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WORLDWIDE AVIATION MARKETING AND MANAGEMENT SERVICE

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Newsletter

Market Comment

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EADS-European Aeronautic, Defense & Space Co. will change its name to **Airbus** to reflect the dominance of its commercial aircraft unit. **EADS** also plans to combine its defense and space operations to respond to shrinking demand for those products. **EADS** will reorganize into three divisions, including civil aircraft under **Airbus**, civil and military helicopters under **Airbus Helicopters** and **Airbus Defense & Space**, which will house **Airbus Military**, **Astrium** and **Cassidian** under one roof. By adopting its most recognizable brand name for the entire group, the partially state-owned company will cease its attempt to create a balance between **Airbus** and the other operations. That strategy failed when its proposed merger with **BAE Systems Plc.** was quashed by German government opposition. **EADS CEO Tom Enders** restructured the company's shareholding to curb political interference. He intends to make **EADS** more investor-driven and less of a government jobs-program. "The renaming simply gathers the entire company under the best brand we have," he said. **Airbus** will create a "one-stop shop for the air forces of the world" by combining defense and space together.

EADS remains committed to defense and space for the long term, and the restructuring is aimed at cutting costs in the absence of new large defense projects in Europe for at least the next decade, Mr. **Enders** said. The restructuring should help **EADS** to better present its array of military and space products in the international marketplace, and it will help **EADS** to tackle costs. The company did not comment on potential job cuts, but did say that workers' council consultations and various other approvals will be required. **EADS** needed to keep one of its three major businesses anchored in Germany, to mollify that country's government, so the new defense and space unit will remain in Munich. The reorganization will start on January 1 and should be completed in the second half of 2014. **Bernhard Gerwert** will be CEO of the defense and space unit. Since the European governments will spend less on defense, the military and space division will focus on growing markets in Asia and the Middle East, where its largest rivals are **Boeing** and **Lockheed Martin**. Combining all defense-related assets may help the company streamline its offerings in new markets. **EADS'** stock rose to €45.75 per share, the most since the company was formed in 2000. Its stock value increased 52 percent this year, while rival **Boeing's** share prices had advanced 40 percent. **EADS** reported in the first half of 2013. Sales increased 3 percent to €13.95 billion and earnings beat analysts' expectations by €80 million. Earnings before interest and tax, goodwill

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impairment and exceptional expenses rose to €887 million (\$1.18 billion) from €724 million a year earlier. This year, **Airbus'** commercial jet deliveries contributed €637 million toward earnings, up from €391 million in the first half of 2012. Commercial sales rose 2 percent to €9.74 billion. **Airbus** forecasts gross commercial aircraft orders will reach 1,000 (up from its first forecast of 600 sales, made earlier this year) and between 600 and 610 aircraft will be delivered. The commercial aircraft division contributed about 70 percent of sales, which Mr. **Enders** said illustrates the importance of the business in driving growth.

Airbus Orders

Airbus Sold 241 Aircraft in June. Most of the orders were announced at the **Paris Air Show**, and they raised the manufacturer's backlog to 5,109, a new milestone. The backlog represents more than seven years of production. The **Paris Air Show** orders boosted total orders to 13,034, of which 9,649 were for the single-aisle A320 Family. At **Paris**, three customers contracted for 65 A350 XWBs, bringing total bookings to 678. **Singapore Airlines** acquired 30 A350-900s, the **Air France-KLM Group** booked 25 A350-900s, and **United Airlines** bought 10 A350-1000s. **SriLankan Airlines'** signed for six more A330s. **Lufthansa** led the A320 Family sales program by firmly ordering 30 A320ceo, 35 A320neo and 35 A321neo aircraft. **ILFC** bought another 50 A320neo jetliners, and **Spirit Airlines** purchased 20 additional A321ceo aircraft. **Airbus'** net orders, including cancellations, reached 722 in the first six months of 2013.

Airbus Delivered 48 Jetliners during June, comprising 38 A320 Family aircraft, eight A330s, and two A380s – bringing total deliveries for 2013 to 295.

The Lufthansa Group firmed up its commitment for 30 A320ceo (current engine option) with Sharklets, 35 new engine option A320neos and 35 A321neos. The 100 single-aisle jets are valued at \$10.4 billion at list prices. The airline was the launch customer for the A321 and was an early adopter of the A319 and A320. **Lufthansa** is **Airbus'** largest European airline customer and operator. It now has 299 A320 Family aircraft on order and has taken delivery of more than 150 of these aircraft.

International Lease Finance Corporation (ILFC) exercised options to purchase 50 more A320neo Family aircraft for \$5

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billion at list price. The options were part of an agreement signed in April 2011 for 100 firm A320neo Family aircraft. **ILFC** was the first lessor to buy the A320neo Family aircraft and is the type's largest leasing company customer. The first neo will be delivered in 2015. **ILFC** has not selected an engine type yet. **ILFC** is the manufacturer's largest customer, having ordered 769 single-aisle and widebody **Airbus** aircraft.

Spirit Airlines ordered 20 A321neos and converted 10 of its existing A320 orders to the larger A321neo. All 30 A321s will be fitted with Sharklet winglets and are worth \$3.2 billion (\$106.67 million each) at list prices. **Spirit** had firmly ordered seven A319s, 98 A320s (including 45 A320 new engine option aircraft) and now 30 A321s. The airline currently operates 50 A320 Family aircraft.

Air France-KLM firmed its previous commitment for 25 A350-900s and reserved 25 options. The A350s will be operated by both carriers. The firm order was delayed while the airline group negotiated with **Rolls-Royce** about engine maintenance. The two parties reached a "comfortable" agreement which allows **Air France** to maintain its own Trent engines. The first A350s will enter **Air France** service in 2017.

Singapore Airlines (SIA) added 30 A350-900 orders to its existing backlog of 40. **SIA** took options for a further 20 aircraft, which can be taken as A350-900s or the larger -1000 model. This was **Singapore's** third order for the A350 XWB and raises the carrier's total A350 firm orders to 70, plus 20 options. The airline will operate the A350 XWB on long-haul and regional services. The first A350 will enter airline service in the second half of 2014.

United Airlines converted an order for 25 A350-900s to the A350-1000 model, and ordered another 10 -1000s. The 35 planes were worth \$11.6 billion at list prices. They will be operated on **United's** higher density routes, including non-stop flights between the U.S. and the Asia Pacific region. The **Rolls-Royce** Trent XWB-powered -1000s will replace some of **United's** 52 777-200ERs.

