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Market Comment

Boeing to Delay 777X Launch. In spite of strong interest in the updated and stretched 777 from **British Airways**, **Cathay Pacific**, **Emirates** and **United**, **Boeing's** board of directors hinted that the plane would not be offered to customers until 2013. **Boeing** CEO **Jim McNerney** told analysts in October that, "We are looking at the end of the decade, beginning of the next decade [for entry into service]." **Boeing** spokesperson, **Karen Crabtree** said, "While we haven't set a firm timeline or launched the program, we've consistently talked about a potential market entry around the end of the decade and we are engaging with our customers to define the airplane and its ultimate timing." **Emirate's** CEO **Tim Clark** is trying to pressure **Boeing** into an earlier launch of the project. He said, "If the aircraft meets our needs, **Emirates** would consider it as a replacement for our fleet of 175 current and ordered **Boeing** 777s, but we have no plans to place any orders at this time." The press said that **British Airways** and **Emirates** had planned for the 777X to enter service by the end of this decade. **BA** wants to replace its aging fleet of 52 747-400s and 52 777-200s/-300s with the 777X. **Cathay Pacific** and **United** also operate sizeable fleets of 747-400s (21 and 24 -400s respectively). They were not content to wait for **Boeing's** 777X and committed to the A350-1000. **Cathay Pacific** is purchasing 26 A350-1000s with delivery starting in 2017. **United** started talking with **Airbus** about switching some of its 25 A350-900 orders to the larger A350-1000 model. Both airlines also operate large fleets of 777s. **Cathay Pacific** flies five 777-200s and 41 777-300s/-300ERs, while **United** has 74 777-200s/-200ERs in service. **Boeing** has a potential market for 444 777Xs, judging from the four airlines' fleets. That number is nearly one third of the 777 program's sales total of 1,380. **Emirates**, **Boeing's** largest customer for the current 777 told the manufacturer that it needed to replace its old 777s starting in 2017, and did not want to wait. This is why Mr. **Clark** said, "The moment you read that **Boeing** is launching the new 777 you will probably find that **Emirates** is fairly close behind. We have been trying to get **Boeing** to build the 777-9x and 8x and we are working closely with them to try and persuade them that it's a good idea to build it." **Boeing** must balance two important concerns. If it launches the new jet too early, then **Airbus** has a chance to create a more technologically advanced airplane, but if it launches too late, **Airbus** will dominate the market with its product. Right now, **Airbus** is playing catch up in the A350/787 market, but it is leading in the A320neo/737MAX competition. Some analysts say

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Boeing wants to return capital to shareholders through higher dividends rather than invest into ambitious plane-development programs. A delay in the 777X launch frees cash for other projects, such as the 737 MAX, and potentially the 787-10. It also avoids diverting sales from the very popular, and profitable, 777-300ER to the 777X. Industry sources wondered that if A350-1000 sales increase slowly from the current 88, then **Boeing** will avoid moving too quickly and time the 777X in-service date to coincide with the 747-400s retirement at the end of the decade. **Boeing** can move quickly when it needs to. If there is an early launch, **Boeing** would start cutting metal on the 777X in 2014 and the plane will enter service in 2019. A launch delay will put the in-service date at 2021 or 2022, but that 777X could offer much better performance and economics. So far, **Airbus** said it is happy with the A350-1000 design and that there would be no further tweaking of the plane. The A350 is an all-new carbon composite airplane that offers greater fuel efficiency over the 777-300ER. **Airbus** launched the A380 long before the 747-8 and sold twice as many of them. It offered the re-engined A320neo a year before **Boeing** launched the 737 MAX and the neo out-sold the MAX by 50 percent. The 787 Dreamliner is in service, while the A350-9 prototype is still in the factory; the 787 leads the market by 838 to 562. It seems that it is best to be first, because you can always improve the product over time. ®

Airbus Orders

Airbus Sold 21 Widebodies and Just Two A319s in October. Two private operators purchased one A319ACJ each. **Turkish Airlines (THY)** acquired 15 more A330-300s. The new jetliners will operate medium- and long-haul services from **THY's** hub at Istanbul. **Etihad Airways** placed a repeat order for two A330-200s, as part of this **United Arab Emirates** national airline's growth plans. **Afriqiyah Airways** purchased its first four A350-900s, and converted its existing six A350-800 orders to the longer-fuselage A350-900 version.

The Manufacturer delivered 57 new planes in October, matching a monthly record set in 2011. **Airbus** handed over five A380s during October, also a new record, since it averages 2.5 super-jumbo deliveries per month. To date, **Airbus** has handed over 22 A380s, and is on track to reach its target of delivering 30 double-deck aircraft this year. By the end of October, deliveries reached an all-time year-to-date record of 462 to 76 customers. This pushed **Airbus'** single-aisle aircraft deliveries above 5,300

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and its total deliveries past the 7,500 mark. **Airbus** stated it intends to deliver 580 commercial aircraft this year.

Turkish Airlines (THY) placed an order for 15 A330-300s in October. This was their seventh order for the A330 family of aircraft and their 20th **Airbus** order to date. The A330s will fly medium and long haul routes. The flag airline ordered its first Airbus in 1984, and now operates 101 **Airbus** aircraft including 17 A330-200s, -200Fs and -300s.

Etihad Airways signed a firm order for two additional A330-200 passenger aircraft for a total of 14. The other 12 -200s have already been delivered. All of **Etihad's** A330s are powered by **Rolls-Royce** Trent 700 engines. The UAE flag carrier also converted seven of its previously ordered A320s to the larger A321 model. The A321s were ordered to meet increasingly strong demand on medium-haul routes and the first one will be delivered in November 2013.

Afriqiyah Airways, Libya, placed a new firm order for four A350-900s. At the same time, the carrier converted its original order for six A350-800s to six orders for the larger A350-900 model. **Afriqiyah's** A350 XWB (Xtra Wide-Body) aircraft will seat 314 passengers, and will be operated on new routes to the U.S., the Middle East and Asia. Including the newest order, the A350 XWB has won 562 firm orders from 34 customers worldwide. **Afriqiyah** is the latest airline to defect from the smaller A350-800 to the -900. The slow-selling A350-800's backlog has fallen to 112 aircraft, while -900 sales have grown to 362. Several -800 customers are talking with **Airbus** about converting their -800 commitments to the -900 type. Even though the -800's backlog is shrinking, **Airbus** insisted that it would not cancel the -800 program. The 270-seat -800 offers 200 nautical miles longer range than its bigger sister does. The first -800 will enter service in mid-2016 and the first -900 is scheduled for delivery in the second half of 2014.

Singapore Airlines (SIA) announced on October 24 that it would order five super-jumbo A380s and 20 A350-900s. All the widebodies will be powered by **Rolls-Royce** Trent engines. The airline already

Airbus Orders, Deliveries and Backlog October 2012

OCT ORD	OCT DEL	OCT CANX	TOTAL ORD	TOTAL DEL	BACK LOG
			A318		
-0-	-0-	-0-	81	78	3
			A319		
2	4	-0-	1,520	1,348	172
			A320		
-0-	32	-2	5,794	3129	2,665
			A321		
-0-	7	-0-	1,233	752	481
			A330		
17	9	-0-	1,242	917	325
			A340		
-0-	-0-	-0-	377	375	2
			A350		
4	-0-	-0-	562	-0-	562
			A380		
-0-	5	-0-	257	89	168
This Month			This Year		BL
23	57	-2	403	462	4,378

Airbus sold 11,882 aircraft and delivered 7,504 as of October 31, 2012. Fifty-seven orders were cancelled. Total orders, deliveries and backlog include cancellations and order changes.

operates 19 A380s and the new A350 XWB order doubles SIA's commitments to 40. The A350-900s will fly the airline's medium and long haul routes. When confirmed, the A380 order will be the third placed by the airline, and will bring the airline's A380 orders to 24. The first will be delivered in 2017. The airline was the launch operator for the A380, and flew them to 10 cities in Europe, the U.S., and the Asia-Pacific region. With the SIA order, Airbus will have 262 firm orders for the A380 and 368 for the A350-900.

Airbus Offers the ACJ318 Enhanced. It is the newest version of the smallest Airbus Corporate Jet and offers a more elegant cabin decor, new seats and high-definition in-flight entertainment as well as options such as fuel-saving Sharklets, a shower and a cinema lounge. Airbus said the ACJ318 features the widest and tallest cabin of any narrowbody business jet and it set new standards in comfort, space and freedom of movement. The manufacturer boasts of the ACJ318 Enhanced's domed ceilings and window shades throughout the cabin, new interior linings that allow for better integration of overhead lights and air supply outlets, and light-emitting diode (LED) illumination throughout. The ACJ318 Enhanced can be fitted with a wider choice of seats, high-definition in-flight entertainment with Blu-ray player, state-of-the-art displays and HDMI interfaces for external equipment, and a new passenger information system, including iPod and iPad interfaces, wireless local area network, even greater soundproofing, and a humidifier. The wingtip Sharklets save fuel and extend the planes range. The cabin can be fitted with a shower in the ensuite bathroom and the aft lounge can be transformed into a cinema, with mood lighting.

TransAsia Airways, Taiwan, placed a firm order for another six A321neo aircraft in November. The new aircraft will be powered by **Pratt and Whitney** PW1100G engines and be used to expand the airline's fleet. With the latest

Airbus Global Market Forecast (GMF) states that Brazil will need 1,060 new aircraft between 2012 and 2031. This includes 700 single-aisle, 310 twin-aisle and 50 very large aircraft, which will have an estimated current market value of \$160.7 billion. The planes are expected to support the country's rapidly growing air travel market. Brazil's GDP is growing at above the world average, and its economy should more than double over the next 20 years. Its domestic air traffic has doubled since 2006. Brazil is now the world's fourth largest passenger traffic market, after the U.S., China and Japan. Its international traffic exploded by 34 percent in the last three years. Foreign carriers currently control most of the market. Airbus said that Sao Paulo and Rio de Janeiro were major gateways to more than a third of long-haul traffic to Latin America. Both cities are now tourist destinations and two of the world's top-10 metropolitan areas. The manufacturer foresees a need for 50 A380s at Brazil's leading airlines. "Each day, Brazil becomes a stronger candidate for the A380," said **Rafael Alonso**, Executive Vice President of Airbus for Latin American and the Caribbean. "The A380 is the best solution to alleviate Brazil's increasing air traffic congestion. The A380 should be the clear aircraft choice for airlines operating into Brazil, especially in light of the upcoming **World Cup** and **Olympic Games**." The tourism industry will contribute more than 5 percent to Brazil's economy, and accounts for nearly 3 percent of its employment. According to the **Airbus GMF**, Latin American airlines will require more than 2,100 new aircraft in the next 20 years. This number includes 1,660 single-aisle, 420 twin-aisle and 40 very large aircraft, which are estimated to be worth approximately \$242 billion at list prices. Latin America and Caribbean airlines already operate more than 450 Airbus aircraft and have another 350 on backlog. Globally, by 2031 some 28,200 new aircraft valued at \$4.0 trillion will be needed to satisfy future robust market demand.

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contract, **TransAsia** has ordered 29 A320 Family aircraft and taken delivery of 11 of them. The carrier now has 12 A321neo and six Sharklet-equipped A321ceo (current engine option) airplanes as well as two A330-300s on order, with the first deliveries scheduled later this year.

Interjet, a Mexican low-cost carrier and all-Airbus operator signed an agreement to purchase 40 A320neo aircraft in November. The airline will announce its selection of the aircraft's engines later. **Interjet** operates a fleet of 36 A320s and will receive an additional A320 later this month. The A320neo has 95 percent commonality with **Interjet's** standard A320s. **Airbus** said, "In only seven years of operations, **Interjet** has become a leading domestic airline in Mexico, having quickly expanded their network throughout the country and into the United States, Central America and the Caribbean. The new A320neo will support their continued network expansion and fleet renewal plans. **Interjet** has a backlog of 45 A320 Family aircraft, including today's order." The A320neo has won nearly 1,500 firm orders from more than 30 customers since its launch in 2010. The fast selling commercial aircraft is scheduled to enter service in 2015.

The Serbian Government is renegotiating its long-standing order for eight A319s. Now it wants to buy four A320-200s and lease eight more A320 family aircraft for its new, debt-free **JAT Airways**. In the late 1990s, Serbia placed a \$23.5 million deposit with **Airbus** for the eight A319s. **JAT's** order lapsed in the intervening decade, but **Airbus** kept it on the books. The government wants the deposit to apply to the four A320s it intends to buy. The **Finance Ministry** issued a statement that said, "Talks will be stepped up in the coming period [and] should be completed by spring when the new **JAT** will be established." The Finance Minister **Mladjan Dinkic** recently met with **Airbus** about the order, and said Serbia may offer **JAT** to **Etihad Airways** as a way to raise capital for **JAT's** relaunch.

