 18 tankers to the **Air Force** by August 2017, with 179 due by 2027. **Boeing's** net earnings dropped 33 percent compared to the previous year. **Commercial Airplanes** second-quarter revenue increased 18 percent to $16.9 billion on higher delivery volume and mix. **Boeing** said the second-quarter operating margin was 7.1 percent, reflecting the previously announced $513 million pre-tax charge on the KC-46 Tanker program and the dilutive impact of higher 787 and 747 deliveries partially offset by strong performance on production programs. During the quarter, **Boeing** sold 116 737 MAX aircraft, and the 737 MAX program has won more than 2,800 firm orders since its launch. The company started assembly of the first 737 MAX and the 787-10 program completed its Critical Design Review and so development is on schedule. **Commercial Airplanes** booked 171 net orders worth $18 billion during the quarter. Backlog remains strong with nearly 5,700 airplanes valued at $431 billion. Its cash and investments totaled $9.6 billion and debt totaled $9.0 billion, both unchanged from the beginning of the quarter. **Boeing Military Aircraft's (BMA)** second-quarter revenue was $3.5 billion, reflecting planned timing of deliveries and mix. Operating margin was 3.5 percent, reflecting the KC-46 Tanker program charge partially offset by strong performance on production programs. During the quarter, **BMA** was awarded contracts for six C-17 Globemaster III airlifters, the company said.

**Boeing Projects Demand for 1,740 New Airplanes in India,** valued at $240 billion, over the next 20 years. The South Asia region is forecast to have 8.6 percent traffic growth, possibly the highest rate in the world. **Dinesh Keskar, Boeing** Senior VP of Asia Pacific and India Sales, said, ñIndiaôs economy and the countryôs potential for air travel growth ï both for leisure and business ï continues to be strong and we remain confident in the Indian commercial aerospace market.ò The number of low cost carriers is projected to grow to more than 30 percent of the total Indian market, so demand for single-aisle airplanes will be greater than the demand for twin-aisle aircraft.

**New Airplane Deliveries to India: 2015-2034**

| Airplane type | Seats | Deliveries | Dollar value |
|---|---|---|---|
| Regional jets | under 90 | 20 | <$1B |
| Single-aisle | 90-230 | 1,460 | $160B |
| Widebody | 200-300 | 260 | $80B |
| Total | | 1,740 | $240B |

**Boeing** projects a worldwide demand for 38,050 new airplanes over the next 20 years, India will account for 4.6 percent of world total deliveries and 4.3 percent of the dollar value.

**The U.S. Export-Import Bank's Charter** may be restored after the **U.S. Senate** voted 67-26 to enable the federal credit agency to operate until September 30, 2019. Authorization was attached to an unrelated highway and mass transit funding bill. However the **Republican**-led **House of Representatives** needs to pass the bill with its controversial **Ex-Im** provision. **Boeing** depends heavily on overseas exports, and uses loans at favorable rates to finance its sales. Closing the bank allows foreign

companies to become more competitive through their own government loan guarantees and other financial assistance. Many conservative **Republicans** see the **Ex-Im** as a form of corporate welfare for U.S. companies such as **Boeing, Caterpillar** and **General Electric**. The **Obama Administration,** many **Democrats** and a few **Republicans** in Congress support the bank, and have said it helps large and small U.S. companies remain competitive against foreign firms. The **Ex-Im** webpage said, ñOver the past two decades, the bank has generated nearly $7 billion more than the cost of its operations.ò The bankôs profits are used to reduce the federal deficit.

**Boeing Loses an Average of $23 Million** on every 787 Dreamliner it delivers. The manufacturer is trying to cut costs, partially by reducing the amount of titanium it uses in the 787. The strong, lightweight alloy costs seven times more than aluminum and accounts for about $17 million of the cost of the plane, which is list priced at $260 million. **Bob Noble,** VP of **Boeing's Partnering for Success** said the company was trying to make the 787 profitable by pressing suppliers for price cuts, adjusting assembly lines to improve efficiency, and to reduce titanium content, as part of a broad, long-running effort. Titanium accounts for 15 percent of the 787ôs empty weight, much more than in other **Boeing** airliners. One of **Boeing's** problems is that it buys much of its titanium from one factory in Russia. A ***New York Times*** article from 2012 states that the **Avisma** titanium foundry in the Ural Mountains east of Moscow makes 45 percent of the worldôs aerospace titanium alloys, and 35 percent of the titanium used by **Boeing**. Further, pure titanium costs $7 per pound, but the aerospace alloy cost $150 per pound. The manufacturing process to make the double plus chord for the wings requires **Boeing** to buy about 40 pounds of titanium for every pound that ends up on the aircraft. After a titanium alloy piece is forged, it is machined at great cost to produce a finished part. The scrap is recycled, but needs to be forged into ingots again. **Avisma** is owned by **Rostec-Russian Technologies,** which is owned by the **Russian Government**, so **Boeing** is liable to be exposed to political pressures from that government. Only four other countries, China, Germany, Japan and the U.S., smelt titanium in industrial quantities, so the price is not very elastic. The 787 programôs losses in the early years of production were expected and the company announced that it spent approximately $30 billion on development and production of the 304 Dreamliners delivered to date. **Boeing** is spreading those costs over a large block of planes the company expects to deliver (1,095 firm orders as of July 31). **Boeing** said the 787 deferred cost balance will keep rising until 2016, when it expects the balance will start decreasing.

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**Aurora,** Russia, plans to acquire up to 10 Dash 8Q-400s from **Bombardier** and 12 DHC-6-400s from **Viking Air** by 2020. The airline will acquire three Q400s from **Aeroflot,** which owns 51 percent of **Aurora,** while the other two have been sourced from the **Sakhalin Oblast Government,** which owns 49 percent of the airline. The turboprops are currently being refitted in Canada to Russian standards ahead of their delivery by the end of this year. The Q400s will be operated on flights within the Kuril Islands as well as to the island of Sakhalin. **Aurora** operates a diverse fleet of turboprop aircraft including two DHC-6-300s, two Dash 8-200s and four Dash 8-300s. They will acquire a fifth -300 from **Sakhalin Government** shortly, for use on medical charter flights. The airline also operates seven A319s and three 737-500s on routes linking eastern Russia to China, South Korea and Japan.

# Regional Report

**Bombardier Reported its Financial Results** for the second quarter and said its revenues totaled $4.6 billion, down from the $4.9 billion for the same period last fiscal year. Revenues rose 2 percent, but were dragged down by the impact of foreign exchange rate changes. Earnings before financing expense, financing income and income taxes (EBIT) totaled $226 million, or 4.9 percent of

revenues, compared to $257 million, or 5.3 percent, in 2014. Net income totaled $125 million, down from $155 million for the same period the previous year. On an adjusted basis, net income amounted to $145 million compared to $192 million a year ago. The overall backlog reached $64.8 billion as at June 30, 2015, down from the $69.1 billion as of December 31, 2014. The company has short-term capital resources of $4.4 billion, including cash and cash equivalents of $3.1 billion on hand. The C Series aircraft is on track for entry-into-service in the first half of 2016, and the first Global 7000 will be delivered in the second half of 2018. **Alain Bellemare, Bombardier's** President and Chief Executive Officer, said, ñOverall, the second quarter was in line with plan in terms of revenues, EBIT and deliveries, and our liquidity stands at $4.4 billion. After five months on the job, I have a better under-standing of our challenges and opportunities. We are taking specific action, including the launch of our **Bombardier** transformation plan, a disciplined approach to cash management, and the strengthening of our leadership team to reshape the company and ensure our long-term success.ò

**Aircraft Industries,** Czech Republic, started flight testing its updated **Let** L-410 19-seat commuter turboprop. The aircraft features enhanced **General Electric** H85 engines, new avionics and a more spacious fuselage. The L-410 NG is being advertised as a new generation aircraft, rather than a modification of the old one. The test aircraft was rolled-out from the airframerôs facility in Kunovice, and flew on July 29. **Aircraft Industries** said all systems were functional, and the certification program should be completed in 2017, allowing for serial production of the L-410 NG. The manufacturer displayed a mock-up at a trade and industry show in Ekaterinburg, Russia, which is the home of the Czech airframerôs parent company, **UGMK—Ural Mining and Metallurgical Company.** Ekaterinburgôs regional government, the **Sverdlovsk Oblast**, is interested in acquiring a batch of L-410 NGs and deploying them on subsidized routes within the region. **UGMK** took control of **Aircraft Industries** in 2008, and it has delivered 45 turboprops to Russian customers since then.

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**Embraer** delivered 27 commercial and 33 executive (26 light and seven large) jets in the second quarter, and 47 E-Jets and 36 light and nine large executive jets in the first half. The company announced 102 firm orders for the current and second generation of the E-Jet commercial jets, during the second quarter, reaching a total of 124 firm orders year-to-date. **Embraer's** firm order backlog was the highest in its history, at $22.9 billion, as of June 30, 2015. This was $2.5 billion more than at the end of the first quarter and $2 billion more than at the end of 2014. As a result of aircraft deliveries, coupled with revenues from the companyôs **Defense & Security** business, second quarter revenues were $1.513 billion. **Embraer** generated $72.7 million in free cash flow during the second quarter. **Embraer** issued $1.0 billion in debt with a coupon rate of 5.05 percent and maturing in 2025; $996.8 million will be used in repayment of existing debt and general corporate purposes. The company expects 2015 consolidated revenues to range from $5.8 to $6.3 billion, due to the recent devaluation of the Brazilian real versus the U.S. dollar. The previous range was $ 6.1 to $ 6.6 billion.

**Four Russian and Chinese Companies** tentatively agreed to establish a new leasing company to buy up to 100 **Sukhoi Civil Aircraft** Superjet 100s. The company will be based in the Xixian, Shaanxi Province, China, and will focus on sales and leases to Asian carriers. The four partners are **United Aircraft**, Russia, a Russian-Chinese investment fund, **New Century International Leasing, China,** and Xixianôs local management committee. The joint lessor intends to acquire 100 Superjets worth $3 billion over a three-year period. The Xixian administration will provide the land where the company will build the infrastructure for operating and maintaining the SSJ100s. These buildings will include a flight-

training and servicing center, warehouses for spare parts and possibly a place to paint and fit interiors to the Superjets. **United Aircraft** president **Yuri Slyusar** said the agreement was the result of efforts to ñrethink the approachò to marketing the Superjet internationally. He said, the agreement will strengthen the prospects for the Russian domestic civil aviation industry, and the venture will result in a ñhighly-competitiveò leasing operation allowing the Superjet to take a ñsignificant shareò of rapidly expanding aviation markets in China and Southeast Asia.