Airbus Orders, Deliveries and Backlog June 2013

JUN ORD	JUN DEL	JUN CANX	TOTAL ORD	TOTAL DEL	BACK LOG
A318					
-0-	-0-	-0-	79	79	-0-
A319					
-0-	1	-7	1,519	1,371	148
A320					
115	29	-5	6,305	3,363	2,942
A321					
55	8	-0-	1,746	822	924
A330					
6	8	-0-	1,252	992	260
A350					
65	-0-	-0-	678	-0-	678
A380					
-0-	2	-0-	262	105	157
This Month			This Year		BL
241	48	-12	758	295	5,109

Airbus sold 13,034 aircraft and delivered 7,925 as of June 30, 2013. Thirty-six orders have been cancelled. Total orders, deliveries and backlog include cancellations and order changes. Airbus expects to deliver from 600 to 610 aircraft in 2013.

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SriLankan Airlines ordered six A330-300s in June and committed to buy four A350-900s in a deal worth \$2.6 billion at list prices. The airline firmed its tentative order for four A350-900s in late July. It is the 35th customer for the twinjet type. **SriLankan** will also lease three additional A350-900s. The 13 twinjets will replace the carrier's six A340-300s and seven A330-200s, over the next 10 years. **Rolls-Royce** will provide Trent 700 engines to power the A330-300s and Trent XWB engines for the A350-900s in a deal worth \$800 million at list prices. The airline will take the first A330-300s after October 2014 and the A350-900s in 2017. **Airbus** has booked 1,252 orders for the three types of A330s and the A350 XWB has won 682 firm orders.

British Low-Cost Airline, easyJet, provisionally ordered 100 A320neos and 35 A320ceos at the **Paris Air Show**. The purchase was approved by the airline's stockholders in mid-July. **EasyJet** operates one of Europe's most extensive route networks, and carries 55 million passengers a year. In addition, **easyJet** is the U.K.'s largest airline and the largest A320 Family customer and operator in Europe. The airline operates 153 A319s and 59 A320s, and has 149 A320s in backlog.

Also in July, Nepal's flag carrier, **Nepal Airlines Corporation (NAC)** signed a firm order for two A320ceo aircraft equipped with Sharklet wingtip devices. The contract followed a Memorandum of Understanding (MoU) that was announced in April. The A320 was chosen because it could operate from high altitude airports and for its flexibility to fly on a wide variety of routes. **Nepal** currently operates two 757-200s and three DHC-6 Twin Otters. The airline has two **Xi'an** MA-60s on order.

Syphax Airlines, Tunisia, firmed its Memorandum of Understanding (MoU) to buy three A320neos in July. This was the first order for the A320neo from an African based carrier. **Syphax** also ordered three A320ceos, which will be powered by CFM56 engines. The A320neos will be powered by **CFM LEAP** 1A engines. The airline already operates 2 A319 and three A320 aircraft and will lease an A330-200 soon. At the end of July 2013, firm orders for the A320neo Family stood at 2,348 from 42 customers, making it the fastest selling commercial airliner ever and underlines its market leadership position with close to a 60 percent market share, **Airbus** said.

Airbus will build the A330 at a rate of 10 a month through 2015 and Chief Operating Officer **John Leahy** said the type will "be in production until the next decade." **Airbus** is working on a half dozen

Doric Lease Corp. (DLC) may take its first A380s in 2015 to meet the needs of new customers. It had financed A380s for **Emirates** and **Singapore Airlines** before committing to buy planes directly from **Airbus**. Current A380 operators, **Malaysia Airline** and **Thai Airways International** want to add to their fleets and are considering leasing additional capacity from **Doric**. The lessor's original deal with **Airbus** called for deliveries in 2016, but the order may be modified before it is signed. **Airbus** still has open production slots in 2015. **Doric** said that the earliest deliveries will go to existing users which have specified their cabin interiors. The company is talking with several new superjumbo operators. The lessor also said **Airbus** provided **Doric** with favorable terms for pre-delivery payments due before the aircraft are handed over. The payments usually require large cash outlays from buyers. **Airbus** offered fixed price guarantees to redo the cabin after each A380 is returned by its first lessee. The costs of converting the cabin in the A380 are assumed to be quite high, because no airline has done it yet. **Doric** is talking with institutional investors to raise financing for the purchases, and those talks should be completed by the end of the year. The lessor committed to buy 20 A380s at the **Paris Air Show**.

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“major” sales campaigns that will bring in new orders to sustain output at record levels for years, he said at the delivery ceremony of its 1,000th A330 to **Cathay**. Mr. **Leahy** said quite a few customers, including leasing companies and airlines, want to place more repeat orders. **Cathay Pacific Airways** received its 39th A330-300 powered by **Rolls-Royce** Trent 700 engines in late July. **Cathay**, combined with its sister airline **Dragonair**, is the world’s largest operator of the A330, with a total of 56 now in service. Demand for the long-range, twin-engine, 300-seater has benefitted from delays at the 787 Dreamliner program. The A330 entered service in 1994 and has won 1,252 orders. **Cathay** flew its first A330 in 1995 and has come back nine times with repeat orders. The airline skipped the 787 and ordered 46 A350s for its next long-haul twinjet. **Airbus**’s A330 backlog stood at 246 airplanes late in the month, equaling two years of production. The A330 is the first **Airbus** widebody type to break the 1,000-delivery mark, while **Boeing** passed that mark with its 747, 767 and 777 models and it has already sold some 960 787s. So far, the A330 is the only widebody to be built at a rate of 10 planes a month, since April 2013. **Boeing** is catching up, having delivered nine 787s in June. **Airbus** considered building even more A330s per month, but was discouraged by the **Chinese Government**’s failure to approve more A330 deliveries to its domestic airlines. The government froze the contracts to deliver 27 ordered airplanes as part of a spat with the **European Union** over a tax on carbon emissions. The Chinese originally froze 45 orders, but have allowed 18 of them to be delivered. Mr. **Leahy** said. “We’re waiting patiently for the remainder [to be released].” **Airbus** is marketing the A330 as a replacement for aging **Boeing** 767s and 777-200s, and as the here-and-now substitute for the 787-8 and 787-9 Dreamliners. Since the 787 was launched in early 2004, **Airbus** has sold more than 800 A330s, Mr. **Leahy** said. The A330-300’s average route is 1,800 nautical miles, or about two hours, but some aircraft are used for 30 minute flights and others fly for 14 hours. The not-as-popular freighter version competes against the 767-300F which has out-sold the A330F. The large American air cargo airlines, **FedEx** and **UPS** opted for the 767F while the A330F has been purchased by cargo adjuncts to Middle Eastern and Asian airlines. The A330 MMRT (multi-mission refueling tanker) has won 28 sales by **NATO** and other U.S. allies. So far 16 of the airborne-tanker versions have been delivered. Mr. **Leahy** said the manufacturer will offer a regional A330 variant later this year. The plane’s engines will be de-rated to lower engine thrust, and **Airbus** will reduce the fuel capacity and takeoff weight. Therefore the airplane will be cheaper to buy and to maintain. “With lower thrusts, you don’t have to pay as much in route charges, not as much for the engine, obviously, and you have lower engine and airframe maintenance costs. That would be good in Southeast Asia for regional flying, and in markets like China,” Mr. **Leahy** said.