Airbus sold the first Sharklet-equipped ACJ319 to a Chinese customer in mid-November. Approximately 25 **Airbus** corporate jets such as the ACJ318 and ACJ319 are operated by **BAA Jet Management**, **Beijing Airlines**, **China Eastern Executive Aviation**, **Comlux Asia**, **Deer Jet**, **Hong Kong Jet** and **TAG Aviation**, in China. This is the first sale of the winglet version of the ACJ319 to China.

AJW Capital Partners, a worldwide aviation services group based in the UK, purchased **Airbus'** last two new ultra-long-range A340-500s. The aircraft were originally built for **Kingfisher Airlines** several years ago and then stored. **Airbus** then sold one to the Tunisian government and the second to another government, but they were not delivered. The A340s are powered by **Rolls-Royce** Trent 500 engines and will be fitted with a 282-seat, two-class cabin. They will enter commercial service with an un-named **AJW Group** customer in early 2013. **AJW Capital** is the **AJW Group's** principal investing division and is responsible for the purchase, sale and lease of large aviation-related capital assets, including whole aircraft and engines. **Airbus** and **Boeing** have taken A340s as trade-ins on sales of new A330s and 777s. Recently, **Iberia** and **Singapore** announced plans to retire more of their A340s, further glutting the market for the type.

China Eastern Airlines agreed to buy 60 A320 aircraft worth approximately \$5.4 billion. The planes are scheduled for delivery from 2014 to 2017. **China Eastern** revealed the order in a filing to the **Hong Kong Exchange** in late November. The airline plans to fund the purchase with the company's working

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capital, commercial bank loans and other sources. The order is subject to approval by **China Eastern's** shareholders and government regulators.

Boeing Orders

Boeing Sold 152 New 737s in October. **GOL Airlines** led the parade with its order for 60 737-MAX aircraft. **Alaska Airlines** purchased 37 737 MAX and 13 Next Generation 737-900ERs. On Halloween, **ALAFCO** gave **Boeing** a treat by confirming its July 2012 Memorandum of Understanding (MoU) for 20 737 MAX aircraft. At the beginning of the month, an **Unidentified Customer** ordered 22 737 MAX airplanes. **Boeing** delivered 32 737NGs, two 747-8s, two 767-300s, seven 777s and seven 787-8s, for a total of 50 deliveries in October.

Boeing's 2012 Orders Pass 1,000 Mark. The manufacturer sold 1,092 new aircraft so far this year, but lost previously placed orders for 17 737s, six 777s and 60 787s. It won orders for 1,007 737s and the vast majority of the new orders were for the 737 MAX versions. **Boeing** also sold five new 747-8Is to one customer (**Air China**), 19 767-300s (15 767Fs for **FedEx**), 23 777s and 38 787s. The bulk of the 777 and 787 orders came from repeat customers.

Boeing October 2012 Orders, Deliveries and Backlog

OCT ORD	OCT DEL	OCT CANX	TOTAL ORD	TOTAL DEL	BACK LOG
			737		
152	32	-0-	10,305	7,352	2,953
			747		
-0-	2	-0-	1,529	1,450	79
			767		
-0-	2	-0-	1,105	1,036	69
			777		
-0-	7	-0-	1,380	1,052	328
			787		
-0-	7	-0-	838	33	805
This Month			This Year		BL
152	50	-0-	1,009	486	4,234

Boeing sold 22,687 aircraft and delivered 18,453 as of October 31, 2012.

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

Sales totals are net, minus cancellations.

The South American Launch Customer for the 737 MAX, GOL Airlines, purchased 60 737 MAX airplanes, valued at approximately \$6 billion (\$100 million each) at published list prices. The first aircraft will be delivered in 2018. This is **GOL's** largest order since the airline was founded in 1990, and it is the largest airplane order placed by a South American airline. The new aircraft will replace the oldest 737 NGs in **GOL's** all-737 fleet. The airline operates three 737-700s and 97 737-800s. **GOL** is working with **Boeing** to launch the short-field performance version of the 737 MAX aircraft that can operate from the many short runways in Brazil.

Alaska Airlines ordered 20 737 MAX 8s, 17 737 MAX 9s, and 13 Next-Generation 737-900ERs. The firm order was valued at more than \$5 billion (\$100 million each) at current list prices, and is the largest in **Alaska Airlines'** history. The airline had three 737-800s and 22 737-900ERs on back-order prior to

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the new contract for 50 737s. **Alaska** currently operates 120 737s. The new planes will give the carrier the flexibility to adjust its fleet size to meet air travel demand over the next decade, **Boeing** said.

ALAFCO, Kuwait's airplane leasing company, finalized an order for 20 737 MAX 8s in November. The order is valued at \$2.0 billion (\$100 million each) at current list price. The order was first announced as a commitment at the **Farnborough Airshow** in July. **Ray Conner**, president and CEO of **Boeing Commercial Airplanes** said this was "the first order for the 737 MAX by a Middle Eastern customer. This is one of the aviation industry's highest growth regions."

Aeromexico finalized its order for 60 737 MAX 8s and MAX 9s in November. The Mexican flag carrier took reconfirmation rights for another 30 737 MAXs. The commitment was first announced in July at the **Farnborough Airshow**. The deal was valued at more than \$6 billion (\$100 million each) at published list prices. The **Aeromexico** order brings 737 MAX firm orders to a total of 938. The 737 MAX features the new **Boeing Sky Interior** and the **Advanced Technology** winglets. **Aeromexico** currently operates an all-**Boeing** fleet of 45 737NGs, seven 767ERs and four 777-200ERs. **Aeromexico** operates from its main hub at **Mexico City International Airport**. The airline offers more than 550 daily flights to different cities in Mexico, the United States, Canada, Central and South America, as well as Europe and Asia.

Boeing Announced the sale of one **Boeing Business Jet** 787 to a VIP Customer in November. It also sold two 737s and five 787s to unidentified customers. **Boeing** also reported that it lost 15 existing 737 orders during the month.

SilkAir, **Singapore Airlines'** regional subsidiary, signed its order for 23 737-800 NGs and 31 737 MAX 8s, valued at \$4.9 billion (\$90.74 million each) at list price. The order was originally placed in August, and included options for 14 more unspecified 737s. Delivery of **SilkAir's** planes will begin in 2014, and continue through 2021.

Avianca Airlines, the Colombian national carrier placed a \$620 million (\$206.7 million each) order for three Boeing 787 Dreamliners. **Avianca** ordered a dozen 787s in 2007, and now the total order of 15 787s was valued at more than \$3.1 billion, the company said. **Boeing** attributed the **Avianca** sale to an "unidentified customer" in September 2012.

Aviation Capital Services LLC, a subsidiary of **Russian Technologies State Corporation Company (Rostech)**, announced a commitment to purchase 35 737 MAX airplanes in late October. **Boeing Commercial Airplanes** President and CEO **Ray Conner** said, "This is the first commitment for the 737 MAX from Russia and CIS, which is one of the commercial aviation industry's fastest-growing regions." The order will be valued at more than \$3.5 billion (\$100 million each) at current list prices, when it is confirmed. **Avitas**, an aircraft valuation firm puts the order's value at about \$1.5 billion (\$42.85 million each), after standard market discounts. **Boeing** did not announce which model of the MAX that **Rostech** ordered. The 737 MAX 8 is list priced at \$100.5 million, and the MAX 9 lists for \$107.3 million. **Aviation Capital Services** was established in February 2011, as an aircraft leasing company, and it is 100 percent owned by **Rostech**. The Russian company agreed to buy 50 single-aisle planes from **Boeing** in an agreement signed in 2010. The 737 MAX aircraft will be offered for lease to Russian airlines. As of October 31, **Boeing** had received 858 orders for the 737 MAX. The first MAX will be delivered in 2017.

Turkish Airlines (THY) announced it will buy 15 777-300ER (Extended Range) aircraft. Deliveries will begin in 2014. The agreement will be worth \$4.7 billion (\$313.3 million each) at list prices when finalized, and the deal includes options for five additional 777-300ERs. Aircraft valuation firm **Avitas** said the order was really worth about \$2.5 billion (\$166.67), after standard market discounts were taken into account.

Boeing to Launch the 787-10? In October, the **Boeing** board of directors gave its sales staff the authority to offer the stretched Dreamliner. Spokesperson **Karen Crabtree** said, "We are beginning to discuss more details about the airplane with customers. They can talk terms and pricing with the airlines. She said the talks are conditional upon our obtaining final board approval to launch the program at a yet-to-be determined date. The board is waiting for one or several commitments that are big enough to launch the new airplane program. It was reported in the press that **British Airways** and **Singapore Airlines** are potential launch customers, and they may be ready to commit by early next year. **Boeing** may be able to deliver the first 330-passenger 787-10 in 2017 or 2018. The 787-10 is ideal for routes less than 7,000 miles, while the 290-seat 787-9 will be able to fly 9,800 miles. The first 787-9s will be delivered in early 2014. **Boeing** expects the superior fuel efficiency of the 787-10 will quash the market for the **Airbus** A350-900, which will enter service in 2014, approximately three years sooner.

Boeing Forecast that North American Airlines would take delivery of 7,290 new airplanes over the next 20 years. The planes will be valued at \$820 billion at list prices. The North American fleet will grow from 6,650 airplanes today to about 8,830 airplanes by 2031, after the retirement of 5,110 airplanes. North American airline traffic is growing at approximately 3 percent per annum and will continue to do so through the forecast period. The market is marked by the aggressive growth of low-cost carriers and the established network carriers need to replace aging airplanes. **Boeing** forecast that single-aisle airplanes would grow to 69 percent of the total North America fleet by 2031. The replacements of older planes are driven by high fuel prices. Most of the mainline airlines have announced fleet renewal programs. Long-haul international traffic is forecast to grow at approximately 5 percent per year. The international growth will be driven by increases in traffic to everywhere but Europe. Having reached its maturity, European traffic is flat. Growth in the long-haul segment should require 1,320 new fuel-efficient, twin-aisle airplanes such as the 787. Ironically, **Boeing** does not foresee significant demand for the 747/A380-sized Very Large Aircraft in North America, with only about 40 deliveries, 10 fewer than **Airbus** forecast for Brazil.

Scoot, the long haul, low-cost carrier owned by **Singapore Airlines (SIA)**, took over all 20 of its parent's 787 Dreamliner orders in October. **Singapore** ordered 20 787-9s in October 2012. The first will be delivered to **Scoot** in late 2014. The airline may switch some of its -9 orders to the -8 and possibly -10 models. The 787-9s were supposed to be delivered from 2011 to 2013, but the program's delays forced **Singapore** to order 40 **Airbus** A350-900s. **Scoot** currently operates four 777-200s that it acquired from **SIA**. The low-cost airline will obtain only one more 777-200 before the 787s arrive. Having a small fleet allows **Scoot** to maximize its utilization and keep its costs low. The Singapore-based carrier flies to Sydney, Bangkok, Taipei, Tokyo, and to several cities in China. **Scoot** has an interline agreement with **Tiger Airways**, a short-haul low-cost carrier also based in Singapore.

New Boeing Business Jets. At the **National Business Aviation Association (NBAA) Conference**, the manufacturer said it would offer the 737 MAX to **Boeing Business Jets** customers, "furthering **Boeing's**

dominance in the large cabin ultra-long-range business jet market. The BBJ MAX 8 will be based on the 737 MAX 8, and it will be the first MAX to be offered. The new CFM LEAP-1B engines and winglets will improve fuel economy by 13 percent, which will extend the BBJ MAX 8's range to 6,325 nautical miles. The BBJ MAX 8 will retain the BBJ2's cabin size, which is 19-feet longer than the 737-700-based BBJ1. **Boeing** also intends to develop the BBJ MAX 9, which will offer a 6,255 nm range and an even larger cabin. The BBJ MAX 7 is also under consideration. Captain **Steve Taylor**, BBJ president said, "We anticipate the BBJ MAX 8 will be a very strong seller as a VIP aircraft and will likely capture a larger share of the market. For VIP customers, extended range and exceptional comfort are equally important. The BBJ MAX will ensure our customers get the best of both. For our customers, the range improvement is really the thing that's going to be a big sell. This allows you to open up additional city pairs." Orders for BBJs slumped in the last three years. **Boeing** booked only 14 BBJ orders, down from the 22 BBJ sales in 2008 alone. The economic recovery should encourage companies to buy new planes. **Boeing** has sold 134 737-based BBJs since 1996, as well as 17 widebody VIP jets, which are often purchased by heads of state.