**Aeroflot** plans to transfer an undisclosed number of **Sukhoi** Superjet 100s to its subsidiaries, **Donavia** and **Rossiya** sometime next year. Earlier this year, **Aeroflot** signed a Letter of Intent to acquire a further 20 Superjets from **Sukhoi Civil Aircraft**, and it will take delivery in 2016. Once the order is confirmed, it raises the airlineôs Superjet order book to 50 airframes. The Russian government is committed to lessening its airlinesô dependence on Western-built aircraft in order to stimulate the local aviation industry. The government announced it would inject 100 billion roubles ($1.9 billion) into **Sukhoi's** parent, **United Aircraft Corporation (UAC)**, to encourage the production of the Superjet. It also recapitalized the Russian **State Transport Leasing Company (GTLK)** with 30 billion roubles ($469 million). In June, **GTLK** announced it had placed 15 Superjets with **Yamal Airlines**, 15 with **SCAT Airlines,** Kazakhstan, and two with an undisclosed operator. At the **MAKS Airshow** near Moscow in late August, **GTLK** announced that **Bural** has signed a lease agreement with **GTLK** for 15 Superjets at. Seven of the Superjets will be delivered before year-end with the remainder due between 2016 and 2018. **GTLK** said it signed a firm order for 32 SSJ 100-95s and took options for an additional 28 of the type in a deal worth $2 billion at list price. The lessor also stated that the first jets will be delivered in May 2016, and the last in 2017. Fifteen will be leased to **SCAT Airlines** as part of a larger Memorandum of Understanding (MOU) which includes five options, and 25 will go to **Yamal Airlines**. Both carriers are expected to finalize their 12-year lease agreements with the Russians in August next year. **Red Wings** also signed a Letter of Intent to lease 15 Superjets subject to finalization. **Tuva Airlines and Yakutia Airlines** agreed to lease an unspecified number of Superjets. It is not clear if the orders and leases signed at **MAKS** were new or confirmations of previous commitments. So far, **Sukhoi** has not commented.

**The Aviation Industry Corporation of China (AVIC)** announced that it sold 185 MA-700 twin-turboprop airliners to 11 domestic and foreign airlines. The middle-range MA-700 is currently under development by the **Xi'an Aircraft Company**, and it was officially launched in August. **AVIC** said it sold 30 MA-700s each to launch customers **JoyAir** and **Okay Airways.** The bulk of the orders were placed by **Cambodia Bayon Airlines** (partially owned by **Xi'an**), Chinese leasing companies, **China Development Bank Leasing (CDBL), CMB Financial Leasing, Chongqing Yashi Financial Leasing, China Poly Group Corporation**, and to airlines, **Air Kasthamandap,** Nepal, **Hybrid Aviation**, Pakistan, and **Segers Aero,** South Africa. Chinaôs top four airlines, **Air China, Chins Eastern, China Southern** and **Hainan** reportedly expressed interest in the plane, but none of them operates 70-seat turboprops. **Xi'an** will build the first airframe in 2016 and the first flight is scheduled for 2017. The Entry-Into-Service date is now 2019. The MA-700 was first presented to the public in 2007 as a 70-seater, but the airframe has grown to 78 seats. It will be powered by two **Pratt & Whitney Canada** PW150C engines.

**Sky Angkor Airlines** will wet lease its first Superjet SSJ 100-95 from **Red Wings** in December. The lease is part of deal signed with **Ilyushin Finance & Co. (IFC)** Russia, during the ongoing **MAKS 2015**

**Air Show** in August. The airline will lease two SSJ-100LRs from the **IFC** next year. **Red Wings** currently operates four early-model SSJs.

**RUAG Aviation** sold one Dornier 228 NG to **Aurigny Air Services,** Guernsey. It will be delivered by the end of 2015. **Aurigny's** fleet comprises one **Embraer** E-195, four ATR-72-200/500s and several 15-seater **Brittan Norman** Trilanders. The later type had been in service for 40 years and had reached the end of its service life. The airline decided to replace its ageing aircraft with two Dornier 228 New Generation models and one classic Dornier 228.

**Russian Petroleum Giant Rosneft,** is buying 10 **Viking** DHC-6-400s for its aviation subsidiary, **RN-Aircraft.** The order was announced during the ongoing **MAKS 2015 Air Show** at **Moscow Zhukovsky Airport**. They will be delivered between November 2015 and February 2017, and **Rosneft** will use them on cargo and passenger flights to the more remote parts of the Krasnoyarsk Region.

# Order Changes and Cancellations

**Airbus Reported Seven Cancellations** in July, when **Singapore Airlines (SIA)** relinquished seven A350-900 production slots at the request of **Airbus**. The cancellation leaves the flag carrier with 63 firm orders for the type. **SIA** still holds 20 options for the A350 which can be picked up as either -900s or the larger -1000. The airline reported in a stock market filing that ñadjustments have been made to bring forward deliveries of other A350-900 aircraft on order,ò so the changes will ñnot materially affect **SIA's** fleet renewal or growth plans.ò **Singapore** will receive its first A350-900 in January 2016, and it will be deployed on medium- and long-haul flights.

**Qatar Airways** converted two A320neo order slots into two commitments for the larger A321neo. The Qatari carrier now has orders for 34 A320neos and 16 A321neos. The 50 A320neo Family jets were ordered in 2011. **GECAS** ordered 60 A320neo Family jets the same year, and switched six A320neo orders to the larger A321neo in July. The lessor now has 99 A320neos and 21 A321neos on backlog. An undisclosed customer exchanged seven A320neos for an equal number of A321neos. The order was placed in November 2014. As of July 31, 2015, **Airbus** had firm orders for 866 A321neos and 2,976 A320neos. The changes show a shift trend towards the largest member of the single-aisle family. A319neo sales have lagged far behind, with only 49 on firm order.

**AirAsia X** said it cancelled 12 A330-300 orders to slow its losses. It reported a second quarter loss of 133 million ringgit ($35.2 million). Four of the aircraft were to be delivered in 2016, five in 2017, and the last three in 2018. The airline said it will receive one new A330ceo aircraft in September and two in 2016, and will receive the first of 55 A330-900neos in 2018. **Airbus** reports that **AirAsia X,** and its associates, currently operate 26 A330s and has 12 on order, so there is some confusion as to how many A330s were cancelled.

**Airbus Delayed Delivery** of the first of four A380s to **Transaero Airline,** Russia. An **Airbus** spokes-woman said, ñThe contract is still in place. We are looking at rescheduling the delivery of the first plane, which was planned for this year.ò The Russian economy has been in recession, which suppressed travel demand in the region.

**Vietnam Airlines** formally dropped the A380-800 from its five-year operational plans. The state-backed carrier had signed a Memorandum of Understanding for four A380s in late 2009, and let the MOU expire in 2013. The recently said that the A380 would present too great a financial burden given existing costs associated with its A350 and 787 purchases. It also mentioned that a change in market conditions warranted greater focus on the A350-900 and 787 better fit its capacity needs. The airline lowered the total number of aircraft it intends to operate by 2020 from 150 to 122.

**Boeing Cancellations.** An un-named customer dropped two 737 orders, raising the 737 cancellation total to 20 as of July 31.

**KLM Royal Dutch Airlines** converted six of its 21 787-9 orders to the 787-10 Dreamliner type. They will be delivered from 2020 onwards. The Dutch flag carrier will receive its first 787-9 (SN 36113) in September, in time for an October 25 debut on flights from Amsterdam to Bahrain. Its partner **Air France** is scheduled to take deliveries of its first few of 12 787-9s in November 2016, but it may delay them, along with the first of 18 A350-900s.

**Air India** considered converting its last six 787-8 orders into commitments for the larger -9. The state-backed carrierôs Board of Directors eventually decided to retain their -8s, but the flag carrier lost its delivery slots during the decision making period. Therefore, its 22nd and 23rd 787-8s will be delivered during its 2016/17 financial year instead of at the end of the current 2015/16 year which ends March 31, 2016. The airline now has 21 787-8s in service and options for another seven -8s, which can be switched to the larger -9 or -10.

**Virgin Australia** reportedly converted 17 of its 737-800 orders to the 737 MAX variant. The change now leaves the Australian carrier with 40 737 MAX scheduled for delivery starting in 2018. The cancelled 737-800s were to be delivered through the 2015, 2016 and 2017 financial years. CEO **John Borghetti** said, ñOur desire has always been to have the most fuel-efficient, modern aircraft possible and clearly the opportunities that we see in front of us with the MAX and converting some orders to the MAX is very important,ò **Virgin's** order change has not been posted to the ***Boeing Orders & Deliveries*** webpage. It still shows 23 737 MAX orders and 80 737-800 orders with 16 -800s in backlog. **Virgin** said it expects to take delivery of four new 737-800s in FY16, which suggests that the airline had placed at least five ñundisclosedò orders. Its annual report stated, ñDuring the 2015 financial year, the Group converted four **Boeing** 737-800 deliveries for 2016 into **Boeing** 737 MAX aircraft. Consequently, the **Virgin Australia Group** will now receive 40 deliveries of **Boeing** 737 MAX aircraft from 2018 onwards.ò **Virgin Australia** will return three 737-800s to lessors next year, and will transfer three 737-800s to its low-cost carrier subsidiary, **Tigerair Australia,** to operate international service to Bali from March 2016. **Virgin** has already withdrawn two 2007-era 737-800s (SN 29675 & 29676) from the fleet and ferried them from Melbourne to Jakarta. This is a reaction to falling passenger numbers and load factors in its core domestic market in 2014/15.

**GOL Airlines,** Brazil, CEO **Paulo Kakinoff** said the airline may have to adjust its fleet plans due to an adverse economic outlook. It has some flexibility as to when it will take delivery of the 18 737-800s that are still on order. **GOL** has the option of leasing out its new planes to other carriers, as well.

**Arik Air,** Nigeria, cancelled its last two **Bombardier** CRJ-1000 orders as well as orders for two Dash 8Q-400NGs.

# Leasing & Finance

**Air Lease Corporation (ALC)** will lease one A330-200 to **Hawaiian Airlines.** The aircraft will be delivered in the second quarter of 2016. **Hawaiian** uses its fleet of 21 A330-200s on flights to the U.S. mainland as well as to China, Australia, New Zealand, South Korea, Japan, and French Polynesia. **ALC** announced the long-term lease of two new A320-200s to **Frontier Airlines,** an ultra-low-cost carrier based in Denver, Colorado. The A320s will be handed over in the second and third quarters of 2016. **Far Eastern Air Transport** will long-term lease one new 737-800 from **ALC.** It will be delivered during the second quarter of 2016. **FAT** currently operates five MD-82s and three MD-83s on scheduled flights between Taiwan and China, and it has two 757-200s in storage at **Taipei Taoyuan Airport**, which may be returned to service. **Air Lease Corporation** signed a long-term lease agreement with **Air Vanuatu**, based in Port Vila, Vanuatu, for one new 737-800. It will be delivered in January 2016. All the new aircraft are sourced from **ALC's** order books with **Airbus** and **Boeing**.