Turkish Airlines will exercise options for three A330-300s; the aircraft will be delivered in 2015 and 2016. It ordered 15 A330-300s in October, 2012, and added another pair in February this year. The airline’s current A330-300s are fitted with **Rolls-Royce** Trent 700 powerplants, but it chose the **General Electric** CF6 engine for the subsequent order. **Turkish Airlines** has not disclosed an engine selection for the three latest A330s.

Airbus SAS wants airlines to see the A380-800 as a high-density workhorse instead of a luxury flagship. The current double-decker is set up to carry an average of 525 passengers in three classes. Only **Lufthansa**’s three-class cabin matches **Airbus**’ average. Most airlines have fewer seats and **Korean Air**’s A380s carry only 407 passengers, less than half the maximum seating of 853. **Airbus** proposes installing 11-abreast seating in coach class and 30 more berths in first class to increase the plane’s capacity. Most early buyers emphasized personal space and comfort, while **Airbus** envisioned the A380 as a high-capacity people-mover flying between major hubs. **Keith Stonestreet**, **Airbus**’ A380

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marketing director, said, “We’re working to optimize the aircraft, and that means giving airlines some ideas to move the capacity up.” Prospective buyers should consider denser layouts that could cut unit costs and lift profit margins, he said. Such configurations could work best on intra-Asian routes, trips between the Middle East and Indian subcontinent and on flights serving the **Islamic Hajj** pilgrimage. **Airbus** is focusing on mass-market carriers in countries such as China, Japan and Indonesia. It is also looking at ways to make the interior more easily modified from low to high density to respond to seasonal variations in traffic. Only **Air Austral**, the flag airline of Reunion, an island in the Indian Ocean, has ordered two A380s fitted with 840 tourist-class seats. **Emirates** operates 35 A380s. Its first planes were delivered with 489 seats for long-haul flights and its more recently delivered jumbojets fly medium-haul routes with 517 seats. Some of **Singapore Airline’s** A380s were fitted with 409 seats and in others the capacity was bumped to 471. Rival **Malaysia Airlines’** A380s carry fewer than 500 people. The promise of luxury travel has not generated enough sales for **Airbus** and the type is not living up to expectations. **Airbus** has sold 262 A380s since 2000 and should have broken even by now, but development expenses quickly rose above the budget of €12 billion. Program delays and compensation payments pushed **Airbus’** costs past €18 billion. The program may never reach breakeven, but the manufacturer will break even on per-aircraft production costs by 2015, if it builds 30 A380s per year. So far, the company has not reached that goal. It sold just four aircraft in 2012 and has booked no firm orders this year. Both **Doric** and **Lufthansa** have not confirmed their commitment for a combined 22 aircraft. Neither the A380, nor **Boeing** 747-8 have matched their original sales forecasts because the “big twin” A350 and 777 models have cannibalized sales from the four-engined planes. The newly launched 777X and the A350-1000 can carry 350 passengers on long-haul, point-to-point routes, while the A380 is optimized for hub-to-hub operations. The dilemma for **Airbus** is that most routes cannot use an 800-passenger plane. **Emirates** President **Tim Clark** dropped plans for a 600-seat, two-class A380 even though the aircraft would offer “stupendous” seat-mile costs. “For carriers that have very dense markets and maybe [are] restricted on access slots, it will be a fantastic plane,” Mr. **Clark** said, but, “Our economy offering on the A380 is so popular we didn’t really want to tamper with it.” He seems to be saying if it works, don’t fix it, but what works for **Emirates** is not working for **Airbus**.

Boeing Orders

Boeing Sold 247 737s and 40 787s in June. **Ryanair** signed its previously announced commitment for 175 737-800NGs at the **Paris Air Show**. Lessor **CIT Leasing Corporation** bought 30 737-MAX aircraft. **United Airlines** ordered two more 737-900ERs. **Unidentified Customer(s)** contracted for 20 737-800NGs and 20 737-MAX aircraft, worth \$3.8 billion (an average of \$95 million each). **Singapore Airlines** and **United Airlines** placed launch orders for 30 and 10 787-10s respectively at **Paris**. **Boeing** announced **Qatar Airways’** previously unidentified order for two 777-300ERs. **Boeing** had orders for 396 737s, 777s and 15 787s from unidentified customers at the end of June.

Boeing delivered 61 aircraft in June, including a record nine 787s. It also handed over 39 737NGs, two 747-8s, three 767s, and eight

Qatar Airways announced the purchase of two 777-300ER (Extended Range) airplanes at the **2013 Paris Air Show**. The airline optioned seven more. The firm orders were placed in May and attributed to an unidentified customer on **Boeing Orders & Deliveries** website. The total value of the agreement was \$2.8 billion (\$311.1 million each) at current list prices. The Doha-based airline currently operates 22 777-300ERs, nine 777-200LR (Longer Range) airplanes and four 777F freighters. The two new orders raised **Qatar’s** backlog to nine 777s.

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777s. During June, several customers cancelled a total of 30 737 orders, **Boeing** said. As of July 2, **Boeing** had lost 87 737 orders as well as orders for five 747s and eight 777s.

United Airlines purchased 10 787-10 Dreamliners and switched 10 existing 787-8 orders to the -10 model. The new contract raised **United's** 787 backlog to nine 787-8s, 24 787-9s and 20 787-10s, with six -8 aircraft delivered. **United** selected GEnx-1B engines to power its 787-10s. Deliveries of the first aircraft are expected in 2018. **United's** conversion of 10 existing 787-8 orders allowed the airline to delay those 10 deliveries until after 2018. The 20 787-10s will join its international widebody fleet and replace older, less efficient aircraft. They were list priced at \$5.8 billion (\$290 million each).