Regional Report

Bombardier Aerospace reported its financial results for the third quarter ending September 30, 2012. Revenues were flat at \$2.3 billion from the same period last fiscal year. Earnings before financing expense, financing income and income taxes (EBIT) dropped to \$123 million versus \$129 million last fiscal year. The overall backlog increased by 18.6 percent, reaching \$26.1 billion as of September 30, 2012, compared to \$22.0 billion as of December 31, 2011. Fifty-seven new aircraft were delivered during the third quarter, compared to 68 in the same period last fiscal year. **Bombardier Business Aircraft** received 45 net orders compared to 30 in the previous third quarter. This included three multi-aircraft sales totaling 19 aircraft valued at \$1.2 billion, based on list prices. **Bombardier Commercial Aircraft** received 38 firm orders during the quarter, including the conversion of the conditional order placed by **WestJet** for 20 Q400 NextGen turboprops into a firm order, which was list priced at \$683 million. It also included the conversion into firm orders for six CRJ900 NextGen regional jets and 12 Q400 NextGen turboprops. The value of these

Commercial Aircraft Corporation of China (COMAC) announced 50 new orders for its C919 passenger jet at the opening of the bi-annual **China Airshow** at Zhuhai. Domestic carriers, **Hebei Aviation Group** and **Joy Air** each ordered 20 aircraft. The U.S.-based leasing and financing unit of **General Electric, GECAS**, placed a repeat order for another 10 C919s. The lessor has now purchased 20 aircraft. The new orders for the 150-seat jet raised the official firm order total to 380. This is close to the state-owned manufacturer's previously announced breakeven point of 400 orders. **COMAC** intends to challenge **Airbus** and **Boeing** with the C919 in the \$100 billion domestic airliner market. The C919 is scheduled to make its maiden flight in 2014. It will need to prove its technical ability and its operating economics before foreign airlines welcome **COMAC** sales representatives. Irish low-cost carrier **Ryanair** has been vocal about buying the plane, but the carrier's CEO is famous for bluster and bargaining. The airplane will be built with traditional materials and powered by **CFM International's** LEAP 1C engines. The flight deck will have a great degree of commonality with **Bombardier's** CSeries jets. These factors may make sales to Western airlines a little easier. **COMAC** forecast that annual passenger traffic in China would grow an average 7.2 percent each year to 2031. In its **2012-2031 Market Forecast** report, **COMAC** predicted China alone would need nearly 5,000 new planes over the next two decades to meet demand.

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firm orders was \$643 million at list prices. **Bombardier** President and Chief Executive Officer **Pierre Beaudoin** said. "In **Aerospace**, substantial headway has been made in the CSeries development program, and testing is progressing well. We have used the momentum gained over the last few months to meet a number of key milestones, however, some areas require more time. The CS100 aircraft's first flight will now occur by the end of June 2013 – a timeline that all parties have agreed is achievable." **Bombardier** is building the **Complete Airframe Static Test (CAST)** and the first flight-test aircraft, but the **Aerospace** group has encountered certain issues, mainly related to some suppliers. The first aircraft will enter service approximately one year after first flight. The CS300 aircraft will enter service by the end of 2014. The CS300 model has received the bulk of the program's orders and commitments.

Azerbaijan Airlines ordered four EMBRAER 190s in November. The planes are worth about \$181 million (\$42.25 million each) at list price. The airline also purchased two pre-owned EMBRAER 170s through **Embraer's** subsidiary, **ECC Leasing**, for an undisclosed amount. All six jets will be delivered to **Azerbaijan** by the end of 2013.

Bombardier September 30, 2012 Orders & Deliveries			
CRJ	Total Orders	Total Deliveries	Current Backlog
Challenger	33	33	-0-
CRJ1/2/440	1,021	1,021	-0-
CRJ700	340	332	8
CRJ900	274	259	15
CRJ1000	67	23	44
Total	1,735	1,668	67
CSeries	Total Orders	Total Deliveries	Current Backlog
CS100	66	-0-	66
CS200	72	-0-	72
Total	138	-0-	138
Dash 8	Total Orders	Total Deliveries	Current Backlog
Q1/2/300	671	671	-0-
Q400	460	416	44
Total	1,131	1,087	44
Bombardier delivered 2 CRJs and 10 Dash 8s this quarter.			

Embraer's Third Quarter Results. During the third quarter of 2012, **Embraer** delivered 27 commercial jets, 11 light jets and two large executive jets. It delivered 83 commercial jets and 46 executive jets in the first three quarters of 2012. The quarterly revenues reached \$1.404 billion. Net income reached \$65.2 million in the quarter and \$1.238 billion for the year to date. The company booked revenues of \$4.279 billion in the first three quarters of 2012, and the company believes it is in line to meet its revenue guidance for the year. The decline of the Brazilian Real against the U.S. dollar is contributing to reducing the company's cost structure, which improved the gross margin of 25.3 percent from the previous 24 percent. **Embraer** invested \$21.5 million on research in the third quarter and a total of \$52 million this year. **Embraer** entered negotiations with **Chautauqua Airlines** about restructuring that airline's outstanding debt. As a result, **Embraer's** third quarter was impacted by a \$41.9 million expense. The company held \$123.2 million in cash at the end of the period. **Embraer's** firm order backlog stood at \$12.4 billion at the end of the quarter.

FLYNONSTOP, a new Norwegian airline, leased an EMBRAER 190 from a third party. The airline will launch services between its base in Kristiansand and major European cities in April 2013. The E190

will be configured with 100 Elite seats in single class layout. The airline intends to tap into the growing demand for scheduled nonstop air service to and from Norway. **Daniel Lundberg**, CEO of **FLYNONSTOP** said, "Like our name suggests, the focus of our business is to link underserved markets in Norway with key cities in Southern and Central Europe without having to make a connection. We can add frequency and routes without adding too many seats and we can fly nonstop to places with seasonal demand as well as to key business cities." **Embraer** delivered its 900th E-Jet on October 10, 2012, and it booked 1,063 firm E-Jet orders as of September 30, 2012.

The Indonesian General Directorate of Civil Aviation found the **Sukhoi** Superjet 100 SSJ-95B to be compliant with the certification requirements of the **Indonesian Aviation Authority**. This allows the SSJ100 to be operated by Indonesian airlines without restrictions. **Sky Aviation** ordered 12 SSJ100s at the **Farnborough International Airshow** in June 2011. They were scheduled for delivery from 2012 through 2015 and the first plane is expected by the end of this year.

Aviation will take up three options for ATR-72-600s. The planes will be leased to **Skywest Airlines** and operated for **Virgin Australia** after they are delivered in 2014. **ATR** has not announced the firm order yet.

Airbus Military and **Dirgantara Indonesia**, also known as **Indonesian Aerospace**, will jointly launch an upgraded version of the C212 tactical transport aircraft. The new aircraft will be designated the NC212 and will be offered in both civil and military versions. It will be built on a new final assembly line at Bandung, Indonesia. The planes will be equipped with new digital avionics and a new autopilot. The civil version will be able to carry up to 28 passengers, while the current C212 has 25 seats. **Airbus Military** sees the market for this size of aircraft at 400-450 units over the next decade. **Indonesian Aerospace** has collaborated with **CASA**, **EADS-CASA** and **Airbus Military** since 1976, and has jointly produced the C212, CN235 and C295.

Embraer September 30, 2012

Orders & Deliveries

Type	Total Orders	Total Options	Total Deliveries	Current Backlog
E170	192	31	182	10
E175	191	271	160	31
E190	543	257	441	102
E195	137	20	102	35
Total	1,063	579	885	178

Type	3rd Quarter Deliveries	2012 Deliveries
Light Exec Jets	11	40
Large Exec Jets	2	6
Embraer 170	-0-	-0-
Embraer 175	7	17
Embraer 190	17	52
Embraer 195	3	14
Total	40	129

Embraer intends to deliver from 105 to 110 commercial jets, 75 to 85 small executive jets, and 15 to 20 large executive jets, in 2012.

Engine News

Hainan Airlines selected **General Electric** GENx-1B engines to power its latest two **Boeing** 787 aircraft. This brings **Hainan's** GENx-powered 787 Dreamliner fleet to 10 aircraft. **Hainan** also extended its long-term maintenance agreement to cover the additional GENx engines.

TransAsia Airways converted options for six A321neo aircraft into firm orders. The airplanes will be equipped with **Pratt & Whitney** PurePower PW1100G-JM engines. The PW1100G engines will power all 12 of **TransAsia's** A321neo aircraft. The contract includes a 10-year **PureSolution** maintenance service agreement for 27 engines, including spare engines. Deliveries are scheduled to start in 2017.

CFM International. The sale of 50 CFM LEAP-1C-powered **COMAC** C919 aircraft to Chinese airlines and **GECAS** pushed total LEAP engine orders and commitments to 4,352 engines. The orders alone were list priced at more than \$52 billion. **CFM's** LEAP-1C is the sole Western powerplant for the new 150-passenger C919, which is scheduled to enter commercial service in 2016. Following **COMAC's** sale, there are now 760 LEAP-1C engines on order to power 380 C919 aircraft. **CFM** received firm orders for 1,876 LEAP-1B engines to power 938 737 MAX airplanes. The first 737 MAX will enter service in 2017. The LEAP-1A is one of two engine options for the **Airbus** A320neo family. To date, airlines and lessors have purchased 1,192 LEAP-1A engines to power 596 A320neo aircraft. This represents 51 percent of the total A320neo orders.

Turkish Airlines (THY) ordered **General Electric** GE90-115Bs to power the 15 **Boeing** 777-300ERs that it ordered in November. It also selected **GE** CF6-80E1 engines for the 15 firm ordered **Airbus** A330-300s. Deliveries of the first A330s are scheduled for next year. The first 777 aircraft will arrive in 2014. **GE** reported the combined value of the two engine orders was about \$2.4 billion. **THY** signed a 12-year **OnPoint** solutions agreement with **GE Aviation**, for the maintenance, repair and overhaul of its CF6-80E1 engines. **THY** has also signed a long-term **OnPoint** MRO agreement for its GE90-115B engines. The GE90 engine order and MRO agreements are valued at more than \$1.4 billion.

Spring Airlines ordered **CFM International** CFM56-5B engines to power two new **Airbus** A320 aircraft. The engines are list priced at \$40 million, and the A320s are due in January and July 2014.

Order Changes and Cancellations

Airbus Order Shuffle. In October, **US Airways** switched one A319 and 10 A320 orders to the A321 type. The airline now has ordered 67 A319s, 38 A320s and 110 A321s. **BOC Aviation** switched two of its 107 A320 orders to the larger A321 type, bringing its A321 orders to nine. **Etihad Airways** cancelled two of its 13 A320 orders when it ordered two more A330-200s in October. An **Airbus** press release said the UAE flag carrier also converted seven of its previously ordered A320s to the larger A321 model. This change was posted in November.

Gulf Air, Bahrain, cancelled 12 of its 20 A330-300s in November, and purchased eight A320 ceo (Current Engine Option) aircraft and up to 16 A320 neo family aircraft. All the standard A320s will be delivered this year. Earlier, the press reported a rumor that **Gulf Air** had cancelled four A330-300s in June and another 10 -300s in September. The October **Airbus' Orders, Deliveries and Operations** report still shows that **Gulf Air** has 20 A330-300s on order. The airline revised its January 2008 and April 2009 agreements with **Boeing** to buy 16 787-8s, and took purchase rights for another eight Dreamliners worth a total of \$3.9 billion at list prices. **Gulf Air** will now buy from 12 to 16 787s, with deliveries re-scheduled toward the end of the decade. The official **Boeing** website does not reflect the change as of October 31. The airline currently operates 34 **Airbus** aircraft and two EMBRAER 190s.

HNA Group, the parent of **Hong Kong Airlines**, and **Hainan Airlines**, is talking to **Airbus** about cancelling its order for 10 A380s, list priced at \$3.8 billion. Chairman **Chen Feng** blamed weak market conditions. He said the market was good when he wanted the A380s, but now the group expected a prolonged period of global economic weakness. In addition, China's government blocked the purchase due to a controversy between China and the **European Union** over airline emissions charges. The Hong Kong aviation regulator stopped **Hong Kong Airlines'** expansion due to complaints about its service standards. It is quite possible that **HNA** will substitute smaller widebodies for the A380s. Mr. **Chen** said **HNA** would continue to order new aircraft next year, but "whether we need to order that many and that soon is another matter."

Virgin America said it cancelled 20 A320 orders in November. The airplanes were to be delivered in 2015 and 2016. The airline also delayed the delivery of its 30 A320neo aircraft, which were originally due from 2016 through 2019. Now the 30 planes will be handed over from 2020 through 2022. The airline is slowing the rapid expansion of its fleet and will concentrate on earning a profit. In spite of a 27 percent jump in revenue, to \$368 million in the third quarter, **Virgin America** saw its losses quadruple to \$12.6 million from \$3.3 million in the third quarter of 2011.

Virgin Atlantic delayed deliveries of its first A380s to 2017 and suggested that it could cancel the orders altogether. The eventual fate of the superjumbo order will depend on market conditions five years hence. **Virgin Atlantic** CEO **Steve Ridgway** said, "We don't need to make a decision about [the six A380 orders] now, it very much depends on the state of the global economy and the oil price." He continued with, "It's a lovely, quiet aircraft, but it's very big and you need to operate it on some very big trunks and you need to have a big enough fleet - we always knew we'd have a small fleet and is that fleet too small? And that is a challenge for **Virgin Atlantic** but it's not something we need to worry about right now." **Virgin** was a launch customer for the A380 back in 2001, and it was originally slated to be an early operator of the type, but deliveries were progressively deferred.