**Dubai Aerospace Enterprise (DAE)** announced recent leases: **DAE** long-term leased six new ATR 72-600s to **Azul Brazilian Airlines** for delivery in 2015. **Airlines PNG,** Papua New Guinea, long-term leased four new ATR 72-600s, which were scheduled for delivery in 2015 and 2016. **Myanmar National Airlines** long-term leased three new ATR 72-600s with delivery in 2015 and 2016. The lessor long-term leased two ex-**Kingfisher-**leased **Airbus** 330-223s (SN 874 & 939) to **Turkish Airlines** in 2015. One 2006 vintage **Boeing** 737-800 was long-term leased to **Corendon Airlines,** Turkey. The 737 was fitted with **Split Scimitar winglets**. **T'way Airlines,** Seoul, South Korea, leased one 737-800 and extended the lease of another 737-800. **Emirates SkyCargo** sold and leased back its 13th **Boeing** 777 freighter (SN 42234) with **DAE** when it was delivered in August. The lessor offered a competitive sale leaseback solution to **Emirates** for its entire fleet of 13 777 freighters.

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**Norwegian Air Shuttle's** wholly-owned leasing subsidiary, **Arctic Aviation Assets (AAA)** reported to the **Oslo Stock Exchange** that it signed a Letter of Intent (LOI) to lease 12 **Airbus** A320neos to an undisclosed airline. The jets will be delivered from 2016 through to 2018. The leasing company was incorporated in Ireland in August 2013, and it administers **Norwegian Air Shuttle's** aircraft assets, which includes firm orders for 222 **Airbus** and **Boeing** aircraft, with another 150 options. **AAA** will take delivery of all future aircraft and lease them to **Norwegian** and other operators. **Norwegian** will lease two new **Boeing** 787-9s from **AAA** in the summer of 2017. **Norwegian** currently has eight 787-8s aircraft in its long-haul fleet, and now has 11 787-9s on contract from lessors. The company will take delivery of four 787-9s in 2016, five in 2017 and two in 2018, for a fleet total of 19 long-haul aircraft by the end of 2018. **Boeing** does not acknowledge any 787-9 orders from **Arctic** or **Norwegian** at this time.

**Bohai Leasing,** China, made an unsolicited takeover bid of $31 per share for Irish aircraft leasing firm, **Avolon,** which valued the firm at over $2.5 billion. The lessorôs stock was priced at $20 per share in December. **Avolon** received another offer from a third party of $30 per share. In July, **Bohai** agreed to buy 20 percent of **Avolon** for $429 million, and when it learned of the $30 offer, it countered with $31 per share. **Avolon** said in a statement, ñ**Avolon's** Board of Directors has not accepted or rejected either offer and continues to carefully evaluate these... and has authorized its financial advisors to continue negotiations with both,ò Chinese lessors have been expanding their share of the market and are willing to buy Western lessors to rapidly add aircraft to cater to Chinaôs domestic airlines.

**EQT VI** has agreed to buy a majority stake of **Nordic Aviation Capital A/S,** the worldôs largest lessor of turboprop aircraft. It will enter into a partnership with **NAC's** founder and Chairman, **Martin Møller**. He will remain a significant shareholder and will contribute around 50 percent of the capital. **NAC** was founded in 1990 and it currently owns almost 250 aircraft with an average age of only 5.4 years. The customer base is global with more than 40 airlines in 30 different countries.

# Engines

**Rolls-Royce** won a $580 million **TotalCare** engine support contract with **Vietnam Airlines.** The deal was welcomed by **Rolls** because they had revised downward their profit forecasts three times in the last 9 months. The Trent XWB engines will power **Vietnam's** 14 **Airbus** A350 XWB aircraft. The contract was signed a few weeks after **Vietnam Airlines** became the second airline to operate the A350 XWB. **Rolls** said the Trent XWB was the worldôs most efficient large civil aero engine with over 1,500 engines having been sold to some 40 customers. It is the only engine offered with the A350, which has won 774 orders to date.

**Rolls-Royce** will provide Trent XWB engines on eight A350-900s ordered by **International Airlines Group**. The aircraft will be operated by **Iberia**, which bought its first eight Trent XWB-powered A350-900s in August 2014. **Iberia** already operates 17 Trent 500-powered A340-600s, and the A350s will replace them upon delivery.

**General Electric. CIT Aerospace** chose GEnx-1B engines to power four of its 14 **Boeing** 787-9 Dreamliners on order. The lessor also purchased GEnx-1Bs to power three 787-8 Dreamliners (two have been delivered). The new GEnx engine order was valued by **GE,** at more than $200 million at list prices. **Qantas Airways** picked the GEnx-1B engine for the eight 787-9 Dreamliners it ordered in August. This engine order was list priced at more than $400 million. Deliveries will begin in 2017.

**CFM International** delivered the first CFM LEAP-1C engine to **Commercial Aircraft Corporation of China (COMAC)**. This engine will be installed on the first C919 test airplane in preparation for its roll-out this year, and first flight in 2016. The LEAP engine was officially launched in December 2009 when **COMAC** selected the LEAP-1C as the sole Western powerplant for its 150-passenger C919 airplane. **CFM** said, ñThe engine incorporates a unique, industry-first, fully integrated propulsion system (IPS).ò The manufacturer provides the engine as well as the nacelle and **Nexcelle** thrust reverser to **COMAC**. The engine unit will be fitted to the pylon made by **COMAC**. The resulting total system provides improved aerodynamics, lower weight, and easier maintenance, **CFM** said. The first LEAP-1C engine successfully completed a flight test program last year and was installed on a modified 747-400 flying testbed at **GE**ôs facilities in Victorville, California.

**RwandAir** selected **Rolls-Royce** to supply Trent 700 engines to power its two new **Airbus** A330s, making the airline a new **Rolls** customer. The carrier secured a $160 million loan facility from the **Preferential Trade Area Bank (PTA)** needed for the purchase of one A330-200 and one A330-300. They will be delivered during the second half of next year. **RwandAir** currently operates two 737-700s, two 737-800s, two CRJ-900s and two Dash 8-400s on flights throughout sub-Saharan Africa as well as to the United Arab Emirates. The first of the A330s would fly to Dubai in the first quarter of 2017. Later, the jets will be used to develop routes to China, and Western Europe.

**CFM International** will provide support for the **Garuda Indonesa's** fleet of 50 **Boeing** 737 MAX 8 aircraft, which will be powered by **CFM** LEAP-1B engines. **Garuda** is a long-time **CFM** customer and began operating CFM56-3-powered 737-300s in the late 1990s. The airlineôs fleet currently includes 79 CFM-powered 737 aircraft in service and the 50 MAX 8s on order.

**Pratt & Whitney** developed a new, higher-thrust version of the PW1500G engine for the **Bombardier** CSeries aircraft family. The new PW1525G will become the fourth engine option for the CS100 and the third option available for the CS300. The new engine will offer 5 percent higher thrust than the current PW1524G, which is rated to deliver up to 23,300lb thrust. The improvement will not require hardware changes within the engine. **Graham Webb,** VP of PW1000G program said, ñWe have a certain amount of design margin we have found in the engine,ò but the higher rating will mean hotter temperatures in the engine, so maintenance costs will rise. **Transport Canada** is expected to approve the software update on the PW1500G engine in September or October. The PW1525G option will allow a CSeries operator to carry a heavier load of passengers and cargo, or offers more range, or some blend of the two. With the new engine, the maximum range for the CS100 and CS300, will rise to 3,100nm (5,741km) and 3,300nm, respectively.

## Airline News

**Ryanair Formally Accepted International Airlines Group's (IAG)** offer to buy its 29.8 percent holding in **Aer Lingus** for ú400 million on August 18, on the deadline. This gives **IAG** the approval of over 90 percent of shareholders in Irelandôs flag carrier. **Ryanair's** board of directors approved the sale in early July, but it failed to formally accept the offer before a July 30 deadline, which **IAG** then extended to August 18.

**The Indonesian Ministry of Transport** is restricting Thai operators which fly into Indonesia, including a ban on new Thai services to the country and any alterations to existing flight schedules or aircraft. The bans are due to safety concerns voiced by both the **ICAO** and **FAA**. Indonesia has now joined the ranks of other countries which have placed restrictions on Thai carriers, including China, Japan, Singapore, South Korea and Taiwan. **ICAO** raised a red flag about **Thai** airlines in June, and a recent **FAA** report which concluded that a number of Thai carriers needed immediate safety oversight. The **FAA** is expected to release a full report on Thai safety compliance this September.

**LATAM Airlines Group** will merge its **LAN** and **TAM** airlines into a single corporate identity, **LATAM**. This comes three years after **LAN Airlines,** Chile, merged with Brazilôs **TAM Linhas Aéreas** to create South Americaôs largest airline. **LATAM** will start painting its logo on the airplanes and facilities in 2016 and the whole process will be finished in 2018, the company said. The change will create a unified, global brand instead of two strong domestic brands. **LAN's** subsidiaries in Argentina, Colombia, Ecuador, and Peru, and **TAM's** Paraguay subsidiary will also be folded into the **LATAM** brand. The group unveiled a new logo in Sao Paulo in August. Its new logo is primarily in indigo and coral, with the airlineôs name presented in bold white letters. The carrier said indigo ñfalls between red and blueò which are the predominant colors of **TAM** and **LAN,** respectively while coral is a symbol of ñenergy and passionò. **LATAM** will repaint its fleet of more than 300 aircraft when they are due for maintenance in order to minimize taking aircraft out of service for the paint job. The new color scheme may be debuted on **LATAM's** new A320s, A350s and 787s when they are delivered in the first half of 2016, and before the **2016 Summer Olympics,** in Rio de Janeiro. The first A350 will be delivered to **TAM** late this year and it will feature **TAM's** current livery. The airplane repainting was estimated to cost $32 million.

**International Air Transport Association (IATA) Posts August 2015 Jet Fuel Prices.** The association updates the worldôs average jet fuel prices each week. On August 21, the worldôs average price of fuel was $1.382 per gallon, 13.2 percent lower than the July 2015 price of $1.578. Fuel was also 51.2 percent less than it was in August, 2014. The price of fuel is affected by location. It was only $1.269 in the Middle East region and was $1.419 per gallon in Latin America. In Asia, fuel cost $1.301 per gallon. Fuel dropped to $1.389 in Europe, and to $1.439 in North America. Since last year, fuel costs in those regions dropped by 50.6 and 50.3 percent respectively. **IATA** estimated that the global airline industryôs aggregate fuel bill will total $71.2 billion in 2015.

**The Indonesian Ministry of Transport** gave thirteen local carriers, including **Indonesia AirAsia,** and **Lion Group's Batik Air** until the end of July to recapitalize or risk losing their operatorôs licenses. **AirAsia's** CEO **Tony Fernandes** said ñWeôve always said that weôre re-capitalizing the airline and we will. Thereôs not a second of worry that **Indonesia AirAsia** will close down because of equity regulations,ò ahead of the deadline. **PT Indonesia AirAsia** is a 49/51 joint-venture between **AirAsia Group,** Malaysia, and **PT Fersindo Nusaperkasa**, Indonesia, and it needed at least 3.035 trillion rupiah ($227.77 million) to raise its finances to meet the requirements of Indonesiaôs **Law No.1/2009** which governs airline financial requirements. The airline plans to sell perpetual bonds in a bid to raise more than $200 million. **Lion Air** Director for General Affairs, **Edward Manurung,** stated his airlines will take action to meet financial minima. The government softened its hardline by saying it would ñhelp and supportò airlines to improve their finances. Indonesia extended the deadline for airlines to meet its ñpositive equityò rule until September 30, because some carriers, including **Indonesia AirAsia,** failed to meet the original July 31 date. The **MOT** barred the affected carriers from opening up any new routes for the duration of the extension.