Singapore Airlines (SIA) launched the new 787-10 Dreamliner model when it signed a commitment for 30 of the type in late May. The order was confirmed at the **Paris Air Show**. The 787s will be powered by **Rolls-Royce** Trent 1000 engines. The first of the 30 787-10s are scheduled for delivery in the 2018-19 financial year. The deal is worth \$8.7 billion (\$290 million each) at list price. **SIA's** low-cost subsidiary **Scot** will fly the 10 787-8s and 10 787-9s that **Singapore** ordered in October 2006.

Ryanair CEO **Michael O'Leary** signed a firm order for 175 737-800NGs at the **Paris Air Show**. The commitment was announced in March and was list priced at \$15.6 billion (\$89.142 million each), but the press reported that **Boeing** sold the 737NGs at a huge discount from their list prices. **Ryanair** is expected to order and option 200 737-MAX 8 aircraft. Mr. **O'Leary** wants to install up to 199 or 200 seats in the MAX 8, and **Boeing** said it would consider options to meet customer requirements. The **Ryanair** sale mopped up most of **Boeing's** 737NG production line slots from now until 2017 when the first 737-MAX aircraft will be delivered.

CIT Leasing placed a firm order for 30 737-MAX 8s, list priced at \$3 billion (\$100 million each). The lessor will take delivery of the aircraft in 2019 and 2020. **CIT** has the option to convert the order to the MAX 9. **CIT** ordered 12 737-700s, 58 -800s and 14 -900ERs between June 1999 and December 2010. It

Boeing June 2013 Orders, Deliveries

JUN ORD	JUN DEL	JUN CANX	TOTAL ORD	TOTAL DEL	BACK LOG
737					
247	39	-30	11,088	7,643	3,445
747					
-0-	2	-0-	1,523	1,470	53
767					
-0-	3	-0-	1,108	1,052	56
777					
-0-	8	-0-	1,452	1,113	339
787					
40	9	-0-	930	66	864
This Month			This Year		BL
287	61	-30	690	306	4,757

Boeing sold 23,631 aircraft and delivered 18,874 as of June 30, 2013.

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

Sales totals are net, minus 100 cancellations. Boeing expects to deliver from 635 to 645 aircraft in 2013.

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has taken delivery of 46 737NGs. The lessor also ordered 10 787-8s in 2006. **CIT** is looking at the newly launched 787-10. **CIT** owns or finances approximately 350 aircraft.

Silk Way Airlines, a cargo carrier based in Baku, Azerbaijan, announced an order for two **Boeing** 747-8 Freighters in July. The sale was valued at \$704 million at current list prices. **Silk Way** currently operates two 747-400 Freighters and two 767-300 Freighters. It is considered as one of the leading cargo airlines in Central Asia providing full-fledged services to Europe and the United Kingdom and the Middle East, as well as the Far East including Korea, China and Hong Kong, **Boeing** said. In addition, it also serves international destinations through a network of alliances. The airline is part of the **EuroAsian Transport Company** and has co-operating contracts with **Azerbaijan Airlines**, **Lufthansa Cargo** and **Cargolux**. To date, **Boeing** has delivered 36 747-8 Freighters.

Boeing has completed major trade studies that define the capabilities of the 737-MAX family. Detailed designs have been completed and released, so that production can begin. Final assembly of the 737-MAX 8 is scheduled to begin in 2015 with first delivery scheduled for the third quarter of 2017. The configuration included new LEAP-1B engines from **CFM International** that were optimized for the 737 MAX, a redesigned tail cone and the **Boeing** designed **Advanced Technology Winglet** to reduce fuel use. Other changes incorporated included upgrades to the flight deck displays, an electronic bleed air system and fly-by-wire spoiler flight controls.

Turkish Airlines (THY) exercised options on five 777-300ER (Extended Range) airplanes in late July. The 777s were valued at \$1.6 billion (an average of \$320 million each) at list prices. The Turkish flag-carrier's options were part of a previous firm order for 15 777-300ERs that was announced in December 2012. **Turkish Airlines** now has 20 777-300ERs on order from **Boeing**. **Turkish Airlines'** fleet currently includes 12 777-300ERs; the first was delivered in October 2010. The 777-300ER can seat up to 386 passengers in a three-class configuration and has a maximum range of 7,930 nautical miles (14,685 km). The recent deal raised **THY's Boeing** airplane backlog to 105 including 35 737NGs, 50 737-MAXs and 20 777-300ERs. The manufacturer sold 34 777s this year and lost eight existing orders for a net increase of 26.

All Nippon Airways (ANA) ordered three 777-300ERs from **Boeing** and will acquire another 767-300F freighter for **ANA Cargo**. The planes, valued at \$945 million (\$315 million each) at current list prices, were ordered on July 30 and will arrive in the first six months of 2015. **ANA Cargo** intends to add a 10th 767-300F, but it has not yet decided to lease a new aircraft or buy a new one. The airline was not interested in converting one of its existing 767-300ERs. **ANA** operates seven **Pratt & Whitney** PW4000-powered 777-300s, and 19 **General Electric** GE90-powered 777-300ERs. With **ANA's** order, **Boeing** has accumulated 1,460 orders for 777s from 66 global customers.

The Boeing Company reported second-quarter core operating earnings increased 13 percent to \$2.0 billion from the same period of the prior year. Second-quarter revenue was \$21.8 billion, earnings from operations were \$1.7 billion and its earning per share was \$1.41. The company also increased its revenue guidance to \$83-\$86 billion on higher **Defense, Space & Security** revenues, and reaffirmed its 2013 operating cash flow outlook. Operating cash flow in the quarter was \$3.5 billion, reflecting higher commercial airplane production rates, strong core operating performance and timing of receipts and expenditures. Cash and investments in marketable securities totaled \$14.3 billion at March 31, up from \$11.8 billion at the beginning of the quarter. Debt was \$9.6 billion, up from \$9.2 billion at the beginning

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of the quarter, primarily due to the issuance of new debt. Total company backlog at quarter-end was a record \$410 billion, up from \$392 billion at the beginning of the quarter, and included net orders for the quarter of \$40 billion. **Boeing Commercial Airplanes** second-quarter revenue increased to \$13.6 billion on higher delivery volume. Second-quarter operating margin improved to 10.7 percent, reflecting lower R&D and the higher deliveries partially offset by the dilutive impact of 787 deliveries. The company completed the retrofit of 787 battery enhancements on 50 previously delivered airplanes and delivered 16 new 787s. Also during the quarter, the 787-9 Dreamliner began final assembly and the launch of the 787-10 was announced. **Commercial Airplanes** booked 481 net orders during the quarter. Backlog remains strong with nearly 4,800 airplanes valued at a record \$339 billion. **Boeing Defense, Space & Security's** second-quarter revenue was \$8.2 billion, while operating margin was 9.5 percent. **Boeing Military Aircraft** second-quarter revenue was \$3.9 billion, primarily reflecting lower delivery volume. Backlog at **Defense, Space & Security** increased to \$71 billion, of which 37 percent represents orders with international customers. At quarter-end, **Boeing Capital Corporation's** net portfolio balance was \$4.1 billion and debt-to-equity ratio was five to one.