Boeing Order Cancellations and Changes. **Boeing** announced the cancellation of 12 737 orders in October. On November 15, it reported that another 15 737 orders were cancelled, but did not identify the customers in either report.

Myanmar Airways International cancelled its two **COMAC** ARJ-21 orders in October. It is acquiring more A320s.

Embraer Order Changes. **Trip Linhas Aereas** exchanged three EMBRAER 190 orders for three larger EMBRAER 195s in the third quarter. **CIT Leasing Corp.** dropped four E190 orders and picked up four E175s (17000342, 17000343, 17000345 & 17000346) that were allocated to **Alitalia**. **Air Lease Corp.** acquired two E175s (SN 17000350 & 17000352) and leased them to **Belavia**. The lessor cancelled two E190 orders.

Caribbean Airlines Cancelled Four ATR 72s in September. The airline took delivery of four ATR 72-600s and will receive (SN 997) in November. **ATR** built four -600s (SN 1021, 1030, 1038 & 1042) against the **Caribbean** order. The first two will be delivered to **InterSky** in December.

Leasing Companies

AWAS reported that the Russian flag carrier, **Aeroflot**, agreed to lease five new A320s. The planes come from **AWAS** new order backlog. **Aeroflot** plans to increase its fleet by 2014, using leased and purchased aircraft. The emphasis on brand new aircraft allows **Aeroflot** to maintain the highest quality of service to its customers.

BOC Aviation's fleet grew to 200 aircraft following the delivery of a new 737-800 NG on November 8th. The 737 was leased to **Jet Airways**. **BOC's** portfolio comprises 176 owned and 24 managed aircraft, which are on lease to 55 airlines in 33 countries.

BOC Aviation agreed to lease two new A321-200s to **Etihad Airways**. The planes will be delivered in the second quarter of 2014 and will be equipped with **IAE V2533-A5 SelectOne** engines. The two aircraft will come from seven A321s that **Etihad** ordered in October.

Air Lease Corporation (ALC) placed two new ATR 72-600s (SNs 1086 and 1096) on long term lease to **Aeromar** (Mexico). The planes come from **ALC's** backlog and will be delivered in April and May 2013.

China's Leasing Market. Chinese airlines lease a total of 668 passenger aircraft. This accounts for 36 percent of the country's passenger fleet of 1,827 aircraft. Aircraft leasing is popular in China, and has been dominated by Western leasing companies up to now. In the last five years, Chinese financiers have jumped into the market because the **China Banking Regulatory Commission (CBRC)** relaxed its regulations on aircraft leasing in January 2007. The **CBRC** issued new rules lowering the minimum required registered capital for firms from 500 million yuan (\$79.9 million) to 100 million yuan (\$16 million). The number of leased aircraft in China has grown by 17 percent since 2002, higher than the 13 percent growth rate of the total commercial fleet. The Chinese lessors' share of the market grew from zero aircraft in 2002, to more than 220 aircraft today. Chinese lessors now control 32 percent of the total leased fleet in China.

The **CBRC** permitted local and overseas commercial banks to set up financial leasing companies. They must have a capital-adequacy ratio of 8 percent or more, total assets of at least 8 billion yuan (\$1.28 billion) and the firm must be profitable for two consecutive years. Chinese lessors can now set up

Aircastle Limited Lost \$45.8 million, in the third quarter 2012, on revenues of \$172.9 million. The loss was due to \$78.7 million non-cash impairment charges against 15 older technology aircraft. The planes averaged 21-years and represented approximately 1.7% of the net book value of **Aircastle's** flight equipment. The third quarter revenues were 22 percent higher than the \$141.5 million reported in the third quarter of 2011. **Aircastle's** third quarter net income was \$32.8 million before the write down. **Aircastle's** CEO, **Ron Wainshal**, stated, "Aircastle's third quarter operating results were strong despite a difficult economic environment. We grew our lease rental revenues 9 percent, achieved portfolio utilization of 99 percent, and generated sizeable operating cash flows." Lease revenue in the quarter was \$159.5 million, up \$13.7 million from last year. The lessor intends to part out two older-generation A320-200 aircraft, due to their falling value. During the third quarter, **Aircastle** sold one 737-300 after its lease return, and parted-out a 747-400 that the company had planned to convert into a freighter. It has 157 aircraft in its portfolio with a net book value of \$4.7 billion. Of these, 70 aircraft, with a net book value of \$2.0 billion, are unencumbered. **Aircastle** invested approximately \$610 million in aircraft and aircraft-secured debt investments, consisting of 18 aircraft and one secured loan, in 2012. The lessor committed to buy approximately \$170 million worth of aircraft in the fourth quarter.

domestic special purpose companies (SPC). Several cities offer incentives to lessors, including special tax breaks and simplified foreign currency settlement rules. These incentives allow Chinese lessors to offer lower rates than foreign lessors. Foreign investors can set up SPCs in China, but they face more complicated application procedures and higher capital requirements. Up to now, Chinese lessors focused on domestic leasing, with only **CDB Leasing**, **Hong Kong Aviation Capital** and **ICBC Leasing** offering leases to international clients. Government restrictions about U.S. dollar financings have stifled growth in the overseas markets. So far, Chinese leasing companies have purchased most of their aircraft from other leasing companies, such as **AerCap**, **GECAS**, and **SMBC Aviation Capital**, or from airlines through sale and leaseback transactions. As the Chinese leasing companies have matured and become more confident, they have placed speculative orders with the manufacturers. Most of them have **COMAC C919** orders, which will be filled after 2016. Others have looked farther afield; **CDB Leasing** ordered **EMBRAER 190s** and **ICBC Leasing** placed orders for **Airbus A320s** for domestic and international airline customers.

International Lease Finance Corp. (ILFC) agreed to lease three **Boeing 787-8 Dreamliners** to **Ethiopian Airlines**. It is sub-Saharan Africa's second-largest carrier, and the continent's first operator of the 787. The state-owned flag carrier will take delivery of the aircraft in the first half of 2015 and will bring its 787 fleet to 13. The leased 787s will be fitted with **GE GENx-1B70/75** engines. **ILFC** was **Boeing's** biggest customer for Dreamliners with 74 on order.

ILFC will lease five new **Airbus A320neo** aircraft to **Spirit Airlines**. **ILFC** is a launch customer for the Airbus New Engine Option (NEO) family and has 100 A320/321neos on order, and purchase rights for 50 additional aircraft. **Spirit** is the first airline to commit to an operating lease for the A320neo. It has not decided the engine type for the leased A320neos.

Airline News

International Air Transport Association (IATA) Posts November Jet Fuel Prices. The organization updates its global average jet fuel price each week. On November 2, the average price of fuel was \$2.96 per gallon. **IATA** reported fuel prices were 0.5 percent lower than they were in October 2011, and was 3.2 percent higher than it was in November 2011. The global airline industry will pay \$130 billion for fuel in 2012. **IATA** said that every \$1 increase in the price of a barrel of oil adds \$1.6 billion in costs to airlines. The fuel price rise will cost airlines an additional \$33 billion this year. On average, fuel now accounts for approximately one-third of the world's airlines total costs.

Indian Beverage Tycoon Vijay Mallya agreed to sell a majority share of **United Spirits** to **Diageo** for \$2.1 billion. The deal could throw a lifeline to Mr. **Mallya's** grounded **Kingfisher Airlines**. The **State Bank of India** said the airline needed to raise at least \$1 billion by November 30. The bank is the leader of a 17-bank consortium that has lent about \$1.4 billion to the carrier. The airline apparently owes a total of \$2.5 billion in debts. **United Spirits** and Mr. **Mallya's** company **United Breweries Holdings** will use about half the \$2.1 billion to pay down **United Spirits'** debt and to release its encumbered shares that are collateral for loans. The airline will need more than \$1 billion to renew operations. All this assumes that Mr. **Mallya** will not write off his airline investment and let the company go under. **Kingfisher** was launched in 2005, and was India's second-largest airline by domestic market share a few years ago. Now it has only 10 aircraft in its fleet, down from 66 in 2011. The airline recently paid its staff some of the

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back pay they were owed. If **Kingfisher** goes bankrupt, its creditors would get virtually nothing back because India does not have a formal bankruptcy process. Even so, the lenders marked a deadline of November 30, while the **Kingfisher** operating license will expire on December 31. The airline suspended operations in early October. Its rivals, **Jet Airways** and **SpiceJet** have captured much of the traffic that was previously carried by **Kingfisher**.

Deutsche Lufthansa (DLH) Wants Closer Ties to Turkish Airlines (THY) to counter competition from Gulf rivals and their new European partners. **International Consolidated Airlines Group SA (IAG)** recently agreed to a strategic partnership with **Qatar Airways** through the **oneworld** alliance, while **Air France-KLM Group** agreed to code-share with Abu Dhabi's **Etihad Airways**. The Turkish Prime Minister **Recep Tayyip Erdogan** and German Chancellor **Angela Merkel** both thought a closer relationship between the two countries' flag carriers would be beneficial. Mr. **Erdogan** favored a deeper partnership by a share-swap between the two **Star Alliance** carriers. Analysts dismissed a full merger because of E.U. ownership requirements and other political restraints. **Turkish Airlines** is 49 percent owned by the **Turkish Government**. Rather than merge, **Lufthansa** has preferred to buy smaller carriers such as **Swiss International Airlines**, **Austrian Airlines** and **bmi—british midland**, and it bought stakes in **Brussels Airlines** and **JetBlue Airways**. **DLH** invested \$7.29 billion on acquisitions in the past decade. **DHL** and **THY** have been talking for several years about finding ways to better serve their passengers, **THY** CEO **Temel Kotil** said. A quick agreement is not expected. **Turkish Airlines** joined the **Star Alliance** in 2008, and already code shares on **Lufthansa** flights to North America, and **DLH** adds its flight numbers to **THY** services to the Middle East. **THY** has ambitions to being a hub airline for travel between Europe, the Middle East and

International Air Transport Association September International Traffic Growth.

Sept 2012 vs. Sept 2011	RPK Growth	ASK Growth	Pax Load Factor	FTK Growth	AFTK Growth
Africa	4.7%	3.0%	71.6%	2.6%	1.4%
Asia/Pacific	1.7%	0.4%	77.2%	-2.3%	-3.7%
Europe	5.4%	3.5%	83.9%	-0.8%	0.7%
Latin America	7.5%	6.2%	78.2%	-1.7%	8.9%
Middle East	13.3%	11.3%	78.7%	16.4%	7.2%
North America	2.1%	-0.2%	84.6%	-1.0%	-2.8%
Industry	4.9%	3.1%	80.9%	0.5%	-0.4%

Year to Date 2012 vs. 2011	RPK Growth	ASK Growth	Load Factor	FTK Growth	AFTK Growth
Africa	8.3%	8.3%	67.1%	6.1%	10.8%
Asia/Pacific	5.1%	3.1%	77.9%	-6.7%	-2.6%
Europe	6.1%	3.9%	80.9%	-3.4%	1.0%
Latin America	8.8%	7.3%	78.8%	-2.0%	6.4%
Middle East	16.6%	12.8%	78.1%	14.3%	12.4%
North America	1.3%	-0.2%	82.3%	-1.5%	-0.9%
Industry	6.4%	4.4%	79.3%	-2.4%	1.3%

RPK: Revenue Passenger Kilometers measures actual passenger traffic

ASK: Available Seat Kilometers measures available passenger capacity

PLF: Passenger Load Factor is the percent of **ASKs** used. In comparison of 2009 to 2008, **PLF** indicates point differential between the periods compared

FTK: Freight Tonne Kilometers measures actual freight traffic

AFTK: Available Freight Tonne Kilometers measures available total freight capacity

central Asia. With its new orders for 30 widebodies, **THY** can expand its operations to the rest of Asia. **Lufthansa** CEO **Christoph Franz** said he was "very concerned" about the expansion of the three major Gulf carriers and how they intended to displace "European air transport hubs to the Middle East, only 40 kilometers from the Iranian border." We must stand up for our European interests more forcefully," he said. The Gulf carriers have tiny home populations and must rely on passenger thru-traffic, while **DLH** and **THY** have large domestic populations to serve, as well as hub operations for foreign travelers.

Turkish Airlines (THY) is talking with banks about **Enhanced Equipment Trust Certificates (EETCs)** worth around \$500 million to help finance its aircraft purchases after 2014. The airline is considering using **EETCs** for the first time. The financial securities are issued by banks and the airline gains ownership of the airplanes when the certificates mature, some 12 years later. **THY** may also use Islamic bonds, or eurobonds next year to pay for the 30 new widebodies that it ordered in the fourth quarter of 2012. The planes will be delivered between 2014 and 2016.

SAS Group initiated a last-ditch plan to save its tri-national **Scandinavian Airline System**. The airline will sell its Norwegian regional operation **Wideroe** and **SAS's** ground-handling operation in order to raise approximately SKr 3 billion (\$444 million) in cash. The group will also sell aircraft engines and real estate. The board of directors urged **SAS** employees to support the plan that should cut another SKr 3.5 billion in costs. The restructuring plan calls for centralizing administration functions, arranging new pension terms and outsourcing ground handling and call centers. **SAS** is negotiating an agreement with banks and shareholders to extend and expand its credit facilities from SKr 3.1 billion to SKr 3.5 billion. **SAS** hopes its earnings will exceed 8 percent by around 2014-15 under the new plan.