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**Thai Airways International** aims to reduce its costs and capacity by 20 percent over the next two years. It hopes to cut 1,401 jobs through voluntary retirement this year, which does not include those people who will reach mandetory retirement age. The airline hopes to save 5.3 billion bhat ($151.9 million) through the voluntary retirement scheme. The airline will cease flying its unprofitable route to Los Angeles in October which will end all sevices to the U.S. It will also stop flying to Rome, but it will double its daily flights to London and Frankfurt. The airline hopes to save 100 million bhat ($2.9 million) annually from the route cuts. **Thai** intends to cut capacity by 15 percent for the second half of 2015 and a third of that will be acomplished by cutting those loss-making flights. The flag carrier plans to reduce operating costs by up to 9 billion bhat ($261 million) this year. The airline currently has fifty low-return or loss-making routes, and it may transfer some of the routes to its lower-cost **Thai Smile** subsidiary in order to come closer to breaking even by 2016.

**Delta Air Lines** will buy 3.55 percent of **China Eastern Airlines** for $450 million. The agreement will expand their partnership and better connect **Delta's** global network with **China Eastern**, one of the top three airlines in China. The airlines will collaborate, allowing **Delta** and **China Eastern** to compete more effectively on routes between the U.S. and China, and to provide more travel options for customers in both countries. **Shaoyong Liu, China Eastern** CEO, said, ñThe parties will take advantage of their respective route networks, flight services, relevant businesses and advantageous resources to fully connect the worldôs two top economies as well as two top air transportation markets.ò **China Eastern**, its wholly-owned subsidiary **Shanghai Airlines**, and **Delta** codeshare on 30 domestic routes in the U.S., 43 domestic routes in China and seven trans-Pacific routes between the two countries. As part of the

deal, **Delta** will be entitled to an observer seat on **China Eastern's** board of directors. The agreement is conditionial on approval by each carrierôs board of directors.

**Spring Airlines**, China, plans to raise up to 4.5 billion yuan ($725 million) through a private placement of 3.84 billion shares according to a report filed at the **Shanghai Stock Exchange.** The Chinese low-cost carrier plans to use 3.7 billion yuan ($596 million) to finance the purchase of 21 A320-200s from **Airbus.** According to **Airbus,** the airline operates 50 A320s and does not have any new ones on order. It may lease the new A320s from domestic lessors, or it may have an undisclosed order with the manufacturer.

**Qingdao Airlines** will be renamed **Xinlong Air** after the state-backed **Qingdao Transport Development Group Co**. announced plans to dispose of its 25 percent stake for 251 million yuan ($40.4 million), and another shareholder **Shangdong Ailines** agreed to sell its 20 percent share to **New Nanshan International Holdings**. This would give the **Nanshan Group** 75 percent of the carrier and shift its ownership structure from public/private to exclusively private. The airline operates six A320-200s and it plans to grow its fleet to 60 aircraft by 2020 and 100 by 2025.

**Kenya Airways** reported a record loss in its financial year ended March of 29.71 billion shillings ($293 million) and it may require a $500 million to $600 million bailout. Kenyan Finance Minister **Henry Rotich** said the final figures and the form of recapitalization would depend on a turnaround plan being prepared by consultants. **Kenya Airways'** CEO **Mbuvi Ngunze** said the tourism slump that sparked the losses may have bottomed out. The countryôs tourism industry was hammered by Islamist militant attacks in the country. Passenger numbers rose 12.4 percent to 4.18 million, but increased competition from Gulf carriers forced it to discount some of its fares. The carrier saw its pretax loss explode to six times the 4.86 billion shilling loss a year earlier. It was hurt by higher fleet and financing costs, an unrealized fuel hedging loss of 5.78 billion shillings, and fleet ownership costs doubled to 25.93 billion shillings due to an impairment of 5.58 billion shillings from the write-down in the value of four 777-200s that it is selling. The carrier is offering seven older planes and some land and it expects to raise another $100 million from the sale. The 777s have been replaced with 787s, first delivered in 2013. **Kenya** plans to launch direct flights to the United States and talks on the issue are expected to conclude by September.

**New Privately-Owned Fly Baghdad**, Iraq, acquired its first aircraft, an ex-**Vision Airlines** 737-405 (SN 24271). It also obtained a CRJ-200 (SN 7984) from **Air Nostrum**, Spain. The start-up carrier plans to serve Basrah, Erbil, Najaf and Sulaymaniyah from its Baghdad hub initially.

# Bankruptcy of the Month

**Creditors Chose ANA—All Nippon Airways** to lead a turnaround of the bankrupt **Skymark Airlines**, and turned down **Intrepid's** plan which proposed **Delta Air Lines** as the sponsor. More than 170 creditors voted on the proposals in two rounds and the **ANA** proposal won both rounds. **ANA** offered to buy 16.5 percent of **Skymark,** and it now has access to **Skymark's** 36 slots at **Tokyo Haneda Airport.** The carrier will now dominate domestic and international traffic and its rival **Japan Airlines** is relegated to a distant second place in terms of market share. **Delta** lost an opportunity to gain a bigger presence in Japan where it does not have an alliance partner. **Franklin Pray,** CEO of **Intrepid Aviation** said, ñWhile this is not the result we had hoped for, as **Skymark's** single largest creditor, **Intrepid** will continue to focus on working constructively with key stakeholders.ò A Japanese private equity fund,

**Integral Corp.,** sponsored the **ANA** revival plan, which will be implemented after 30 days if no one objects. **ANA** won over some of the largest creditors by pledging to acquire some, if not all, of **Skymark's** eight A380-800s with **Rolls-Royce** Trent 900 engines and said it would lease A330-300s from **CIT Aerospace** in the future. This mollified **Airbus** which demanded $710 million in cancel-lation fees after **Skymark** failed to make progress payments on the jumbo jet order. **Intrepid** seems left out of the deal and it has seven A330s on hand or on order. **Integral Corp.** will take a 50.1 percent controlling interest in **Skymark** with the remainder split between **ANA Holdings** with 16.5 percent and the **Development Bank of Japan** and **Sumitomo Mitsui Banking's UDS Airlines Investment** with 33.4 percent. The initial plan is expected to include code-sharing, joint ticket sales, joint fuel purchases, and joint crew training with **ANA**.

**Syphax Airlines,** Tunisia, grounded its two A319s (SN 3853 & 3872) in August. A company lawyer said the airline was experiencing ñfinancial difficultiesò and that flights had been temporarily suspended ñuntil solutions are found.ò **IATA** instructed airlines and travel agencies to stop doing business with **Syphax** because it was unable to settle its dues with the industry association. The airline cut its scheduled services to flights from Djerba, Sfax and Tunis to Paris, and Jeddah, Saudi Arabia, after the terrorist attack in Sousse in June, which ruined the summer tourist season. **Syphax** returned two wet-leased A319s to **Royal Air Maroc** once the contract ended. The airline leases its two A319s from **Doric.**

**Indonesia's Ministry of Transportation (MOT)** revoked the **Air Operators Certificates (AOC)** of six small local carriers, including **Asconusa Air Transport, Air Maleo, Manunggal Air, Nusan-tara Buena Air, New Jatayu,** and **Survai Udara Penas,** for not having enough commercial aircraft in their fleets. Indonesia passed a law that requires scheduled operators to operate at least ten aircraft of which five must be owned by the carrier, while charter operators are required to operate at least three aircraft one of which must be owned. The law was passed in 2009 but was never been fully enforced, until now. **Transportation Minister Ignatius Jonan** gave local operators until June 30, to comply with the law, and he then extended the deadline until July 31. Mr. **Jonan** said recently that carriers had not shown any intention to comply and that each would have to be re-certified if they wish to resume operations. The revocation of each operatorôs Air Transport License was dated August 1. According to the law, scheduled airlines operating planes with more than 70 seats must have capital of at least 500 billion rupiah ($37.5 million), while those with aircraft with fewer than 30 seats must have capital of at least 300 billion rupiah ($22.5 million). Cargo operators are required to be capitalized to at least 100 billion rupiah ($7.5 million).

**Jetstar Hong Kong** has been wound up by its three owners, the Hong Kong-based property and transportation conglomerate, **Shun Tak Holdings**, **Qantas** and **China Eastern.** Each announced that they were pulling out of the failed start-up. None of them was willing to invest more money to try to fight the **Hong Kong Air Transport Licensing Authority (ATLA)** which refused to issue an **Air Services Licence** in June. The **ATLA** ruled that the start-up did not conform to local laws governing a companyôs principal place of business. **Jetstar Hong Kong's** last A320-232/W was sold to a Chinese lessor.

## Technical

**GOL Linhas Aereas Inteligentes Airlines** has ordered **Aviation Partners Boeing (APB) Split Scimitar Winglets** for 15 of its **Boeing** 737-800NG aircraft. The unique feature of the **Split Scimitar**

**Winglet** is that it uses the existing **Blended Winglet** structure, but adds new aerodynamic scimitar tips and a large ventral strake, **APB** said. **APB** did not say whether the new winglets would be retrofitted to **GOL's** fleet of 97 737-800s or to most of the 18 737-800s it has on order.

**Comlux America, Comlux Group's** Indianapolis, Indiana-based completion and services center, installed their ninth VIP interior in an **Airbus** ACJ320 aircraft for a private customer. This is **Comlux America's** fourth ACJ interior completion since becoming an **Airbus** authorized service center in 2010. The ACJ320ôs VIP cabin features a modern interior balanced with a classic European flare. **Lauri Church** at **Comlux Creatives** partnered with **Fiona Riddle** of **In Flight Cabin Solutions**, the customerôs representative, to design the cabin.

## Cargo Pallet

**Uni-Top Airlines,** China, received the first A300B4-605(F) (SN 763) from **EADS Elbe Flugzeugwerke (EADS EFW)** after its passenger-to-freighter conversion. The cargo airline bought seven A300B4-605s from **China Eastern Airlines** and contracted for **EADS EFW** to convert them to freighters. The other six are currently being worked on. The freighters will be deployed on flights from Shanghai to Incheon, Osaka, Seoul, Shenzhen and Wuhan.

**Finnair Cargo**, the fully owned subsidiary of **Finnair**, signed a freighter sharing deal with **IAG Cargo**. They will operate an A300-600(F) freighter between London and Helsinki. London will become **Finnair Cargo's** third European cargo hub, joining Brussels and Helsinki. The new route will connect the two carrierôs networks, and will enable **Finnair Cargo** to open tens of new destinations in North America.