Regional Report

Embraer Released Second Quarter 2013 Results reporting that it delivered 22 commercial and 29 executive (23 light and six large) jets. The company's firm order backlog grew to \$17.1 billion, reaching its highest level since the third quarter of 2009. This was a result of significant orders for commercial aircraft. Higher numbers of aircraft deliveries, coupled with revenues from the company's growing **Defense & Security** business, second quarter revenues reached \$1.557 billion and the gross margin for the period was 23.1 percent. The second quarter net loss totaled \$5.3 million primarily due to deferred income taxes generated by the appreciation of the U.S. dollar during the period. This negatively impacted second quarter net income. Therefore, the adjusted net income, excluding deferred income taxes, was \$91.8 million. **Embraer** launched the E-Jets E2 program and won 365 commitments, (100 firm orders and 265 Letters of Intent) during the **50th Paris Airs Show**. **SkyWest Airlines** placed an E-Jets E2 launch order of 100 E175-E2 and optioned 100 additional aircraft. **ILFC** signed a Letter of Intent (LoI) for 25 E190-E2s and 25 E195-E2s, and optioned another 25 E190-E2s and 25 E195-E2s. **Embraer** also signed LoIs with five undisclosed airlines for a total of 65 E-Jets E2. Venezuela's **Conviasa** signed a firm order for seven E190s and **Air Costa**, India, ordered one E190. **Japan Airlines (JAL)** signed a firm order for four more E170 jets. The **Air Costa** and **JAL** orders were already included in **Embraer's** backlog as from

Bombardier Aerospace announced in late July that the CSeries aircraft's overall integration was progressing well; however, the highly technical last steps were taking more time than initially anticipated to validate the overall systems and ongoing software integration. First flight was expected to occur in the coming weeks. **Mike Arcamone**, President, **Bombardier Commercial Aircraft** said, "Seeing the first CSeries aircraft power up on the tarmac was a thrilling event. We have now entered the ultimate phase of systems integration and validation on the first flight test vehicle as we submit brand new technology to in-depth tests. While the process has taken more time than we had expected, we are pleased with the results and are very comfortable taking more time to ensure the required integration is finalized and the CSeries aircraft is cleared for its first flight." Activities with **Transport Canada** to obtain the Flight Test Permit for Flight Test Vehicle 1 are progressing steadily and the permit is also expected in the coming weeks.

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“undisclosed customers.” **Embraer** also announced orders from **United Airlines** for 30 E175 jets, **SkyWest** for 40 E175 jets and from **Austral Líneas Aéreas**, which signed a firm order for two E190s.

International Lease Finance Corp. (ILFC) finalized its Letter of Intent to take 25 firm EMBRAER 190-E2 and 25 E195-E2 aircraft in July. The lessor took 25 options for each type, giving it up to 100 E2 aircraft overall. **Embraer** estimated the value of the firm order at \$2.85 billion (an average of \$57 million each) at catalogue prices. The first of the largest versions of the re-engined E-Jets family will arrive in the first quarter of 2018 and the first E195-E2 will enter service in 2019. Over 950 E-Jets have been delivered to date.

Brazilian Development Bank (BNDES) will finance 47 **Embraer** E175 aircraft for **Republic Airways**. The aircraft will provide service under the terms of the capacity purchase agreement (CPA) with **American Airlines** that was announced in January and they will fly under the **American Eagle** brand.

Embraer June 30, 2013 Orders & Deliveries

Type	Total Orders	Total Options	Total Deliveries	Current Backlog
E170	193	27	185	8
E175	315	498	166	149
E190	563	204	473	90
E195	142	20	123	19
E-Jet-E2	100	100	0	100
Total	1,313	849	947	366
Type	2nd Quarter Deliveries		2013 Deliveries	
Light Exec Jets	23		31	
Large Exec Jets	6		10	
Embraer 170	1		2	
Embraer 175	1		3	
Embraer 190	14		22	
Embraer 195	6		12	

Engine News

Pegasus Airlines selected **CFM International** LEAP-1A engines to power its ordered fleet of 75 firm, and 25 optioned A320neo/A321neo aircraft. The airplanes were purchased in December 2012 and the airline is scheduled to begin taking delivery of the aircraft in 2016. The Istanbul-based low-cost airline was a **CFM** customer since it was founded in 1990. **Pegasus** currently operates a fleet of 41 **Boeing** 737-800s on scheduled routes to 72 domestic and international destinations throughout Europe, Russia, Central Asia, Middle East and Africa.

Pratt & Whitney and **SkyWest** have signed a definitive agreement for a **PureSolution Fleet Management Program** supporting the PW1217G engines installed in a fleet of 100 MRJ90 Mitsubishi Regional Jets and up to an additional 100 option MRJ90 Mitsubishi Regional Jets for a term of up to 16 years. Each MRJ90 will be powered by two PurePower PW1217G engines. Deliveries are anticipated to begin in 2017. **PureSolution** services offer MRO expertise from the **PurePower** engine’s OEM creator and design-responsible partners.

Order Changes and Cancellations

Airbus Order Shuffle. In June, **Intrepid Aviation Group** cancelled one of its six A330-200F freighter orders and purchased its ninth A330-300 passenger plane. The lessor ordered 20 A330Fs in June 2007 for delivery from 2010 through 2012, but it has subsequently cancelled its A330F orders and ordered the passenger models in their place. **United Airlines** cancelled seven A319 and five A320 orders when it ordered 10 A350-1000s in June. The airline also switched 25 A350-900 orders to the -1000 type. **CASGC, China**, cancelled four A320s. **Spirit Airlines** switched 10 A320s to the A321 type when it ordered 20 A321ceos at **Paris Air Show**.