Virgin Australia Holdings sold a 10 percent stake to **Singapore Airlines** for A\$105 million (\$109 million). At the same time, the Brisbane-based **Virgin** will pay at least A\$35 million (\$36.3 million) for 60 percent of **Tiger Airways Australia**, the Australian subsidiary of **Tiger Airways Holdings**, Singapore. **Virgin** will also try to buy the regional operator **Skywest Airlines** for A\$94 million (\$97.6 million). The moves are designed to make **Virgin Australia** more competitive with **Qantas Airways**. Last month, **Qantas** dropped its alliance with **Singapore**, so **Virgin** quickly filled the gap. This year, **Virgin** also initiated alliances with **Etihad Airways** and **Air New Zealand** through investments from each of them. **Etihad** holds 10 percent, while **Air New Zealand** recently bought an 18 percent stake. It also cooperates on services to the United States with **Delta Air Lines**. **Virgin Australia Holdings** has 90 aircraft, including five A330s, 62 737NGs, five 777-300ERs and 18 E190s, while **Qantas** has 138 airplanes, including a much larger widebody fleet of 18 A330s, 12 A380s, 18 747-400s and 24 767-300s, as well as 64 737s. Buying **Tiger Australia** (11 A320s) from **Singapore** will give **Virgin** a budget airline to compete with **Qantas' Jetstar** (56 A320 Family & 11 A330s) and strengthen its routes on Australia's east coast. **Virgin Australia** will increase its fleet to 139 aircraft through its 65 orders for 737NGs and 737 MAX aircraft. The deal expands **Singapore's** presence in Australia where it faces rising competition from Gulf carriers on flights to Europe. **Singapore** also owns a stake in **Virgin Atlantic**, which owns 26 percent of **Virgin Australia**.

Bankruptcy of the Month

1Time Holdings Ltd., a low-cost carrier in South Africa, grounded its planes and filed for bankruptcy on November 2. **1Time** was placed under business rescue proceedings on August 21 and then filed for

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liquidation in November. The airline was founded in January 2004, and had 540 employees and seven MD-80s in its fleet when it faltered. It flew to eight cities within South Africa and was 320 million rand in debt. It had lost 35.8 million rand in the last six months.

Technical

Lufthansa Technik signed a contract with **Airbus** for the completion of a three ACJ318s. The work will be performed by its subsidiary, **BizJet International**, in Tulsa, Oklahoma. **BizJet International** took over the ACJ 318 completion program in 2009, which freed **Lufthansa Technik** in Hamburg to work on the outfitting of A320 Family and wide-body VIP aircraft.

AMAC Aerospace delivered the first BBJ 777-200LR (long range) to be completed for a private customer in the Middle East. The 777-KQLR (SN 40753) is owned by **Aviation Link Co.**, Saudi Arabia, and was delivered to **AMAC** 19 months ago. The work took more than 500,000 man-hours to complete. The aircraft features a 265 square meter floor plan, which includes a private hallway, master bedroom, master lavatory, private lounges, majlis, cabanas, guest areas, staff areas and various galleys throughout the cabin. In-Flight Entertainment (IFE) is extensive, **AMAC** said.

Century Tokyo Leasing (CTL) will buy a minority share in **GA Telesis**. The company recently experienced explosive growth in all areas of its businesses. The fresh capital will allow **GA Telesis** to invest in aircraft and engine leasing, inventory and supply-chain finance as well as other new initiatives.

The First Flight of the Sharklet-Equipped A321 took place on October 23. The first flight was the beginning of nine-month test program of the wing-tip modification on **Airbus'** largest narrowbody. **Airbus** finished flight testing the modified A320 in November, and won **EASA** certification of the **CFM International** CFM56-powered variant. Approval of the Sharklet modification on the **International Aero Engines** V2500-powered A320 will follow in December. Certification of the Sharklet-equipped A321 is expected in mid-2013, and the smaller A319 will be certified in late 2013.

Cargo Pallet

Guggenheim Aviation Partners and Boeing will convert three 767-300ER passenger airplanes to freighters. The 767 Boeing Converted Freighters (BCF) will be delivered to **Guggenheim** in 2013, and the conversions will be performed by **ST Aviation Services Company (SASCO)** in Singapore. The 767s are equipped with Blended Winglets from **Aviation Partners Boeing** and will be the first of the type to be converted. **Boeing** said the 767-300BCF with Blended Winglets could carry up to 52 tons for approximately 3,300 nautical miles (6,115 kilometers) at 412,000 pounds (187,000 kilograms) maximum takeoff weight. The Blended Winglets provide about 5.5 percent fuel savings on a 3,000 nautical mile mission. There are 24 pallet positions on the freighter's main deck.

Singapore Airlines Ltd. (SIA), the world's third-largest airline by market value, saw its losses at the cargo unit triple in the quarter ending September. The airline blamed diminishing trade and increasing competition from Middle Eastern airlines. **International Air Transport Association** reported that global cargo volumes fell 0.6 percent in September from the month before and freight load factors were 45.6 percent. **SIA** said it will park one of its 13 747-400 freighters from January 2013 to May 2014. It will also consider selling some freighters if it receives an adequate offer; the airline may reduce its

passenger fleet too. **SIA** will also end its longest non-stop flights to Newark and Los Angeles next year; the airline's five A350-500s will be traded-in to **Airbus**. The airline expects its cargo capacity will shrink by 3 percent by March 2014, while its passenger capacity will probably rise by 4 percent.

The Colombian Air Force, Fuerza Aerea Colombiana (FAC), is buying two **Boeing 737-400** cargo aircraft from **AAR Corp.** This is **AAR's** first deal with **Fuerza Aerea Colombiana** and it is valued at approximately \$31 million. **AAR** will perform inspections and maintenance checks at the company's **Aircraft Services** business in Miami. One passenger 737-400 is being converted into a combination passenger/freighter (combi) and the second into a pure freighter. **AAR** is working with **Pemco** to perform the cargo conversions. **Pemco** has the sole **FAA Supplemental Type Certificate (STC)** to perform 737-400 combi conversions.

Kenya Airways selected **Aeronautical Engineers (AEI)** to provide two 737-300SF-Special Freighter 10-Pallet Configuration conversions. The airline optioned two additional conversions. Modification work will start in 2013. The first two aircraft are high gross weight 737-300s (SN 29088 & 29750), and were built in 1998 and 1999 respectively. They will undergo freighter modification at **AEI's** authorized conversion center, **Boeing Shanghai Aviation Services**, located in Shanghai China.

The Xian Aircraft MA600 Freighter First Flew on October 24, 2012, from **Xian's Yanliang Airport**. The airplane flew for 15 minutes and company executives, officials from the **Civil Aviation Administration of China** and the Shaanxi provincial government, witnessed the event. The MA600 freighter is based on the twin turboprop powered MA600 passenger aircraft.

Qatar Airways is selling its 35 percent share of **Cargolux**, the Luxembourg-based all-cargo airline. **Qatar** bought their stake from the **Luxembourg Government** and other shareholders in June 2011, for an undisclosed amount. A spokesperson at **Cargolux** said, "The Luxembourg and Qatari shareholders disagreed on the future strategic orientation of the airline, which led to **Qatar's** decision to pull out of **Cargolux**. Mr. **Al Baker** [**Qatar's** CEO] made a series of demands that were considered as being difficult to accept." The press reported that **Qatar Airways** wanted to close **Cargolux's** Luxembourg maintenance base and transfer some operations to Doha. This was opposed by the airline's unions and the government of **Luxembourg** where **Cargolux** employs almost 1,200 people. The country is union friendly and the government wanted to protect those jobs. **Qatar** also wanted **Cargolux** to cancel some or all of its seven outstanding orders for the 747-8F freighter, worth \$2.5 billion at list prices. **Cargolux** would then use some of **Qatar's** eight 777F freighters out of a hub at Doha. The cargo airline lost \$18 million in 2011, the third annual loss in four years and the Qatari money was supposed to support the airline. **HNA Group**, owner of **Hainan Airlines** and several other Chinese airlines, may renew its offer for **Cargolux**. **HNA** was outbid by **Qatar** last year. Another potential investor is **AirBridge Cargo**, Russia.

Military Market

The Royal Australian Air Force (RAAF) accepted its sixth C-17 Globemaster III on November 1. The airlifter was assigned to No. 36 Squadron at **RAAF Base Amberley** near Brisbane. The **RAAF** uses its C-17As to support Australia's military, humanitarian and peacekeeping operations. The **Australian Government** signed a contract for this latest C-17A on June 6, and the plane was delivered less than five months later "due to the strong cooperation among the Australian and U.S. governments working

with the **Boeing** team, the manufacturer said. This means the plane was originally built for the **U.S. Air Force**, but was reallocated to the **RAAF**. The **USAF** will take a later spot on the production line. **Boeing** has delivered 248 C-17s worldwide, including 218 to the **U.S. Air Force**, **National Guard** and **Reserve** units. Thirty C-17s have been delivered to Australia, Canada, Qatar, the United Arab Emirates, the United Kingdom and the 12-member **Strategic Airlift Capability** initiative of **NATO** and **Partnership for Peace** nations. India has 10 C-17s on order for delivery in 2013 and 2014.

The Republic of Korea Air Force (ROKAF) took delivery of its fourth and final 737 Airborne Early Warning and Control (AEW&C) aircraft on October 24. **Korea Aerospace Industries (KAI)** modified and supported testing of the last three of the four 737-based Peace Eye aircraft at its facility in Sacheon, Korea. The aircraft are based at **ROKAF Base Gimhae**. **Boeing** has delivered six AEW&C aircraft to Australia and is building four for Turkey. **Boeing** said the 737 AEW&C provides airborne battle management capability with an advanced multi-role electronically scanned radar and 10 state-of-the-art mission crew consoles that are able to track airborne and maritime targets simultaneously. The mission crew can direct offensive and defensive forces while maintaining continuous surveillance of the operational area. Further it said, **Boeing Defense, Space & Security** is one of the world's largest defense, space and security businesses, and the world's largest and most versatile manufacturer of military aircraft. It is based in St. Louis, has 61,000 employees worldwide and is valued at \$32 billion.

Boeing Defense, Space & Security delivered the fifth production P-8A Poseidon aircraft to the **U.S. Navy** on November 2. The P-8A is one of 24 low-rate initial production (LRIP) maritime patrol aircraft that the **Navy** ordered in 2011 and 2012. The manufacturer said it was the last P-8 to be delivered in 2012, but they will ramp up production to 12 aircraft in 2013, including the first P-8Is for India. The sixth **Navy** P-8A will be delivered early next year. The **Navy's** P-8As will be operational in 2013, and are based at **Naval Air Station Jacksonville**, Florida. The airplanes are built on the Renton final assembly line and undergo mission systems installation and checkout in Seattle. The **Navy** plans to purchase a total of 117 P-8As anti-submarine warfare, anti-surface warfare, intelligence, surveillance and reconnaissance aircraft to replace its **Lockheed** P-3 fleet.

The First Airbus Military A400M Atlas Delivery remains on track for the second quarter of 2013. The first production aircraft (SN 7) will go to the **French Air Force**, according to information released by **Airbus Military's** parent company, **EADS** on November 7. The manufacturer intends to deliver three more A400Ms in 2013, another two to France and the third will be the first Atlas for the **Turkish Air Force**. Development of the Atlas was slowed by problems with the **Europrop International** TP400-D6 turboprop engines early in 2012, but corrections are at an advanced stage, **Airbus Military** said. The manufacturer received new orders for 30 military aircraft by the end of September 2012, and it delivered 11 aircraft worth almost \$1.2 billion (\$1.5 billion).

A330 MRTT Orders. The **French Armée de l'Air (Air Force)** said it intends to buy 14 A330 Multi Roll Tanker Transports. The French will replace its 14 ancient KC-135RF tankers, three aging A310-300s and two VIP A340s with the A330 MRTTs. The purchase was first mentioned in the press in November 2011 and it is now closer to completion. The **Indian Defense Ministry** opened a tender for six aerial refueling planes in 2006. The **Ilyushin** Il-78 and **Airbus** 330 MRTT were the main competitors and India chose the A330 MRTT in May 2009. The government cancelled the order in

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January, saying the airplanes were too expensive. The contract was renegotiated, and on November 1, the **Indian Air Force** announced that **Airbus** would be the preferred vendor. It is probable that **Boeing** offered the KC-767/KC-46 when it made its pitch to sell the C-17A and P-8I to India, but the 767-based tanker was rejected.