**Qatar Airways Cargo** received its first 747-400BCF freighter (SN 24998) in August and deployed it on flights to Hong Kong and Beijing. The 747F is wet-leased from **myCargo Airlines,** Turkey, and it will be replaced with a nose-loading 747-400F in October. The Qatari carrier also operates six A330-200Fs and eight 777Fs on flights across the globe.

## Military Market

**The Royal Australian Air Force (RAAF)** ordered four P-8A Poseidon maritime surveillance aircraft and the **U.S. Navy** bought nine additional P-8As. The contract for 13 aircraft was worth $1.49 billion ($114.6 million each) to **Boeing.** The **RAAF** has been a partner to the U.S. Navy on P-8A development since 2009, when the governments signed the first in a series of memorandums of understanding to work on system design and development. Capt. **Scott Dillon, U.S. Navy** P-8 program manager**,** said, ñBy working together since the early stages of P-8A development, the U.S. and Australia have created one airplane configuration that serves the needs of both countries. The U.S. and Australian P-8As will be able to operate with each other effectively and affordably for decades to come.ò The latest contract will raise the **U.S. Navy's** fleet to 62 P-8As, and 28 Poseidons have been delivered to date. The first Australian P-8A will be handed over in 2016.

**AirTanker,** U.K., is offering its latest **Airbus** A330 Voyager (ZZ341, SN 1555) to military operators to move personnel or freight, rather than put the widebody into commercial use. The company ordered 14 A330-200 Voyagers to fill the U.K.ôs **Future Strategic Tanker Aircraft** program requirements. The 12th Voyager was on static display at the **Royal International Air Tattoo** at the **Royal Air Force**

**(RAF)** Base at Fairford, U.K., from July 17 to 19. The KC2-model aircraft is part of a so-called ñsurgeò fleet which is available to the U.K. if required beyond a core inventory of eight tankers flown by the **RAF** and a ninth that is retained on the civil aircraft register (leased to **Thomas Cook** since May 1) and flown by **AirTanker** crews. **AirTanker** CEO **Phill Blundell** said, ñWe believe thereôs value for our U.K. customers in making this aircraft available to them. It would be cheaper to use the Voyager than going to the charter sector.ò The company will employ ZZ341 to support its existing tasks. **AirTanker** hopes to provide excess capacity to support a **European Defense Agency** initiative to acquire a pooled fleet of A330MRTT tanker/ transports by Norway, the Netherlands, and Poland. Their pilots would train on the Voyager. **AirTanker's** last two A330s are scheduled for arrival in January and September 2016.

**The Royal Australian Air Force (RAAF)** took delivery of its seventh **Boeing** C-17A strategic transport in August. Its eighth C-17 will arrive in late 2015. The airplanes were ordered in April 2015, and were priced at approximately A$350 million each. Minster for Defense **Kevin Andrews,** said, ñWith its proven ability to transport heavy equipment, vehicles and helicopters in a short time frame, the C-17Aôs capabilities are vital to Australiaôs national security and safety.ò The **RAAF** has used the C-17 fleet to support military operations in the Middle East as well as humanitarian relief missions. Prime Minister **Tony Abbott** said, ñThese aircraft, particularly with aerial refueling, can go potentially right around the world, anywhere in the world where there is an airstrip capable of handling these aircraft, we can get to within about 24 hours thanks to these planes and the refueling capabilities that the KC-30s give us. These aircraft make the strong arm of Australia longer than would otherwise be the case.ò

**Embraer** said it will delay development of the KC-390 military cargo jet for nearly two years. It now plans to deliver its first cargo aircraft to the **Brazilian Air Force** in the first half of 2018 rather than the end of 2016. The company said its second-quarter profit was $129 million, which was down 10 percent from a year earlier, due in part to military contracts which have been cut back and stretched out. The **Brazilian Government's** austerity push is aimed at shoring up Brazilôs investment-grade rating. The military contracts are also suffering from a 20 percent drop in the real against the dollar this year. CEO **Frederico Curado** said he did not expect military revenues to rebound next year, but that there should be no ñnew surprisesò from the government forcing **Embraer** to scale back contracts again this year or in 2016. The KC-390 flew for the first time in February, in Gaviao Peixoto, Brazil, and the test campaign is now scheduled to start in the third quarter, with certification scheduled in the second half of 2017. The government still owes about $370 million to **Embraer** and the company is working to collect the debt, Mr. **Curado** said. Because of the debt, **Embraer** lowered its 2015 revenue outlook by $300 million, to between $5.8 billion and $6.3 billion. The **Brazilian Air Force** launched the KC-390 program in 2009, and awarded a roughly $1.5 billion contract to build two prototypes. The air force ordered 28 KC-390s to replace a fleet of C-130s. Embraer also has received commitments from five more countries to build 32 more aircraft. The KC-390 is a clean-sheet design and is the largest aircraft that **Embraer** has developed to date. The new aircraft will perform all the same missions as the C-130. It features a fly-by-wire flight control system, which is integrated with an **Embraer** flight control computer, and a **Rockwell Collins** ProLine Fusion avionics system. The plane is powered by a pair of **International Aero Engines** V2500s.

**Israel** is now looking at the **Israel Aerospace Industries (IAI)** 767 MMTT (Multi-Mission Tanker Transport) as its next aerial refueling tanker. The air force wanted to acquire new **Boeing** KC-46As, but delays in the program appear to have made the converted 767 a viable alternative. The price of the KC-

46A also makes it less attractive. A senior Israeli air force source said, ñWe need the aerial refueling capability and we will now calculate the cost effectiveness and other factors of the two options.ò The first KC-46s will not be ready for delivery until 2018, while the first **IAI** 767 MMTT is already operating for the **Colombian Air Force**. **IAI's Bedek** division said it will operate a dedicated conversion line to convert former passenger 767-300ERs into its MMTT configuration. **Bedek** has a contract to convert three 767s into tankers for the **Brazilian Air Force** to replace the four KC-137s, which it operated since 1986.

**Finmeccanica-Alenia Aermacchi** completed flight-testing of the C-27J transport that was fitted with winglets. This is one of a series of product developments undertaken to improve the military medium turboprop airlifter. The winglets are intended to improve the overall flight performance of the aircraft by increasing the lift-drag ratio and will extend the performance gap between the C-27J and its competitors, the manufacturer said. The benefits include improved hot and high runway performance, increased payload, range, endurance and an overall reduction in operating costs. First flight of the C-27J winglet aircraft took place at **Finmeccanica-Alenia Aermacchi's Turin-Caselle** facility, Italy, on June 15.

**Aviakor**, a Samara, Russia-based airframer, suspended its **Antonov** An-140 manufacturing program due to disruptions in its supply-chain. The company buys components from 34 suppliers in the Ukraine, including crucial systems such as landing gear. **Aviakor** director general **Anatoly Gusev,** said those supplies, however, have been ñseverely disorganizedò by Russo-Ukrainian conflict, and ñsubstituting them with alternative domestic equipment instantly is impossible.ò Demand for An-140s is not sufficient for Russian suppliers to start serial production of parts. To date, **Aviakor** has delivered seven military variants to Russiaôs **Ministry of Defense** and four passenger aircraft to **Yakutia Airlines**. By the end of this year, the airframer plans to complete several An-140s using components and parts from inventory. They will be delivered to the **Ministry of Defense**. Since 1997, **Antonov** and **Aviakor** have delivered a total of 25 An-140s to airline and government customers and there were a total of 18 more on order, by the two Russian customers. **Yakutia** recently grounded three of its An-140s because of a lack of spare parts, and in 2014, the **Ministry of Defense** said it would abandon the An-140 cargo transport program due to the situation in the Ukraine. **HESA,** Iran, contracted to assemble 100 IrAn-140s at its factory in Shahin-Shahr from kits provided by **Antonov** in Kharkov, and 14 were completed. One of them crashed in 2014 and the government ordered the rest to be grounded. It appears that the An-140 program is nearly dead, but Mr. **Gusev** said **Aviakor** will continue providing technical support for transports already in service and seek a new workload to utilize its production capacity.

# AIRCRAFT DELIVERIES & SALES

## Airbus

***Airbus A319.*** **Airbus** delivered two **Tianjin FAL**-built A319s in July. **China Eastern Airlines** accepted one -132/W (SN 6593), and **Air China** received -115/W (SN 6603).

***Airbus A320.*** **Airbus** delivered 23 A320s during July, including two -214/Ws (SN 6675 & 6680) to **easyJet** for a total of 92 out of 140 on order. **AirAsia** received two -216/Ws (SN 6666 & 6676). It sold them both to **Avolon**, which leased the first to **Pegasus Airlines** and the second to **Thai AirAsia.** The

**Allegiant Air** will purchase its 50th **Airbus** aircraft, an A320, from **Airbus Financial Services**. At the end of 2015, the airline will operate 10 A319s and 15 A320s, six 757s and 52 MD-83/88s. It will buy the remaining 25 aircraft by the end of 2018. The latest A320 will enter revenue service in early 2016. **Allegiant** expects to buy further aircraft as opportunities arise. The airline is transitioning to an all-**Airbus** fleet and will eventually replace all of its 757s and MD-80s.

aircraft were the eighth -216/W for **Pegasus** and the first to be leased to the Thai low-cost carrier. The nine **AirAsia** A320s were sold upon delivery to **Avolon. Tianjin FAL** delivered three -200s, including -232 (SN 6551) to **China Southern Airlines,** -214/W (SN 6570) to Hong **Kong Airlines** which leased it to **Tianjin Airlines,** and -214/W (6582) to **China Eastern Airlines. Sichuan Airlines** acquired -214/W (SN 6713). **CLC CDB Leasing** leased -214/W (SN 6671) to **Loong Air** and **ICBC** leased -214/W (SN 6686) to **Shenzhen Airlines. Qingdao Airlines** leased -214/W (SN 6681) from **GECAS,** and **China Aircraft Leasing Co. (CALC)** leased a second -214/W (SN 6690) to **Air India** for 12 years**.** The airline will lease another three A320s from **CALC** by the end of the year**. SMBC Aviation Capital** leased a sixth -214/Ws (SN 6674) to **Peach Airlines**. **Lion Air** transferred new -214/W (SN 6628) to its leasing subsidiary, **Transportation Partners,** and it was leased to **Batik Air,** Indonesia. The airline leased a second -214/W (SN 6697) in August. **Airbus** delivered one -214/W (SN 6689) to **Synergy Aerospace,** which leased it to **Avianca Brasil,** and **Avianca Holdings** received -214/W (SN 6692) and leased it to **Avianca. Volaris** leased -233/W (SN 6705) from **SMBC,** and **Virgin America** bought -214/W (SN 6669). **Wizz Air Hungary** obtained -232/W (SN 6683), and in the Middle East, **Rulers Flight Sharjah** took delivery of -232/W- ACJ (SN 6659). The airplane was flown to **Associated Air Center**, Love Field, Dallas, Texas for cabin outfitting. **Qatar Airways** sold new -214/W (SN 6646) to **Pembroke,** which leased it to **Qatar's** Saudi subsidiary, **Al Maha Airways. Air Arabia** accep-ted -214/W (SN 6665), and in Oceania, **Air New Zealand** bought its 15th -232/W (SN 6694) with cash.