Boeing's Order Cancellations and Changes. In June, **Westjet** switched two 737-700 orders to the -800 model. **CIT Leasing** dropped a dozen of its 24 737-800s and six of its 14 737-900ERs when it ordered 30 737-MAX-8s in June. **Air Berlin** cancelled six 737-800s, leaving 50 -800s on order. The defunct **Sky Airlines'** last 737-900ER order was removed from **Boeing's** backlog. One unidentified customer cancelled two 737-800s that it ordered in March 2011. Another unidentified customer dropped one of its nine 737-700 orders. As of July 2, **Boeing** had lost 87 737 orders as well as orders for five 747s and eight 777s. **Oman Airlines** announced that it ordered five 737-900ERs as an unidentified customer in December 2012. **Qatar Airways** was the "unidentified customer" for two 777-300ERs that were ordered in May 2013. **Qatar** optioned seven more 777s and has now ordered 27 777-300ERs. **United Airlines** switched 16 of its 25 787-8 orders to six -900s and 10 -1000s. The airline revealed that it purchased one 787-8 and four -900s in November 2012. In late July, one customer cancelled two 737 orders. Earlier in the month, **Boeing** lost five 737 orders, for a total of 94 cancelations in 2013.

Virgin Atlantic Airways again delayed taking delivery of the six A380s that it ordered in 2000. The U.K. carrier is re-evaluating whether it still needs the world's largest jetliner. Delivery was delayed for one year, from 2017 to 2018. Chief Executive Officer **Craig Kreeger** said, "It's hard, but not impossible to see a world where we want to take the aircraft. It's not a clear choice." **Virgin Atlantic** was one of the first airlines to order the A380 and had expected to take delivery in 2006, but the program was delayed several times and **Virgin** modified its business model. Now the A380 is too big for **Virgin's** point-to-point route system. The A380 would make more sense if capacity at **Heathrow Airport** was capacity constrained. If the **U.K. Government** allows the airport to add another runway, then the airline will add more twinjet widebodies instead of superjumbo jets.

Leasing Companies

International Lease Finance Corporation (ILFC) completed 125 lease transactions during the first half of 2013. These transactions include lease extensions, new leases of used aircraft as well as placements of new aircraft from **ILFC's** aircraft portfolio. **ILFC** supports a worldwide network of approximately 200 airline customers across more than 80 countries. The lessor exercised options for an additional 50 A320neo Family aircraft, bringing its total A320neo orders to 150, **ILFC** also became a launch customer for the E-Jets-E2 Family, when it signed a letter of intent for the purchase of up to 100 E-Jets. In late June, **ILFC** took delivery of its first of 74 787 Dreamliners on order,

Air Transat A.T. signed an agreement with **ILFC** for the eight-year lease of four 737-800NGs. They will be delivered in summer 2014 and become the core of **Air Transat's** permanent narrow-body fleet.

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They will be used on sun-destination routes to Mexico, the Caribbean and Florida. The agreement also included the renewal of leases for three A330-200s and three A330-300s through 2020 and 2021, with improved terms. The three long-range A330-200s were originally to be phased out of the fleet.

Air Lease Corporation (ALC) signed long-term lease agreements with the U.K.'s **Monarch Airlines** for two new **Airbus A321-200s** fitted with Sharklets and powered by **IAE V2533** engines. The A321ceos will be delivered in April and May of 2015.

ALC long-term leased one **Boeing 737-700** to **Jet Time**, Copenhagen, Denmark. The 737 is scheduled for delivery in November 2013. The airline will also lease two new **ATR 72-600s** and take delivery of them in April and May 2014. **Jet Time A/S** began operating in March 2006 and recently leased six **ATR72-600s** from **Nordic Aviation Capital (NAC)**.

Nimrod Capital and Doric Lease formed a new investment company, **Doric Nimrod Air Three Ltd. (DNA3)**, and listed it on the **London Stock Exchange**. **DNA3** will purchase and lease back four **Airbus A380s** with **Emirates**. The A380s are scheduled for delivery from September to November 2013, and will be leased for a period of up to 12 years. The airline is responsible for insurance and all other service, maintenance and repair costs. Once the lease has expired, the aircraft are likely to be sold and investors paid out from the residual value. The **Doric Lease Corp** team, the lease asset manager, has a long and successful history in managing these types of aircraft investments.

Avolon, the international aircraft leasing group, raised total capital of over \$5.8 billion and has a committed fleet of 171 aircraft as of mid-2013. The lessor delivered nine new aircraft valued at over \$540 million, and sold six aircraft to international investors in the first half. The company expanded its customer base to 36 airlines and its lending group to 24 leading financial institutions.

AWAS will place one new 737-800 on long-term lease with **Sunwing Airlines**. This aircraft will come from **AWAS'** existing new order pipeline. **Sunwing** is Canada's leading high-frills, low-cost airline and it operates a fleet of over 29 aircraft. It is part of the **Sunwing Travel Group**, Canada's largest leisure company, comprised of tour operators, airlines and national retail travel agency chain, a hotel management company and a destination management company.

AWAS acquired three aircraft from another lessor, including a new A330-300 that was leased to **Cebu Pacific**, a 737-800 leased to **Qantas** and an A320-200 operated by **Spirit Airlines**. **Marlin Dailey**, Chief Commercial Officer of **AWAS**, said, "We are very proud to welcome **Cebu Pacific** as a new customer as well as expanding our relationships with **Qantas** and **Spirit**."

FLY Leasing Limited, a global lessor of modern commercial jet aircraft, purchased a new **Boeing 777-300ER** from **LATAM Airlines Group** in late July and leased it back to the airline. **FLY** entered into a purchase and leaseback agreement with **LATAM** for a new **Boeing 787-8** that is scheduled for delivery in September 2013. **FLY** financed the 777 with funding from the European bank market and its own unrestricted cash. The lessor acquired six aircraft for approximately \$330 million in 2013 and has identified additional acquisitions to meet its ambitious growth target.

KLM Cityhopper, **KLM's** regional subsidiary, will lease six **EMBRAER 190s** from **BOC Aviation**. **KLM** currently operates a fleet of 22 E-Jets. The additional E190s are part of **KLM Cityhopper's**

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strategic plan to replace the oldest of its **Fokker** fleet. The first E190 is scheduled to arrive in the second half of 2013. The new E190s will be configured with 100 seats in a single-class layout, and will be deployed across **KLM's** European network from Amsterdam's **Schiphol Airport**. **BOC Aviation** is a leading Asia-based aircraft leasing company with a portfolio of 225 owned and managed aircraft operated by 56 airlines worldwide. Its fleet has an average age of less than four years.