Alenia Aermacchi and L-3 Communications Integrated Systems have reached an agreement about the **Joint Cargo Aircraft (JCA)** program. The Italian partner will now offer the C-27J Spartan directly to potential customers through the **Pentagon's Foreign Military Sales (FMS)** program. **Alenia** can now promote the tactical transport as a direct commercial sale, or through its **Alenia North America** subsidiary. It can continue to work with **L-3** as the contract lead if a buyer requests it. The new deal gives **Alenia** more flexibility as a subcontractor. In 2006, **Alenia Aermacchi** teamed up with **L-3** to sell 78 C-27Js to the **U.S. Air Force** and **U.S. Army**. The **Pentagon** cancelled 57 aircraft last year after only 17 had been delivered. The last four C-27Js are now on the final assembly line at the Turin-Caselle factory in Italy. The final plane will be flown to **L-3's** completion centre in Waco, Texas, in 2013. **L-3** installs U.S.-specific communications and self-protection equipment. It will install the same equipment on 10 Spartans for the **Royal Australian Air Force**. The **RAAF** ordered the C-27J through the **FMS** system in May 2012. The first aircraft is due for delivery in 2015. An undisclosed nation ordered several Spartans keeping the assembly line in Turin open until 2017. **Alenia Aermacchi** is chasing further sales from Canada, India, Saudi Arabia, Slovakia and South Africa.

The Saudi Arabian Government made a request to purchase 25 **Lockheed Martin C-130J-30s** for airlift and in-flight refueling. The contract for the latest generation of Hercules could be worth up to \$6.7 billion (\$268 million each). The airplanes will modernize the **Royal Saudi Air Force's (RSAF)** air transport capabilities. They currently operate seven KC-130H tankers and 31 C-130H transports; the oldest of which was built in 1973. The **RSFAF** wants 20 stretched-fuselage C-130J-30s and five KC-130J tankers, along with associated equipment and maintenance services. The U.S. **Defense Security Cooperation Agency (DSCA)** notified the U.S. Congress, which must approve the sale. **Lockheed Martin** previously sold C-130Js and KC-130Js to Iraq, Kuwait, Oman, Qatar and the United Arab Emirates through the **DSCA**.

AIRCRAFT DELIVERIES & SALES

Jet Aircraft

Airbus A318 & A319. **Airbus** delivered four A319s in October, including three -115s (SN 5273, 5330 & 5338) to **China Eastern Airlines**. A private operator, **Rotana Jet Aviation**, Abu Dhabi, received one ACJ319-115X (SN 5277) in mid-month.

Airbus A320. **Airbus** delivered 32 A320s in October, including two -232s (SN 5302 & 5312) to **JetBlue Airways** after a long-hiatus in new deliveries. Several other airlines accepted two A320s each in October; **Volaris** bought two -223s (SN 5308 & 5337), and **IndiGo** received two -232s (SN 5291 & 5313). **LAN Airlines** accepted two -214s (SN 5316 & 5324), and **Qantas** took delivery of two -232s (SN 5281 & 5323). The first was leased to **Jetstar Japan**, and the latter was leased by **Jetstar Asia**. **BOC Aviation** leased two -232s (SN 5305 & 5311) to **Qantas**. The first was subleased to **Jetstar Asia** and the second to **Jetstar Airways**, in Australia. **Hong Kong Airlines** accepted two -214s (SN 5331 & 5341) and leased the first one to **Capital Airlines Beijing**. **GE Capital Aviation Services (GECAS)**

leased two -214s (SN 5329 & 5339) to **Juneyao Airlines**, the fifth new -214 (SN 5304) to **Peach Aviation**, and one -214 (SN 5310) to **AirPhil Express**. **AWAS** leased the first of two new -232s (SN 5315) to **Philippine Airlines (PAL)**. **Air Lease Corp.** leased -232 (SN 5326) to **China Eastern Airlines**. **Lucky Air** leased new Tianjin factory-built -214 (SN 5100) from **Hainan Airlines**. **Airbus FAL** in Tianjin delivered one -214 (SN 5110) to **Shenzhen Airlines**, and one -232 (SN 5121) to **Sichuan Airlines**. **Thai AirAsia** leased -216 (SN 5344) from **ICBC Financial Leasing Co.**, and **Air Asia** took delivery of one -216 (SN 5325), it was leased to **AirAsia Japan**. **Cebu Pacific Airlines**, Philippines, received -214 (SN 5320), and **Tiger Airways** leased the first new -232 (SN 5335) to newly launched **Tiger Mandala Indonesia**. Elsewhere in the world, **Air Arabia** took delivery of -214 (SN 5307), and **Aviation Capital Leasing** leased -214 (SN 5299) to **Avianca Brazil**. Also, **easyJet** accepted its 55th of 70 -214s (SN 5318), and **TAM** received -214 (SN 5342). Lastly, **Qatar Airways Emiri Flight** bought one ACJ320-232 (SN 5255). The plane was leased back to **Airbus** for use as a Sharklet winglet test bed.

ICBC Financial Leasing Co., a Chinese aircraft lessor, took delivery of its first A320-200 on October 30. **ICBC's** A320-216 is equipped with 180 seats and powered by **CFM International** engines, and was leased to low cost carrier **Thai AirAsia**. The leasing company ordered 42 A320s in June 2011 and placed a repeat order for 30 A320ceo and 20 A320neo aircraft in August 2012. **ICBC Leasing** said it intends to become one of the top lessors in the world. It is a wholly owned subsidiary of **Industrial and Commercial Bank of China (ICBC)**, and was founded in November 2007. **ICBC Leasing** owns and manages 77 aircraft. Chinese airlines acquired their first A320 Family aircraft in 1995. Today there are approximately 715 A320 Family aircraft in service with 15 operators.

Hong Kong Aviation Capital (HKAC) bought another new A320-232 from **Indigo Airlines** in November and leased it back. This is the 12th A320 **HKAC** has on lease with **Indigo**. **Pembroke Aircraft Leasing** bought two **IndiGo** - 232s (SN 5291 & 5313) in October and leased them back to the airline.

AWAS leased the last new A320-200 to **Royal Jordanian** in November. The airline and leasing company signed a lease contract for the seven A320 Family aircraft in early 2011, and the planes came from **AWAS'** order backlog.

International Lease Finance Corporation (ILFC) leased one used A320-214 (SN 973) to **Myanmar Airways International (MAI)**. The A320 will modernize and expand the airline's current fleet of six A320s by offering increased takeoff weight, greater range and improved fuel economy. **Myanmar Airways International** was launched in 1993 as a joint venture, 20 percent owned by the government and 80 percent by **Kanbawza Group**. **MAI** flies between Yangon, Singapore, Kuala Lumpur, Bangkok, Gaya and Guangzhou. It will add flights to Cambodia and Hong Kong. **MAI** is negotiating with **Airbus** and **Boeing** about ordering either A320neos or 737 MAX.

Airbus A321. **Airbus** delivered seven A321s in October, including two -231s (SN 5317 & 5332) to **US Airways**. **Vietnam Airlines** took delivery of one -231 (SN 5297) and leased another two -231s (SN 5306 & 5340) from **Vietnam Aircraft Leasing**. **China Eastern Airlines** acquired one -231 (SN 5309).

Airbus A330 & A340. Airbus delivered one A330-200, one A330-200F and seven -300s in October. **Alitalia** leased -202 (SN 1354) from **Airbus Financial Services**. The airline now operates a dozen -202s. **Turkish Airways (THY)** acquired its third of five -243Fs (SN 1344). **Thai Airways International** received one -343E (SN 1348), and **Cathay Pacific Airways** accepted one -343E (SN 1349). **China Airlines** leased one -302 (SN 1346) from **GECAS**, and **Virgin Atlantic** received -343E (SN 1341). **Air China** acquired one -343X (SN 1353) and **Swiss International Air Lines** purchased -343X (SN 1355).

Aeroflot, the Russian national carrier, took delivery of another A330-343X (SN 1356) on October 30, which is the 100th Airbus aircraft to enter service with the airline. The A330 is powered by **Rolls-Royce** Trent 700 engines, and features a two-class cabin layout seating 296 passengers. **Aeroflot** was the first Russian airline to operate the A310 (1992), as well as the first A320 Family (2003) and the A330 Family (2008). It currently operates a fleet of 79 A320 Family aircraft and 21 A330 Family aircraft.

Airbus A380. Airbus delivered three A380-861s (SN 105, 106 & 107) to **Emirates** in October. It also delivered the third and fourth -841s (SN 089 & 094) to **Malaysia Airlines**, out of six ordered. The five A380s mark a new record of super jumbo deliveries.

EVA Air, Taiwan, became a new operator of **Airbus** single aisle aircraft when it took delivery of its first A321-211 (SN 5328) on October 31. The aircraft was leased from **Aviation Capital Group (ACG)** and the plane is the first of 12 A321s ordered by the U.S. lessor. **EVA** plans to lease a dozen A321s between now and the end of 2014. They will be operated on regional routes. The airplane is fitted with a two-class, 184-passenger cabin. All of **EVA's** A321 fleet will be powered by **CFM International** CFM56 engines.

Doric acquired its 17th A380 under management, an -861 (SN 109) from **Emirates** on November 9. The A380 was purchased by **Doric Nimrod Air Finance Alpha Limited (Doric Alpha)**, a wholly owned subsidiary of **Doric Nimrod Air Two Limited**. The A380 was leased to **Emirates** for 12 years, and was the third of the four aircraft financed through **Doric Alpha**. The fourth will be handed over late this year. **Doric Alpha** said it was using **Enhanced Equipment Trust Certificates (EETC)s** worth almost \$590 million to help finance the purchase of four A380s from **Emirates**.

Boeing 737NG. Boeing delivered 32 737s in October, including three -823/Ws (SN 31155, 31156 & 33317) to **American Airlines**. Elsewhere in the Americas, **Alaska Airlines** received one -990ER/W (SN 41189), **Southwest Airlines** accepted one -8H4/W (SN 36997), and **United Air Lines** bought one -924ER/W (SN 37206). The **United States Navy** accepted its seventh P-8A Poseidon -8FV (SN 40817). **Boeing** delivered one -852/W (SN 36702) to **Aeromexico**, and one -8V3/W (SN 38142) to **COPA Airlines**. **GOL Transportes Aereos** leased -8HX/W (SN 38878) from **Aviation Capital Group**. In Europe, **Air Berlin** received one -86J/W (SN 36872), and **Norwegian Air Shuttle** obtained one -8JP/W (SN 39050). **Boeing** delivered four 737s to Australia; **Qantas** accepted two more -838/Ws (SN 39360 & 39361) and **Virgin Australia Airlines** bought one -8FE/W (SN 39818). **Virgin Australia** leased another -8FE/W (SN 39926) from **RBS Aviation Capital**. In the Middle East, **flydubai** took delivery of one -8KN/W (SN 40255), and **Turkish Airlines** acquired another -9F2ER/W (SN 40984). In Africa, **Ethiopian Airlines** received one -860/W (SN 40962), and **Comair Limited**, South Africa, obtained its first -8LD/W (SN 40852). The bulk of **Boeing's** 737 deliveries went to Asia, including two -89L/Ws (SN 40025 & 40036) to **Air China**, one -89P/W (SN 39722) to **China Eastern Airlines**, and one

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81B/W (SN 38931) to **China Southern Airlines**. **Xiamen Airlines** received one -85C/W (SN 38397), and **All Nippon Airways** acquired one -881 (SN 33912). **Lion Air** took delivery of two more -8GP/Ws (SN 38682 & 38724), for a total of 11. **Malaysia Airlines** accepted one -8H6/W (SN 40138) and leased another -8H5/W (SN 39326) from **BBAM—Babcock & Brown**. **Air Lease Corp.** leased -8SH/W (SN 41300) to **Korean Air**, and **AWAS** leased one -8GH/W (SN 39427) to **Spicejet**.

International Lease Finance Corporation (ILFC) purchased the 15th and final 737-823 from **American Airlines** on November 14. In 2011, the two parties agreed to a sale-leaseback program. The aircraft came from **American's** order book. The first **American** -823 was purchased by **ILFC** in November 2011. **ILFC** delivered a new 737-800 to **China United Airlines**, a subsidiary of **China Eastern Airlines**, in November.

The Republic of Korea Air Force (ROKAF) took delivery of its fourth 737-7ES Airborne Early Warning and Control (AEW&C) aircraft (SN 35329) on October 24. The aircraft first flew in June 2010 and has been undergoing modification to an AEW&C surveillance and battlefield management aircraft in Korea since then. It was registered to **Boeing** until the handover to the **ROKAF**.

Boeing Announced the delivery of the 7,370th 737 to come off the production line to Indonesia-based **Lion Air** on November 7. The airplane was **Lion Air's** 75th Next-Generation 737. **Boeing** has sold more than 10,100 737s since selling the first one to launch customer Lufthansa in February 1965.

Boeing 747. **Cathay Pacific Airways** took delivery of its eighth of 10 747-867F freighters (SN 39246), and **Lufthansa German Airlines** acquired its fourth of 10 -830s (SN 37830).

Boeing 767. **LAN Airlines** received its 30th -316ER (SN 40593). The airline has five more on order. **DHL International** accepted its fifth of six -3JHERF (SN 37809) in late October.