AVMARK INC.
WORLDWIDE AVIATION MARKETING AND MANAGEMENT SERVICE

**Congo Airways** received its first aircraft A320-216 (SN 3362) which was formerly in service with **Alitalia.** A second -216 (SN 3412) was scheduled to arrive in August. The start-up was slated to commence commercial operations on August 20 to eight local cities including Lubumashi and Goma, but the launch was delayed. **Congo Airways** is backed by CDF32.5billion ($35.34 million) in start-up capital and **Air France Consulting** is acting in an advisory role. **Congo Airways'** A320 (SN 3412) was seized at Dublin, by the **Irish High Court** to recover outstanding debt from the government, after a suit by two American citizens, who argued that the **Congolese Government** owed them $11.5 million. The men claimed the debt is related to a 2007 arbitration decision involving the ownership of two diamond mines they purchased in Congo. The A320 was being refurbished in Dublin before its delivery. **Congo Airways** denied that the plane had been seized.

**Air Macau** will buy A320-232 (SN 5352) from its parent, **Air China** for 267.8 million yuan ($43.1 million) according to a filing with the **Shanghai Stock Exchange**. The carrier operates four A319-100s, three A320-200s, and nine A321-200s.

**Lufthansa** will take delivery of its first A320-271neo (SN 6801) by the end of this year, several months before the original schedule. Another six winglet-fitted Neos are due to arrive before the end of 2016. **Lufthansa** has a 61 A320neo and 40 A321neos on order.

***Airbus A321.*** **Airbus** set a new record when it delivered 20 A321s in July, including four -231/Ws (SN 6656, 6667, 6687 & 6711) to **American Airlines**. **American** has 56 more A321ceos on order. **LATAM Airlines Group** received four -211/Ws (SN 6658, 6670, 6685 & 6718) and transferred the first three directly to **TAM Linhas Aereas.** The fourth -211/W (SN 6718) was sold to **Bank of America** and leased to **TAM. Vueling** accepted three -231/Ws (SN 6660, 6684 & 6691), for a fleet total of four, with six on order. The airline sold the first two -231/Ws to **Jackson Square Aviation** and the third (SN 6691) to **Avolon Aerospace** and leased them back. **Turkish Airlines (THY)** bought two -231/Ws (SN 6657 & 6682), for a total of 46, with 19 more on order. **BOC Aviation** leased its fifth of five -211/Ws (SN 6707) to **EVA Airways,** and **GECAS** leased a sixth -211/W (SN 6701) to **Juneyao Airlines. Sichuan Airlines** acquired its last of 22 ordered -231/Ws (SN 6703), and **TransAsia** obtained its ninth of 12 -231/Ws (SN 6693). **Spirit Airlines** acquired its first of 30 new -231/Ws (SN 6672). The second -231/W (SN 6736) was delivered in August. **VietJetAir** took delivery of the first high-density A321-211/W (SN 6696). The aircraft was leased from **AWAS** and features 230 seats, 10 more than the traditional configuration of 220. It is the second -211 in service with the Vietnamese budget carrier.

**Transaero Airlines,** Russia, leased of the first of six -211/Ws (SN 6678) from **ICBC Leasing,** China, in July. It second -211/W (SN 6726) was leased in August. The airline will receive two additional aircraft from the lessorôs backlog before the end of the year, and two more by March 2016, The Saint Petersburg-based carrier said it will operate the first A321s on high-demand, medium-range routes from Moscow to Paris, Tel Aviv, Astana, Almaty and Novosibirsk. The aircraft are configured in a dual-class 184-seat cabin layout. The first A321 will fly twice daily between **Moscow Vnukovo Airport** to Almaty, Kazakhstan on July 31. The next -211/Ws will be put on daily services to Astana and **Paris Orly Airport** on October 25. Given Russiaôs current grim economic outlook, it is uncertain whether the airline will pursue previously announced goals of operating 30 A321s by 2019.

***Airbus A330.*** **Airbus** delivered only two -300s during July, possibly a new record low since the programôs first delivery in 1993. **Turkish Airlines (THY)** obtained its 25th -303 (SN 1642), and **China Southern Airlines** received its 19th of 24 -323s (SN 1645). **TransAsia Airways** will lease a pair of ex-**Singapore Airlines** -343s (the first is SN 1146) from **Lease Corporation International (LCI),** Ireland.

***Airbus A380.*** **Emirates** received its 63rd and 64th -861s (SN 184 & 186) in July. The airline has 76 more on order and **Airbus** has 150 more on backlog.

# Boeing

***Boeing 737 NG.*** **Boeing** delivered 37 737s in July, including two -900ERs each to three U.S. airlines. **United Airlines** received two -924ER/Ws (SN 42189 & 42190), and now it has eight more on order. **Delta Air Lines** acquired its 42nd and 43rd -932ER/Ws (SN 31953 & 31954), and **Alaska Airlines** bought two -990ER/Ws (SN 44105 & 60576). The airline has taken delivery of 28 -990ERs and has 37 on order. **Turkish Airlines** purchased the only other -900ER to be delivered in July, its 15th and last -9F2ER/W (SN 42014). **China Eastern Airlines** acquired three -89P/Ws (SN 39744, 41475 & 41506), and transferred the latter one (SN 41506) to its wholly-owned subsidiary, **Shanghai Airlines. Xiamen Airlines** received three -85C/Ws (SN 39913, 39918 & 41391), and **Lion Air** took delivery of three

-8GP/Ws (SN 39858, 39859 & 39866). Two -8GP/Ws (SN 39858 & 39866) were transferred to **Malindo Air,** and one (SN 39859) was handed over to **Thai Lion Air,** joining a fleet of 13 -9GPERs. **Air Lease Corp. (ALC)** took delivery of three -800/Ws and leased -8SH/W (SN 41348) to **Jin Air**. This was the Korean low-cost carrierôs first new 737-800 to be delivered directly from Seattle. **Jin Air** is affiliated with **Korean Air** and now operates 13 -800s. **ALC** leased a 12th -81B/W (SN 41334) to **China Southern Airlines,** and a second -8K2/W (SN 41352) to **Transavia France. Air China** accepted two -89L/Ws (SN 41107 & 44917). It kept -89L/W (SN 41107), and transferred the other -89L/W (SN 44917) to **Dalian Airlines. Dalian** is 80 percent owned by **Air China. Shandong Airlines** acquired two -85N/Ws (SN 41625 & 44918). The **United States Navy** received two more -8FV/W ï P-8A Poseidon aircraft (SN 44147 & 44148). They will enter service once the electronic equipment is installed. **Avolon Aerospace** leased a third of four -852/Ws (SN 43657) to **Aeromexico,** and -84P/W (SN 43658) to **Hainan Airlines**. **Hainan** also leased -84P/Ws (SN 39963) from **SMBC Aviation Capital. Avia Capital Leasing** leased one -8LJ/W (SN 41210) to **Aeroflot Russian Airlines.** This was the airlineôs 11th 737-800, and it leased the 12th one (SN 41211) from **Avia** in August. **AerCap** leased -84P/W (SN 41809) to **Lucky Air**, China. **Shenzhen Airlines** received -87L/W (SN 37627), and **Ethiopian Airlines** accepted its 10th of 10 -860/Ws (SN 40970). **AWAS** purchased the aircraft and leased it back. It was the third -860 that **AWAS** purchased from the airline as part of a three-plane deal agreed to in 2014 and filled in 2015. The lessor bought three -860/Ws from **Ethiopian** in 2014 and leased them back in 2014 as well. **Air Algérie** acquired its 18th -8D6/W (SN 60747), and **flydubai** sold -8KN/W (SN 40277) before delivery to the **Dubai Air Wing/Royal Flight.** The plane was flown to Spokane, Washington, for installation of long range fuel tanks. **Ryanair** obtained its 369th -8AS/W (SN 61578), **WestJet** acquired its 26th -8CT/W (SN 39082), and **SunExpress Airlines** bought -8HC/W (SN 61174).

**Avolon Aerospace,** the international aircraft leasing company, leased 737-8GP/W (SN 368735) to **Lion Air** in August. This delivery is the seventh **Avolon** aircraft on lease to the airline group, and the 90th new Next Generation 737 to be delivered to the Indonesian low-cost carrier. **Avolon** leased the fourth of four 737-851/Ws (SN 43659) to **Aeromexico.**

**Sriwijaya Air** took delivery of two new 737-9LFER/Ws (SN 41712 & 14843) in August, and sold them to **AerGo Capital** for lease back. They were the first new airplanes to be handed over to Indonesiaôs third largest carrier. The airplane order was announced in May 2015, and the airplanes were from a cancelled **UTair** contract. The Jakarta-based company operates a fleet of 737 airplanes, including nine -300s, four -400s, 12 -500s, eight -800s and the two new -900ERs. It offers flights to various Indonesian destinations and a few international cities. The quick delivery after placing an order in May, shows that **Boeing** has no problem placing unwanted 737s with new customers.

**Nok Air** received its first direct-purchased 737-88L/W (SN 61293) in August. It was one of seven -800s that the Thai low-cost carrier ordered in May 2014, along with eight MAX-8s. **Nok Air** operates an all-Boeing fleet of 18 leased 737-800s and the newly bought -88L/W.

**GECAS** leased two ex-**Spicejet** -8N6/Ws (SN 38041 & 41259) to new customer **9 Air**, a subsidiary of **Juneyao Airlines**. **9 Air** launched operations from Chinaôs **Guangzhou Baiyun International Airport** in January and it currently operates a fleet of five -800/Ws to three destinations in China. A further two ex-**Spicejet** -8N6/Ws (SN 41260 & 41261) are currently undergoing pre-delivery maintenance checks at Singapore before delivery to the Chinese budget carrier.

***Boeing 747.*** No 747s were delivered in July, but **Korean Air** received its first of 10 -8B5 Intercontinentals (SN 40905) in August. Another four -8B5s (SN 40906, 40907, 40908 & 60407) will be delivered shortly. **Korean** ordered five -8 passenger planes in December 2009 and five more in October 2013. The airline already operates six -8B5F freighters and has one on order.

***Boeing 767.*** **Federal Express** took delivery of its 19th and 20th new -3S2Fs (SN 42716 & 43546) in July. The cargo airline has 79 more 767Fs on order. One of the **FedEx** planes was the 100th 767-300 Freighter to be delivered by **Boeing. FedEx** operates 26 of the type, **United Parcel Service** has 60 in service and the other 14 are flown by **DHL International, LAN Airlines, All Nippon Cargo, JAL, Asiana** and **AZAL**. **Boeing** said, ñCargo operators keep the global 767 Freighter fleet busy, using each airplane an average of 10 hours a day. The 100 freighters delivered so far have accumulated more than 2 million flight hours combined since the introduction of the model.ò

**Ethiopian Airlines** chose **AWAS** to dispose of two 767-300ER widebody passenger aircraft as part of its deal to sell three 737-800s to the lessor and lease them back. **AWAS** said it ñhas deep expertise in transitioning and upgrading aircraft to new airline customers, jurisdictions and business model, creating a timely and profitable solution for all involved parties.ò

***Boeing 777.*** **Boeing** delivered three 777Fs and four 777-300ERs in July. **China Southern Airlines** accepted one -F1B freighter (SN 41637, and **Air China Cargo** obtained ï FFT (SN 44684). **FedEx** acquired its 23rd ï FS2 (SN 40674). **China Eastern Airlines** received -39PER (SN 43274), and **Cathay Pacific Airways** bought -367ER (SN 60723). **Qatar Airways** purchased -3DZER (SN 60331), and **Korean Air** took delivery of its 12th -3B5ER (SN 37652).