Airline News

South African Airways (SAA) wants to replace its fleet of 24 widebody aircraft as soon as possible.

The airline asked for bids from **Airbus** and **Boeing**. **SAA** operates six A330-200s, one A340-200, eight A340-300s and nine A340-600s. A **SAA** deal depends on the slot availability at the manufacturers and leasing companies. Neither airframer has many near-term delivery positions available for their popular long-range jets. The airline wants to replace its fleet as part of its plan to return to profitability after billions of rand loss over the past few years. **SAA** recently ordered 20 single-aisle **Airbus** A320s for delivery over the next five years. Ten of the A320s will be sold and leased-back with **Pembroke**. The terms will be for 12 years.

Sólyom Hungarian Airways was founded in 2013 and is based at **Budapest Liszt Ferenc International Airport**. It was the first Hungarian airline founded since the flag carrier, **Malév**, ceased operations on February 3, 2012. The **Hungarian Government** decided it could get by without a national carrier. **Sólyom** leased six **Boeing** 737-500s and will start operations in August. The route system was not announced.

The Portuguese Government restated its plan to sell state-owned airline **TAP Air Portugal** this year, after failing to find a suitable bidder in the recent past. **Sergio Monteiro**, Secretary of State for Public Works, Transport and Communications told the press, "We continue to check market conditions in order to hold a truly competitive process that will result in the best offer for the airline's development." Last year, the government rejecting the sole offer for **TAP** from **German Efromovich's Synergy Group**, in Brazil, which controls **Avianca** and other airlines in South America. Portugal was required to sell the flag carrier as part of a bailout by the **International Monetary Fund** and the **European Union** in 2011. **TAP** offers 74 weekly flights between Lisbon and Brazil, as well as services to Africa, Europe, and North America. The airline needs external financing to expand its business and renovate its fleet, Mr. **Monteiro** said. "No fixed timetable has been established for the privatization of **TAP**. Since the sale process has not formally restarted, no offers could have been presented," as of July, 2013.

RAK Airways, the Emirate of Ras Al Khaimah, is talking with **Airbus**, **Boeing** and **Bombardier** about ordering 10 single-aisle aircraft. The state-backed flag carrier is interested in the A320neo, the 737-800NG and the new CSeries jet, and wants to make its decision by the end of the year or in early 2014. **RAK** began flying in 2007, but suspended scheduled operations during the global slump. It restarted

IATA Posts July Jet Fuel Prices. The association updates the world's average jet fuel price each week. On July 26, the average price of fuel was \$2.938 per gallon. The fuel price was \$2.884 per gallon on June 14. The late-July price was 5.9 percent higher than in mid-June, and was only 0.1 percent more than in July 2012. The price of fuel is affected by location. It was only \$2.87 in the Middle East region and was as high as \$3.054 per gallon in Latin America. **IATA** forecast that the global airline industry's fuel bill will total \$123.9 billion in 2013. This was a decrease of \$4 billion over 2012.

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operations in 2010 and currently operates two A320s. It plans to expand its network from nine to 40 cities by 2015. **RAK Airways** carried 300,000 passengers in 2012, and it expects to earn a profit in 2014. **RAK** operates in one of the world's most competitive aviation markets, against two airline superpowers, **Emirates** and **Etihad** and two much larger short-haul airlines, **Air Arabia** and **flydubai**. Chief Executive Officer **Murabit Al Sawaf** said "Ras al Khaimah is growing in an aggressive way, so we should be as aggressive as the government. In five years I want the company to be one of the major airlines in the region. In five to 15 years we'll be on a curve to go upwards to have a worldwide position and international identity." The airline just signed a deal with **ILFC** to lease an A319 and an A320.

FlyDubai said there's an "open race" between the A320neo and the 737-MAX for a \$5 billion order for 50 narrow-body aircraft. The Dubai-based airline operates 30 **Boeing** 737-800s, and has another 20 on order. It plans to make its choice known by the **Dubai Air Show** in November. Chief Executive Officer **Ghaith al-Ghaith** said, "We will choose what's best for us and what's best could be a new type. Both aircraft appeal to us. The best decision is the one that costs us the least." **FlyDubai** aims to grow its route network from the current 64 cities to 100 cities. Adding more planes is required to meet capacity needs as outstanding deliveries near an end. The backlog of 20 737-800s will be filled by early 2016. The 50 737s were ordered at the **2008 Farnborough Air Show** and were priced at \$3.74 billion (\$74.8 million each) at the time. The equivalent 737-MAX-8 and the A320neo are list priced at \$100 million. **FlyDubai** may issue a sukuk or Islamic bond to fund the planned purchase, or it can finance the order from its own cash flow, Mr. **al-Ghaith** said.

Technical

Aviation Partners Boeing (APB) received an order from **TUI Travel** for 737-800 **Split Scimitar Winglets**. The airline has 81 737-800s in service and eight on backlog. **APB** took five years to redefine the aerodynamics of the **Blended Winglet** into an all new **Split Scimitar Winglet** through the use of the latest fluid dynamic computer technology. The new winglet used the existing **Blended Winglet** structure, but **APB** added new strengthened spars, aerodynamic scimitar tips, and a large ventral fin. This advanced technology winglet did not increase the existing wing span. **APB** formally launched the **Split Scimitar Winglet** program at the **Paris Air Show** with an order from **United Airlines**. The winglet can be retrofitted on 737-800s (line number 778 and up) and on the 737-900ER. **FAA** supplemental type certification for the 737-800 is expected in October 2013, and **EASA** certification is planned for December 2013. Certification flight testing of 737-800 **Split Scimitar Winglets** is currently underway and flight testing of the 737-900ER will begin in November. The **FAA** STC for the -900ER is due in late February 2014. **APB** expects an improvement in low speed performance and significant take-off benefits from high/hot or obstacle limited runways. The company intends to certify the various models of 737-700s, -900s, and BBJs.

The U.S. Marshals Service agreed to purchase two **Boeing** 737-400s from **AAR**. The planes will be handed over in September. **AAR** will also

Jet Aviation Basel was contracted by an undisclosed client for the VIP cabin interior completion of a BBJ1 aircraft. The aircraft will be delivered green to the **Basel Completions Center** in the first quarter of 2014. "The customer has selected the **Basel Completions Center** based on the scope of our in-house capabilities and the depth of our skills and experience in this distinguished market," said **Ruedi Kraft**, Vice President of Market Development & Completions Sales. "We are very excited about the prospect of transforming this empty aircraft into a fully functional, certifiable and unique VIP aircraft interior."