United Airlines sold another ex-**Continental** 767-224ER (SN 30430) to **BLF Ltd. (Bermuda)**. The aircraft was delivered in 2000 and will be operated by **UTair** (Russia). It is the third of eight -224ERs that **UTair** is acquiring in order to expand its long-haul scheduled and charter services. **Bristol Associates** acted as remarketing agent for **United**.

Boeing 777. **Boeing** delivered the 10th -39LER (SN 38674) to **Air China**. The airplane was painted with a distinctive design of 40 smiling faces of Chinese people. This represents the critical role that the Chinese aviation industry has played in bringing China to the world. **Air China** has another nine -300ERs on order. The airline will use the 777s for route expansion, including direct routes to Frankfurt, London and Paris from Beijing. Another six 777s were delivered in October, including one -31HER (SN 41082) to **Emirates**, and the seventh of 12 -32WERs (SN 38888) to **TAM**. **BOC Aviation** leased -3ALER (SN 41521) to **Thai Airways International**. **GECAS** leased a second iF6N freighter (SN 41817) to **Ethiopian Airlines**. **LAN Airlines** took delivery of its second iF16 (SN 41518), and **FedEx** accepted its 19th of 29 iFS2 freighters (SN 41066). To date, 63 customers around the world have ordered 1,380 777s.

Air India did not receive any bids to buy five its **Boeing** 777s so it pulled them from the market. The flag carrier will now reconfigure some 777s to all-economy seating and put them on services to the Gulf

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region. The airline expects this will cut losses but will still not earn a profit. The **Indian Government** recently injected \$5.8 billion into the debt-crippled state carrier.

Boeing 787. **Ethiopian Airlines** took delivery of its second and third -8 Dreamliners (SN 34746 & 34747) in October, **All Nippon Airways** accepted its 16th -8 (SN 34507), and **Air India** received its third -8 (SN 36277); the airline has 24 more on order. **United Airlines** received its second -8 (SN 34829) from **Boeing** on October 31. Another three 787s will be delivered in November and December. Both are being prepped for pre-delivery flight tests. **LAN Airlines** acquired its third of 10 -8s (SN 38466).

In November, Boeing Employees rolled out the first 787 Dreamliner built at the new rate of five-airplanes-per-month. The airplane was the 83rd 787 to be built. Early in 2012, the production rate was increased from 2.5 to 3.5 airplanes per month. **Boeing** is on track to achieve its planned 10-per-month rate by late 2013, in both production plants at **Boeing South Carolina** and **Everett**. The 787 program has more than 800 unfilled orders with 58 customers worldwide.

Qatar Airways acceptance of its first Boeing 787-8 (SN 38320) on October 5 was six weeks later than the scheduled August delivery date. It was the first of 30 **General Electric** GEnx-powered 787s that **Qatar** has on firm order. The airline has an additional 30 on option. The plane had interior completion work performed at Victorville, California, and the plane flew to Doha, Qatar, on November 12. The 787 was the first to be operated by an airline in the Middle East. **Qatar Airways'** first 787 was also the 33rd Dreamliner to be delivered.

LOT Polish Airlines took delivery of its first 787-8 Dreamliner (SN 36938) on November 9. The Polish flag carrier is the first European airline to receive a 787. **LOT** will use the 787 for short-haul flights within Europe in December, and will put the Dreamliner on its Warsaw-Chicago route in January 2013. Later **LOT** will fly 787s from Warsaw to Beijing, New York, and Toronto. The **Export-Import Bank of the United States** approved a comprehensive \$500 million loan to **LOT** to finance the export of eight 787s to Poland. The loan was extended to the airline by **Apple Bank for Savings** in New York, and was co-financed by **Nippon Export and Investment Insurance** of Japan.

Bombardier. **RwandAir**, Rwanda, took delivery of two CRJ900 NextGen jets (SN 15286 & 15287) in late October. The airline placed its order for two CRJ900NGs and optioned two more in March. **Bombardier** has two CRJ900NGs (SN 15281 & 15283) on its ramp that are painted in **Iraqi Airways** colors. Apparently, the airline cancelled its outstanding orders for the CRJ900s because it wanted larger aircraft. **Comair** sold 13 CRJ900s to **Delta Air Lines** in October. The planes were leased to **ExpressJet Airlines** and **SkyWest Airlines**.

Bombardier delivered the first two CRJ1000 NextGens (SN 19025 & 19026) to **Garuda Indonesia** in October. The flag carrier became the Asia-Pacific region's CRJ1000 launch customer when it bought six and optioned 18 more aircraft. **Garuda** intends to lease another 12 CRJ1000s from leasing companies.

Embraer Deliveries. The manufacturer delivered a second EMBRAER 170-200 LR (E175) (SN 17000352) to **Air Lease Corporation** in October. It was leased to **Belavia**, Belarus. **Fuji Dream Airlines** will take delivery of E170 (SN 17000332) sometime soon.

BOC Aviation purchased its second EMBRAER 190-100LR (SN 19000543) in October. The E190 was leased to **Air Astana**, Kazakhstan, and a third will be delivered sometime in 2013. **ConViasa**, Venezuela, accepted its third E190 (SN 19000505) in October. The airline will take delivery of E190s (SN 19000485) shortly. **JetBlue Airways** took delivery of E190 (SN 19000576), after taking a break from buying new aircraft. **Kenya Airways** acquired E190 (SN 19000577) in mid-October. It was the 900th E-Jet to be delivered by **Embraer**.

Turboprops

ATR delivered two ATR 72-600 (SN 1047 & 1052) to **Azul Linhas Aéreas Brasileiras**, and one ATR 72-500 (SN 1048) to **Wings Abadi Airlines**, Indonesia, in October. **Lao Airlines** accepted ATR 72-600 (SN 1049), and **Flybe Nordic** received -600 (SN 1050). **Air New Zealand** took delivery of its first -600 (SN 1051); it was painted in an all-black livery as part of the airline's support for New Zealand's **All Blacks** national rugby team. In October 2011, the airline ordered seven 68-seat ATR 72-600s and optioned another five in a deal worth more than \$270 million (\$38.6 million each). **Air New Zealand's** subsidiary **Mount Cook** currently operates 11 ATR 72-500s.

Precision Air Services, Tanzania, took delivery of the first ATR 42-600 (SN 1001) to enter airline service. It was the first of four ATR 42-600s and one ATR 72-600 that the airline ordered in December 2011. The delivery ceremony took place on November 9. The second ATR 42-600 will be delivered by the end of the year. The rest of the ATR 42s will be handed over in 2013 and the ATR 72-600 is scheduled for 2014.

Bombardier delivered two Dash 8Q-402 NextGens (SN 4419 & 4421) to **Ethiopian Airlines** in October. **Colgan Air** sold 15 Dash 8Q-400s to **Regional Equipment Trust**, which subsequently leased them to **Republic Airlines**.

EADS-CASA delivered two C295s (SN 089 & 092) to the **Polish Air Force** in October.

Viking Air delivered DHC-6-400 (SN 862) to the **U.S. Army Golden Knights** in October. They will take delivery of one more (SN 863) by the end of the year. **Vityaz Avia Corporation**, Russia, accepted delivery of two -400s (SN 860 & 861) in late October. The **Peruvian Air Force (FAP)** received one -400 (SN 865), a French operator acquired one -400 (SN 855), and one -400 (SN 866) was ferried across the Pacific for **Airfast Indonesia**.

Intel Corporation's flight department took delivery of two new **Embraer Executive Jets**, ERJ-145XR Corporate Shuttles (SN 14501153 & 14501159) in October, for service in North America. The ERJ-145XR offers a range of 2,000 nautical miles with 50 passengers, and it is equipped with winglets and **Rolls-Royce** AE3007A1E engines. The 50-seaters are equipped with new slim seats, power outlets at each seat, state-of-the-art wireless internet system and **Honeywell** avionics. **Embraer Executive Jets** offers an extensive portfolio of Corporate Shuttles based on the ERJ-135/145 regional jets and EMBRAER 170/190 commercial jets.

Antiques and Other Junque

Reliance Aircraft International, Austin, Texas, purchased one ex-**Malaysia Airlines** 737-400 (SN 27096). The aircraft will be disassembled for parts.

Accidents and Safety

From Aviation Safety Foundation

Five Turboprops Crashed Recently; three of them were government/military transports.

Cetraca Aviation Service Let L-410UVP (9Q-CAZ, SN:790205) was substantially damaged when it left the runway after landing at **Butembo Airport**, Democratic Republic of the Congo, on October 30. The fifteen passengers and three crewmembers survived the accident.

République du Tchad Beechcraft 1900D (TT-ABB, UE-406) missed the runway on landing at Bir Kalait, Chad, on October 28. The plane's undercarriage collapsed, causing all propeller blades to separate which damaged the side of the fuselage. The aircraft was carrying Chad's President **Idriss Deby** and his retinue. All the occupants survived the accident.

Skyward International Aviation Fokker 50 (5Y-CAN, SN 20175) crashed upon landing at **Aweil Airport**, South Sudan, on November 15. Some of the 57 occupants sustained injuries. The plane was a write off since the left hand wing separated from the fuselage.

Yemen Air Force Antonov 26 (420, SN unknown) came down in the abandoned Al-Hasaba Marketplace about 9 kilometers from **Sana'a International Airport**, Yemen, on November 21. The airplane was destroyed and all ten crewmembers were killed.

Al Quwwat al-Jawwiya al-Jaza'eriya (Algerian Air Force) CASA C-295M (7T-WGF SN S-026) came down on a hillside and burst into flames near Saint-Germain-du-Teil, Lozère, France, on November 9. The two crew and all four passengers were killed. The plane was flying from Paris to Blida **Airport**, Algeria.

An Emirates A380-861 returned to Sydney, Australia, after one of its engines caught fire 20 minutes after take-off on November 11. The plane was bound for Dubai with 380 passengers on board and flying at 10,000 feet when it shuddered and flames shot out the back of one engine. The **Emirates** A380s are powered by **Engine Alliance** GP7200 engines.

AVMARK CAPABILITIES

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

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

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

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PUBLICATIONS

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

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

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

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

STA is designed as an easy to use reference guide to compare the operating and cost parameters of 35 regional jet and turboprop aircraft. Information includes development history, current production status, configuration and operating performance and costs as reported to the DOT. Pictures of each aircraft are also included.

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ATR 42-300In Service: 1985 Orders: Out of Production Deliveries: 284

Specifications	
Accommodations	
Passengers*	46
Pilots	2
Cabin Attendants	1
Powerplant	
2 Pratt & Whitney PWC120 Turboprops	1,800 SHP / 1,342 kW
Hartzel Propellers	4 blade

74 吋 5 in
80 吋 7 in
24 吋 11 in
48 吋 3 in

ATR 42-300

Standard Equipment: Right engine Propeller Brake, Airsearch Air Conditioning, Stall Warning