**Scoot Will Retire** its last three 777-212ERs (SN 28509, 28510 & 28519) in August, having replaced them with its first 787-8 and five 787-9s. The airline has nine more 787-8s and five more 787-9s on order. The 777s will be transferred to **NokScoot** in Thailand, joining the low-cost carrierôs first 777 (SN 28522).

***Boeing 787.*** **Boeing** delivered 12 Dreamliners in July, split evenly between the 787-8 and -9. **American Airlines** received two -8s (SN 40624 & 40625), and **Qantas** accepted two -8s (SN 36236 & 36237) and transferred them to its low-cost subsidiary, **Jetstar Airways. Scoot,** Singapore, obtained its first -8 (SN 37117), and **All Nippon Airways** received its 34th -8 (SN 34518), and its sixth of 44 -9s (SN 34534). **Air Canada** bought its first of 29 -9s (SN 35265). It will be placed on non-stop services from Toronto to Delhi beginning November 1, 2015. **United Airlines** purchased its seventh -9 (SN 40918) and has 11 more on order. **Boeing** delivered one -9 (SN 41989) to **Air New Zealand,** and one -9 (SN 39648) to **Etihad Airways. Vietnam Airlines** celebrated the delivery of its first 787-9 Dreamliner (SN 35151) in July. The airline has 18 more 787s on order.

**Pakistan International Airlines (PIA)** will lease three 777-2Q8ERs (SN 28688, 32716 & 32717) from **AerCap** following a tender floated in May of this year. The aircraft are being returned by **Vietnam Airlines** to the lessor. **PIA** will use the planes to replace its aging 747-300s on long-haul routes. Other companies offered 777s, including California-based **LLFC Corporation** which proposed three **Kenya Airways** -2U8ERs (SN 33681, 33682 & 33683) that were withdrawn from use. The **Kenya** also offered its unwanted 777-3U8ER (SN 42097) and two **GECAS**-leased -3N6ERs (SN 41818 & 41819).

**British Airways** expects to take delivery of its first of 22 787-9s (SN 38616) in September. The U.K. flag carrier plans to deploy it on revenue flights between **London Heathrow** and **Delhi International** on October 25. Two more -9s will be delivered to **British** in October and another two will arrive in November. Other destinations to see 787-9 service include Muscat, Oman, the UAE, and Kuala Lumpur, Malaysia. A further six -9s will enter service in 2016 with five more due in 2017. The 787-9s will be configured with eight First Class, 42 Business, 39 Premium Economy and 127 Economy seats for a total of 216 seats. The airline operates eight 787-8s and it has 12 787-10s on order.

**Air Austral** will take delivery of two early model 787-8s (SN 34491 & 34510) next spring and they will operate routes linking its overseas departments of Réunion and Mayotte with **Paris CDG** on June 10.

**Oman Air** will receive its first 787-8 (SN 42378) in September and it will enter service on October 25, after a month of familiarization flights between Muscat and Salalah. Its sistership (SN 42379) will arrive in November and the two Dreamliners will be configured with 18 Business class and 249 Economy class seats. They will be deployed on long-haul routes, along with the flag carriers 10 A330s. **Boeing** shows **Oman Air** with six 787-8s on order but the airlineôs CEO **Paul Gregorowitsch** said the order was increased to two 787-8s and six 787-9s.

# Regional Jet

***Bombardier*** delivered the second of seven CRJ900NGs (SN 15374) to **Mesa Air Group** in July. **Mesa** will operate the aircraft for **American Airlines** under the **American Eagle** brand.

***COMAC*** intends to deliver its first ARJ21-700 (SN 105) to launch customer Chengdu Airlines on November 28. The date is the seven year anniversary of the indigenous regional jets first flight in 2008. The second regional jet (SN 106) will be handed over to **Chengdu** later this year, and they will be put into commercial passenger service in February. **COMAC** has not received production certification for the ARJ21, so it will get individual certification for the first two aircraft. The manufacturer should acquire production certification from **CAAC** by the end of 2016. The airframer said that U.S. **Federal Aviation Administration** certification was no longer a priority. **Chengdu Airlines** is a subsidiary of **COMAC** and currently operates an all-**Airbus** fleet of three A319s and 16 A320s.

***Embraer.*** **Embraer** delivered three more EMBRAER 170-200 LRs (E175) (SN 17000489, 17000490 & 17000494) to **American Airlines** in July. **American** selected **Compass Airlines**, a wholly-owned subsidiary of **Trans States Holdings**, to operate the first 20 E175s under the **American Eagle** brand. So far, nine of 60 ordered E175s have been delivered. **United Airlines** bought five E175s (17000491, 17000492, 17000493, 17000495 & 17000496), and leased them to **Mesa Airlines** and **Skywest Airlines** for operation for **United Express. AZUL Linhas Aéreas Brasileras** accepted its 62nd E195 (SN 19000693) and leased it from **ICBC**. The airline also operates 22 E190s.

***Sukhoi Superjet.*** **Gazpromavia** received its eighth Superjet 100-95B (SN 95092) in July. The airline has three more on order. It is based in Moscow and operates regular domestic flights, and domestic and international passenger and cargo charter services, mainly in support of the oil and gas industry. It operates three 737-7N6/Ws and 102 helicopters, as well as the Superjets.

# Turboprop Aircraft

***ATR.*** **Air India Regional** accepted ATR 72-600 (SN 1252), and **Firefly** obtained -600 (SN 1259) in July. **ATR** delivered the second and third -600s (SN 1257 & 1265) to **HOP!,** and the second and third -600s (SN 1258 & 1266) to **Air Algérie. Air New Zealand Link** acquired its seventh -600 (SN 1264) after it was on display at **Paris Air Show. TransAsia Airways** leased -600 (SN 1251) from **GECAS** in July, and received its sixth -600 (SN 1261) in August.

**Myanmar National Airlines** (previously known as **Myanma Airways**), took delivery of its first ATR 72-600 (SN 1267) in August. The national flag carrier currently operates a fleet of three ATR 72-500s, two ATR 72-200s and one ATR 42-300. It ordered six ATR 72-600s in 2014, and took options for six more, in a deal valued at $296 million. The last of the -600s are scheduled for delivery in 2017, and they will be used to replace the airlineôs current regional fleet.

**Amakusa Airlines,** Japan, took delivery of a 48-seat ATR 42-600 (SN 1202) in August. The plane is the first of the type to operate in Japan. For almost 15 years, **Amakusa** provided regular scheduled regional services connecting the city of Amakusa in southwestern Japan to large cities such as Kumamoto, Fukuoka, and Osaka. The new ATR 42-600 was acquired from **Nordic Aviation Capital (NAC)**, and replaces a 16 year-old, 39-seat Dash 8-100.

***Bombardier*** handed over of its 500th Q400 turboprop, a Q400NG (SN 4500) to Calgary-based **WestJet Encore** in early July. Later that month, the airline received Q400NG (SN 4501), raising its fleet to 24 aircraft, with another 12 on order. **Qazaq Air** leased the last of three Q400NGs (SN 4502) from **Falcon Aviation Services,** Abu Dhabi**. Qazaq Air** is based in Astana, Kazakhstan and leased its first two Q400s (SN 4494 & 4497) in June. The airline will fly to 12 domestic destinations.

# Antiques and Other Junque

**Air Serbia** is scheduled to cease 737-300 operations on October 24, 2014. The typeôs last revenue flights for the Serbian national carrier will be between Belgrade and Vienna. It is assumed the airlineôs fleet of four 737-300s will be transferred to its charter division, **Aviolet**.

**Blue 1,** Finnair, will cease 717-200 operations on November 6. Three of the **SAS** subsidiaryôs fleet were sold to **Delta Air Lines** and the last two were bought by Spanish low-cost carrier, **Volotea**. In a bid to drive down costs, **SAS** will transform **Blue1** from a scheduled airline into a company that will offer flexible wet-lease services to the Scandinavian parent. **SAS** will transfer five 737-600s to **Blue1** and they will be operated from its Finnish base.

**Emirates** ceased 777-200 operations with the retirement of its last -21H (SN 27249). The 19 year-old aircraft left Dubai for storage at Marana, Arizona on July 14. Its two sisterships (SN 27247 & 27248) were scrapped by **Universial Asset Management.** The withdrawal is part of **Emirates's** fleet renewal plan aimed at ensuring it operates one of the worldôs most modern and efficient fleet of aircraft, with an average age of less than 75 months. The airline phased out three 777-200s and eight A340-500s in 2014 and 2015, and will retire 10 aircraft in the 2015/2016 fiscal year. The airline retained six 1997/98 era 777-21HERs and 10 2008/10 model 777-21HLRs.

**Reliance Aircraft International,** Austin, Texas, purchased ex-**United Airlines** 757-222 (24763) for disassembly. **Terry Hix,** President states ñThis will add to **RAI's** diverse inventory of both **Boeing** and **Airbus** aircraft allowing us to support a wide spectrum of the commercial aftermarket all while providing immediate hands on customer service.ò

**Air New Zealand** will retire its final two **Boeing** 737-300s in September, completing the transition of its domestic jet fleet to the **Airbus** A320. The currently operates 27 A320ceos and has two more to be delivered, as well 14 A320neos and four A321neos on order. The first A320neos arrive in fiscal 2018, and they will gradually replace the A320ceos it flies on trans-Tasman services. **Air NZ** will ground its fleet of five **Boeing** 767s over the next year, with the last to be withdrawn by the end of fiscal 2018. They are being replaced by nine more 787-9s of which three will be handed over in the 2016 and 2017 fiscal years, followed by two due in 2018 and one in 2019.

**Debris From Malaysian Airlines Flight MH370** was found on Réunion Island on July 29, 2015. It was quickly determined that the flaperon was from the **MAS** 777-200 that disappeared on March 8, 2014. The part was examined by French, Australian, Malaysian and U.S. aviation authorities to make sure it was from the missing airplane. The French military conducted aerial searches of the Indian Ocean near Réunion for 10 days, but did not find anything else. The discovery of the part re-energized the search for the aircraft in the southern Indian Ocean. ñToday, 515 days since the plane disappeared, it is with a heavy heart that I must tell you that an international team of experts have conclusively confirmed that the aircraft debris found on Réunion Island is indeed from MH370,ò Prime Minister **Najib Razak** said in a television address.