Optional Equipment: 10 ALCOA, 02H48, 02H49, 02H50, 02H51, 02H52, 02H53, 02H54, 02H55, 02H56, 02H57, 02H58, 02H59, 02H60, 02H61, 02H62, 02H63, 02H64, 02H65, 02H66, 02H67, 02H68, 02H69, 02H70, 02H71, 02H72, 02H73, 02H74, 02H75, 02H76, 02H77, 02H78, 02H79, 02H80, 02H81, 02H82, 02H83, 02H84, 02H85, 02H86, 02H87, 02H88, 02H89, 02H90, 02H91, 02H92, 02H93, 02H94, 02H95, 02H96, 02H97, 02H98, 02H99, 03H00, 03H01, 03H02, 03H03, 03H04, 03H05, 03H06, 03H07, 03H08, 03H09, 03H10, 03H11, 03H12, 03H13, 03H14, 03H15, 03H16, 03H17, 03H18, 03H19, 03H20, 03H21, 03H22, 03H23, 03H24, 03H25, 03H26, 03H27, 03H28, 03H29, 03H30, 03H31, 03H32, 03H33, 03H34, 03H35, 03H36, 03H37, 03H38, 03H39, 03H40, 03H41, 03H42, 03H43, 03H44, 03H45, 03H46, 03H47, 03H48, 03H49, 03H50, 03H51, 03H52, 03H53, 03H54, 03H55, 03H56, 03H57, 03H58, 03H59, 03H60, 03H61, 03H62, 03H63, 03H64, 03H65, 03H66, 03H67, 03H68, 03H69, 03H70, 03H71, 03H72, 03H73, 03H74, 03H75, 03H76, 03H77, 03H78, 03H79, 03H80, 03H81, 03H82, 03H83, 03H84, 03H85, 03H86, 03H87, 03H88, 03H89, 03H90, 03H91, 03H92, 03H93, 03H94, 03H95, 03H96, 03H97, 03H98, 03H99, 04H00, 04H01, 04H02, 04H03, 04H04, 04H05, 04H06, 04H07, 04H08, 04H09, 04H10, 04H11, 04H12, 04H13, 04H14, 04H15, 04H16, 04H17, 04H18, 04H19, 04H20, 04H21, 04H22, 04H23, 04H24, 04H25, 04H26, 04H27, 04H28, 04H29, 04H30, 04H31, 04H32, 04H33, 04H34, 04H35, 04H36, 04H37, 04H38, 04H39, 04H40, 04H41, 04H42, 04H43, 04H44, 04H45, 04H46, 04H47, 04H48, 04H49, 04H50, 04H51, 04H52, 04H53, 04H54, 04H55, 04H56, 04H57, 04H58, 04H59, 04H60, 04H61, 04H62, 04H63, 04H64, 04H65, 04H66, 04H67, 04H68, 04H69, 04H70, 04H71, 04H72, 04H73, 04H74, 04H75, 04H76, 04H77, 04H78, 04H79, 04H80, 04H81, 04H82, 04H83, 04H84, 04H85, 04H86, 04H87, 04H88, 04H89, 04H90, 04H91, 04H92, 04H93, 04H94, 04H95, 04H96, 04H97, 04H98, 04H99, 05H00, 05H01, 05H02, 05H03, 05H04, 05H05, 05H06, 05H07, 05H08, 05H09, 05H10, 05H11, 05H12, 05H13, 05H14, 05H15, 05H16, 05H17, 05H18, 05H19, 05H20, 05H21, 05H22, 05H23, 05H24, 05H25, 05H26, 05H27, 05H28, 05H29, 05H30, 05H31, 05H32, 05H33, 05H34, 05H35, 05H36, 05H37, 05H38, 05H39, 05H40, 05H41, 05H42, 05H43, 05H44, 05H45, 05H46, 05H47, 05H48, 05H49, 05H50, 05H51, 05H52, 05H53, 05H54, 05H55, 05H56, 05H57, 05H58, 05H59, 05H60, 05H61, 05H62, 05H63, 05H64, 05H65, 05H66, 05H67, 05H68, 05H69, 05H70, 05H71, 05H72, 05H73, 05H74, 05H75, 05H76, 05H77, 05H78, 05H79, 05H80, 05H81, 05H82, 05H83, 05H84, 05H85, 05H86, 05H87, 05H88, 05H89, 05H90, 05H91, 05H92, 05H93, 05H94, 05H95, 05H96, 05H97, 05H98, 05H99, 06H00, 06H01, 06H02, 06H03, 06H04, 06H05, 06H06, 06H07, 06H08, 06H09, 06H10, 06H11, 06H12, 06H13, 06H14, 06H15, 06H16, 06H17, 06H18, 06H19, 06H20, 06H21, 06H22, 06H23, 06H24, 06H25, 06H26, 06H27, 06H28, 06H29, 06H30, 06H31, 06H32, 06H33, 06H34, 06H35, 06H36, 06H37, 06H38, 06H39, 06H40, 06H41, 06H42, 06H43, 06H44, 06H45, 06H46, 06H47, 06H48, 06H49, 06H50, 06H51, 06H52, 06H53, 06H54, 06H55, 06H56, 06H57, 06H58, 06H59, 06H60, 06H61, 06H62, 06H63, 06H64, 06H65, 06H66, 06H67, 06H68, 06H69, 06H70, 06H71, 06H72, 06H73, 06H74, 06H75, 06H76, 06H77, 06H78, 06H79, 06H80, 06H81, 06H82, 06H83, 06H84, 06H85, 06H86, 06H87, 06H88, 06H89, 06H90, 06H91, 06H92, 06H93, 06H94, 06H95, 06H96, 06H97, 06H98, 06H99, 07H00, 07H01, 07H02, 07H03, 07H04, 07H05, 07H06, 07H07, 07H08, 07H09, 07H10, 07H11, 07H12, 07H13, 07H14, 07H15, 07H16, 07H17, 07H18, 07H19, 07H20, 07H21, 07H22, 07H23, 07H24, 07H25, 07H26, 07H27, 07H28, 07H29, 07H30, 07H31, 07H32, 07H33, 07H34, 07H35, 07H36, 07H37, 07H38, 07H39, 07H40, 07H41, 07H42, 07H43, 07H44, 07H45, 07H46, 07H47, 07H48, 07H49, 07H50, 07H51, 07H52, 07H53, 07H54, 07H55, 07H56, 07H57, 07H58, 07H59, 07H60, 07H61, 07H62, 07H63, 07H64, 07H65, 07H66, 07H67, 07H68, 07H69, 07H70, 07H71, 07H72, 07H73, 07H74, 07H75, 07H76, 07H77, 07H78, 07H79, 07H80, 07H81, 07H82, 07H83, 07H84, 07H85, 07H86, 07H87, 07H88, 07H89, 07H90, 07H91, 07H92, 07H93, 07H94, 07H95, 07H96, 07H97, 07H98, 07H99, 08H00, 08H01, 08H02, 08H03, 08H04, 08H05, 08H06, 08H07, 08H08, 08H09, 08H10, 08H11, 08H12, 08H13, 08H14, 08H15, 08H16, 08H17, 08H18, 08H19, 08H20, 08H21, 08H22, 08H23, 08H24, 08H25, 08H26, 08H27, 08H28, 08H29, 08H30

Rockwell International, 10000 North Main Street, Littleton, CO 80120-1099; Honeywell Aerospace Systems, VLF/Omega Long Range Navigation System, Dual Honeywell AZ-800 Digital Air Data Computers, PA System, HF Radio, Collins Avionics in place of King Avionics, CAT II.

Avionics: EDZ 820 Electronic Flight Instrument System (EFIS) - 4 CRT's for dual engine
Attitude and Heading Reference Systems (AHRS)
Computers (ADC), 1 DFZ 600 Automatic Flight
Director, 1 DFZ 600 Flight Director, Dual King Gold Crown
Dual King Gold Crown VHF Nav. Radios, DME
Radio Altimeter, Honeywell P-600 Weather R

Price List	
Years Built	Base (\$ m)

Utilization (Block Hours / Year) _____

Average Stage Length (nm)	100	300
---------------------------	-----	-----

Flying Operations		
Flight Crew, Salaries / Expenses	\$168	\$18
Fuel, Oil, Taxes	\$173	\$16
Other	\$3	\$3

Aircraft Costs		
Insurance	\$3	\$3
Maintenance	\$476	\$41
Depreciation	\$62	\$6
Rentals	\$318	\$31

Total Direct Operating Costs	\$906	\$831
Cost per Available Seat Mile - ϕ	12.33	9.60
Cost per Airplane Mile	\$5.67	\$4.44
Cost per Seat Block Hour	\$19.67	\$18.00

Note: Data from DCFP's *Active Filings*.

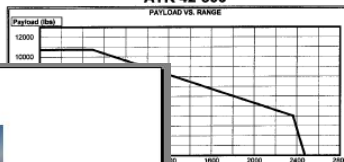
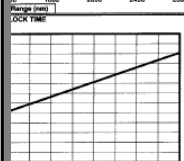
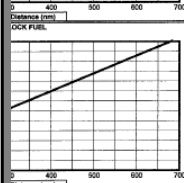
SMALL TRANSPORT AIRCRAFT

*A Catalog
of
New and Used
Commuter / Regional*

2004

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ATR 42-300



ATR 42



THE AVIONS DE TRANSPORT REGIONAL (ATR) first flew in August 1984, and entered service in December 1985 with the French regional Brit Air. The aircraft is a joint venture between Aerospatiale of France and Aeritalia of Italy. The ATR 42's name originally designated it as a 42 passenger aircraft, but subsequent reduction of the forward baggage compartment now allows for a seating configuration of up to 50 passengers.

The baseline aircraft is the ATR 42-300/320 powered respectively by PW120/121 engines. The latest version is the ATR 42-500 powered by PW127e engines and Hamilton six bladed propellers. Thus increasing the payload to 12 015 lb and the cruise speed to 300 kts.

The standard front cargo door allows the aircraft to be quickly converted from a passenger layout to freighter. Unique among turboprops, is the integration of a Propeller Brake on the right engine, which allows running of the engine in "Hotel Mode" to provide aircraft electrical power and air conditioning without the inconvenience and safety hazards of a rotating propeller.

The ATR 42 and ATR 72 have a very high degree of commonality, allowing for cross-crew qualification and a common spare parts holding.

TYPICAL CABIN CONFIGURATION

48-seats in a four-abreast layout with a center aisle. Access to the cabin is by an air stair at the rear passenger door, and a modular galley in the rear of the aircraft is serviced through the same door. A standard toilet is located in the rear of the aircraft behind the passenger door. Baggage is accommodated in overhead bins on both sides of the cabin, under seat stowage, in an externally accessed forward and aft baggage compartment, and in a closet.

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Select Aircraft Type

Available Aircraft

- Airbus A300B4-600R
- Airbus A300B4-600RF
- Airbus A310-200
- Airbus A310-200F
- Airbus A310-300
- Airbus A310-300F
- Airbus A318
- Airbus A319-100
- Airbus A320-100
- Airbus A320-200
- Airbus A321-100
- Airbus A321-200
- Airbus A330-200
- Airbus A330-300
- Airbus A340-200
- Airbus A340-300
- Airbus A340-500
- Airbus A340-600
- Airbus A350-800
- Airbus A350-900
- Airbus A380-800
- Avro RJ-100
- Avro RJ-70
- Avro RJ-85
- BAe 111-200/300/400/500

Picture



Selected: Airbus A340-300

Description: Widebody 4 Engine Passenger

Manufactured: 1992 To 2006

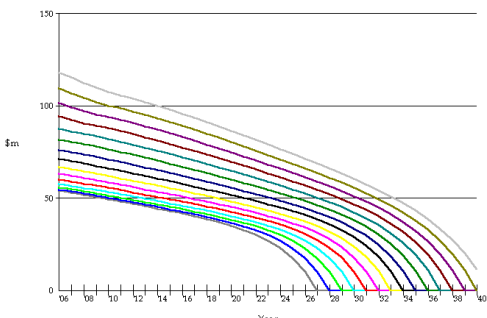
Values: \$54.00m To \$118.00m

Estimated Life: 35 years File No. 013

Search Term

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CAVAS Graph



Profit & Loss Report

Aircraft Type	Airbus A340-300				
Period	1	2	3	4	5
REVENUES (US\$)					
Passengers	49,328,754	49,270,739	49,212,559	49,154,213	49,095,701
Freight & Mail	8,879,176	8,868,733	8,858,261	8,847,758	8,837,226
Other Revenue	986,575	985,415	984,251	983,084	981,914
TOTAL OPERATING REVENUE	59,194,505	59,124,887	59,055,070	58,985,055	58,914,841
VARIABLE EXPENSES					
Fuel	6,918,375	6,918,375	6,918,375	6,918,375	6,918,375
Landing Fees	3,021,823	3,021,823	3,021,823	3,021,823	3,021,823
Enroute Charges	392,440	392,440	392,440	392,440	392,440
Pax Commissions	7,399,313	7,399,313	7,399,313	7,399,313	7,399,313
Freight Commissions	1,331,876	1,331,876	1,331,876	1,331,876	1,331,876
Food & Supplies	3,993,194	3,993,194	3,993,194	3,993,194	3,993,194
Passenger Liability Insurance	379,590	379,590	379,590	379,590	379,590
TOTAL VARIABLE COST	23,443,212	23,443,212	23,443,212	23,443,212	23,443,212
SEMI-VARIABLE EXPENSES					
Crew Salaries & Expenses	5,177,760	5,177,760	5,177,760	5,177,760	5,177,760
Maintenance & Engineering	587,650	587,650	587,650	587,650	587,650

Profit & Loss Report

Aircraft Type: Airbus A340-300

Period	1	2	3	4	5
FIXED EXPENSES					
Station Overhead	346,597	345,923	345,249	344,575	343,901
Maintenance Burden	176,295	351,824	526,586	700,581	873,810
Other Overhead	0	0	0	0	0
TOTAL FIXED COST	522,892	697,747	871,835	1,045,156	1,217,711
TOTAL OPERATING COST	31,464,497	32,185,749	32,903,601	33,618,052	34,329,104
General and Admin. Allocation	1,573,225	1,609,287	1,645,180	1,680,303	1,716,455
TOTAL COST	33,037,722	33,795,036	34,548,781	35,298,355	36,045,559
OPERATING PROFIT OR LOSS	26,156,782	25,329,851	24,506,290	23,686,100	22,869,282
D-CHECK ADJUSTMENT					
Cumulative Hours	4,830	9,650	14,459	19,257	24,045
Cumulative Dollars	315,000	0	0	0	0
ADJUSTED CASH FLOW	25,841,782	25,329,851	24,506,290	23,686,100	22,869,282
AIRCRAFT LIFE ADJ. CASH FLOW	25,841,782	25,329,851	24,506,290	23,686,100	22,869,282

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Small Transport Aircraft Catalog:

\$350 US per Year (Current)

STA is designed as an easy to use reference guide to compare the operating and cost parameters of 35 regional jet and turboprop aircraft. Information includes development history, current production status, configuration, and operating performance and costs as reported to the DOT. Pictures of each aircraft are also included.

Samples of all publications are available upon request.

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