## Accidents and Safety

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*From Aviation Safety Foundation*

**Colombian Air Force Airbus** CN235-200M military transport (FAC1261, SN C-118) crashed on July 31, 2015, into a mountain near Las Palomas, Cesar Province, and all 11 people on board were killed. The crew reported an engine failure prior to the accident. The CN235 was powered by two **General Electric** CT7-9C3 turboprop engines and was built in 1998.

**Trigana Air Service** ATR 42-300 (PK-YRN, SN 102) crashed August 16, 2015, into Mount Tangok, Okbape District in Indonesiaôs Papua province. The 49 passengers and 5 crew members were killed. Rescuers hiked through dense jungle and up steep slopes to reach the wreckage. The ôblack boxô flight recorders were recovered. Airline Captain **Beni Sumaryanto** said Oksibil is ña mountainous area where the weather is very unpredictable. We strongly suspect itôs a weather issue. It is not overcapacity, as the plane could take 50 passengers.ò The aircraft was built in 1988 and owned by **Trigana Air** since 1992. Since being established in 1991**, Trigana Air** had 14 serious incidents, and Indonesian airlines in general have a poor safety record.

**RusLine Embraer** EMB-120 Brasilia (VQ-BBX, SN 120205) was involved in a landing accident at **Moscow-Domodedovo Airport**, Russia on July 31, 2015. On approach to the airport, the flight crew could not lower the nose landing gear so the aircraft landed on its nose and its main gear. None of the occupants was injured.

**Brazilian Air Force (FAB) Embraer** C-95 Bandeirante (FAB2326, SN 110443) sustained substantial damage when the aircraft suffered a runway excursion at the airbase of Lagoa Santa, on July 27, 2015. The three-person flight crew was practicing touch-and-goes. During the takeoff phase, the airplane went up an embankment, sustaining severe damage to the fuselage, undercarriage and propellers.

**Air Bagan ATR** ATR-72-212 (XY-AIH, SN 469) was damaged in a runway excursion accident at **Yangon-Mingaladon Airport**, Myanmar, on July 24, 2105. It is unclear what happened, but the aircraft came to rest in the grass with the left hand main gear dug in soft soil.

**Hummingbird Air Beech** 99 airliner (N128SF, SN U-87) operating as a flight from **VC Bird International Airport** in Antigua, experienced a right main landing gear collapse upon landing at **Coddington Airport** in Barbuda. The airplane sustained substantial damage to the right wing and there were no reported injuries to the pilot nor to the five passengers onboard.

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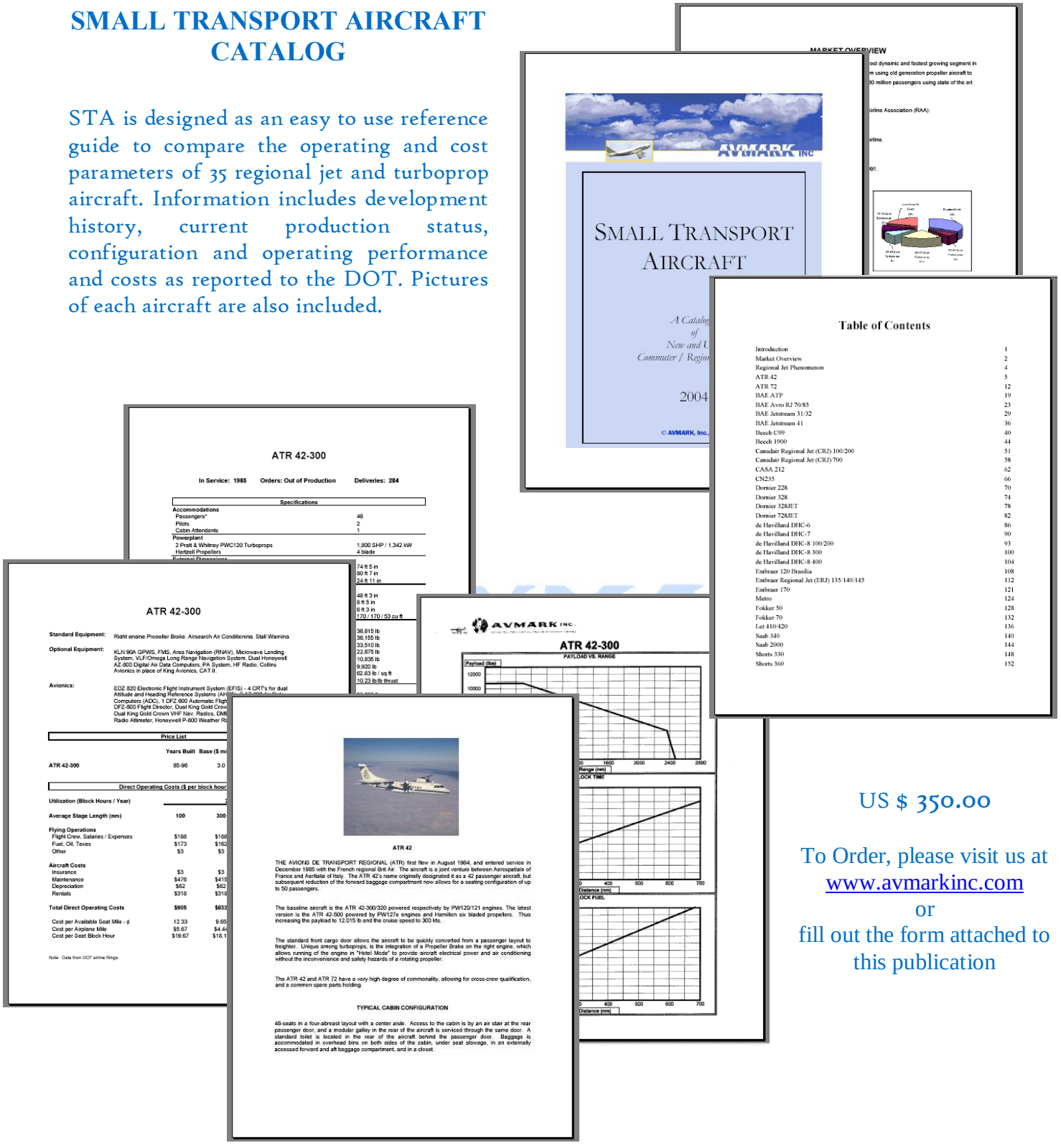


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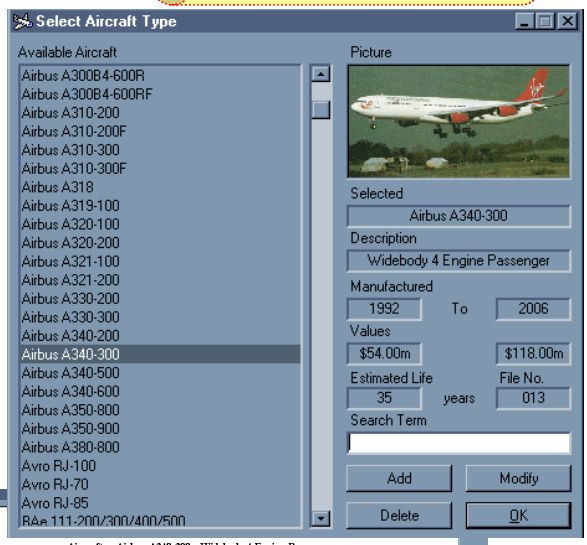


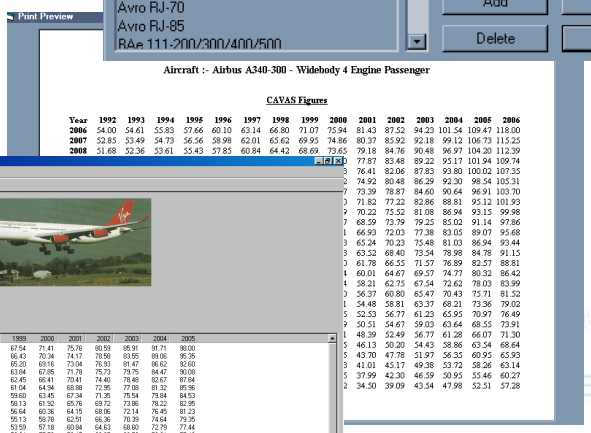


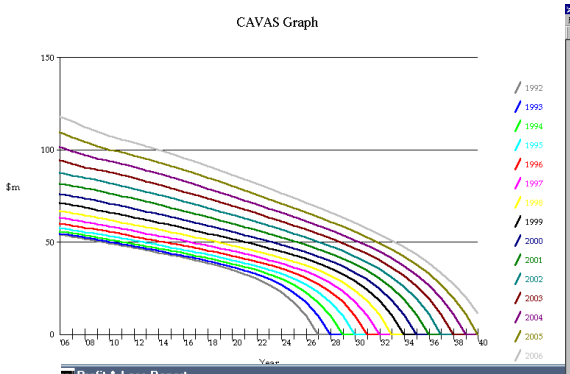


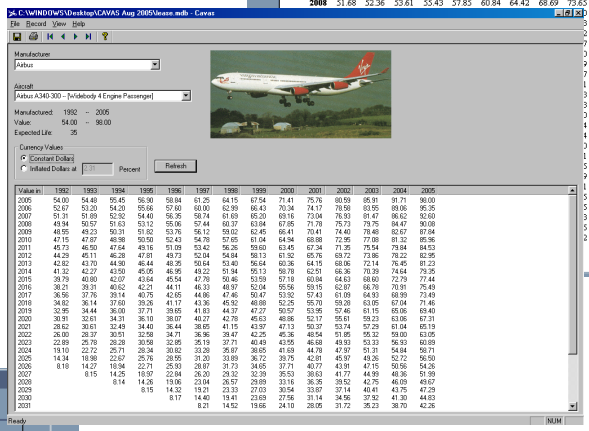

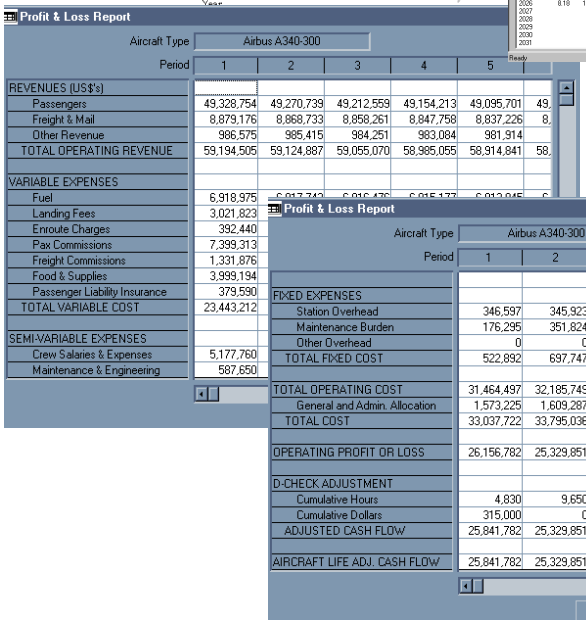





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