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overhaul the airframe and landing gear, paint the aircraft and reconfigure the interior. **AAR** recently delivered two 737-400s to the **Colombian Air Force** after they were converted into freighters. The aircraft came with custom seat pallets. The program demonstrates **AAR's** wide range of capabilities, which the company combines to create custom-tailored solutions for its commercial, Federal civilian government, and defense customers, **AAR** said.

Military Market

Cargo Pallet

Aeronautical Engineers (AEI) redelivered the first **CargoAir 737-400SF** 11 pallet conversion in Dothan, Alabama. The aircraft was a 1989-model, high-gross-weight 737-400 (SN 24474). It was placed into service for **DHL Express**, flying from their hub in Leipzig, Germany. **CargoAir** already operated three **AEI 737-300SF** 10 pallet freighters for **DHL Express** throughout Europe.

The **Indian Air Force (IAF)** took delivery of its second **Boeing C-17 Globemaster III** in July. The aircraft immediately began supporting **IAF** operations. "Our first C-17 Globemaster III signifies a tremendous boost in our strategic airlift capability," said Air Chief Marshal **NAK Browne**, Chief of the **Indian Air Force**. "Because it was delivered mission-ready, it soon undertook its first strategic mission to our **Andaman Nicobar Command** at Port Blair." The **IAF** will be the world's second-largest operator of the C-17 after the U.S., he said. **Boeing** will deliver three more C-17s to the **IAF** this year and five in 2014. The C-17 can operate in extreme climates, transport large payloads across vast ranges and land on short, austere runways. **Boeing** delivered three C-17As in the first quarter of 2013 and another three in the second quarter.

Alenia Aermacchi delivered the first **ATR 72-600 TMUA** (Turkish Maritime Utility Aircraft) to the **Turkish Navy**. The **Navy** ordered two **ATR 72 TMUAs** and six **ATR 72-600 TMPA** (Turkish Maritime Patrol Aircraft) maritime patrol and anti-submarine warfare aircraft. The two **ATR 72 TMUAs** were modified at **Alenia Aermacchi's** plants in **Napoli-Capodichino** and **Torino-Caselle** and feature new radios, an IFF (Identification Friend or Foe system) and a cabin area equipped with tactical tables and communications equipment for the crew. Both aircraft are easily reconfigured into cargo, and will be used for utility roles, and personnel and cargo logistic transport. The first **Turkish Navy** flying instructors just completed the training on the new aircraft at **Alenia Aermacchi's** training center in **Caselle**. The second aircraft will be delivered in August.

Airbus Military's First Production A400M (SN 007) was delivered on August 1, after having received its type acceptance from **OCCAR**, the **Organization for Joint Armament Cooperation**, on behalf of the launch nations (Belgium, France, Germany, Luxembourg, Spain, Turkey and the United Kingdom). It represented a historic milestone of the A400M program after 10 years of development and more than 5,000 flight test hours, **Airbus** said on July 31. This first military standard acceptance was the last step prior to the aircraft delivery to the French **Defense Procurement Agency (DGA)** and its subsequent delivery to the **French Air Force** on August 1. The common basis for military certification was approved on July 19 following a recommendation by representatives of the seven launch nations known as the **Certification and Qualification Committee (CQC)**. **Airbus Military** received the **Military Type Certificate** for A400M aircraft from the **DGA** on July 24.

AIRCRAFT DELIVERIES & SALES

Airbus

Airbus A319. Airbus delivered only one A319 in June, the eighth of nine ordered -115s (SN 5563) to **Tibet Airlines**. The airplane was manufactured in Tianjin, China.

Airbus A320. Airbus delivered 29 A320s in June. **AirAsia** took delivery of two -216/Ws (SN 5627 & 5657) and leased the first to **Indonesia AirAsia** and the second to **AirAsia Japan**. **Jetstar Japan** leased -232/W (SN 5649) from **Qantas Airways**. Japan's **Peach Aviation** leased its tenth new -214 (SN 5640) from **GECAS** in June. The lessor leased -214 (SN 5642) to **Orbest**, Portugal. **AWAS** leased -214/W (SN 5652) to **StarFlyer**, Japan, and -214/W (SN 5673) to **Vueling Airlines**. It was **Vueling's** ninth A320 equipped with Sharklets and the airline's 71st A320 Family aircraft. **Jetstar** leased -232/W (SN 5631) from **BOC Aviation**. **Iberia** took delivery of -232 (SN 5634) and leased it to **British Airways**. **Frontier Airlines** added its first A320 with Sharklets in June. The airline leased -214/W (SN 5661) from **Aviation Capital Group**. **Sichuan Airlines**, the largest all-Airbus fleet operator in China, leased its first A320-232/W (SN 5646) equipped with Sharklets, from **CIT Leasing**. **Hainan** leased -214 (SN 5630) to **Beijing Capital Airlines**, and **Hong Kong Airlines** leased -214 (SN 5626) to **China West Air**. **Shenzhen Airlines** accepted **Tianjin-FAL**-built -214 (SN 5550), and **China Southern Airlines** acquired two **Tianjin FAL**-built -232s (the first was SN 5561). **Spring Airlines** received **Tianjin-FAL**-built -214 (SN 5562). Elsewhere in the Asia Pacific region, **Air New Zealand** took delivery of its first of 10 -232/Ws (SN 5629) equipped with Sharklets, at a ceremony during the **50th Paris Air Show**. **Air New Zealand** was the first airline to order the fuel saving devices, when **Airbus** launched the **Sharklet** at the **Dubai Air Show**, in November 2009. **Airbus** delivered one

American Airlines welcomed its first A319-112/W (SN 5678) on July 23. It is the first of 260 planned **Airbus** narrowbody deliveries. The aircraft is powered by **CFM International** CFM56 engines and seats 128 passengers in a two-class configuration. The A319s will be used on domestic routes and to Central America this fall. This aircraft is the first A319 to feature Sharklet wingtip devices. The **American** A319 is also the 100th A320 Family aircraft produced with **Sharklets**, which are an option on all new-build A320 Family aircraft, and will be standard equipment on all members of the A320neo Family. **American Airlines** has the flexibility to switch between the A319 and A321 variants in its firm order for 130 aircraft. "There's a lot of flexibility in this deal," said **Tom Horton**, Chairman and CEO. "The plan will evolve as we build the new airline" as part of its merger with another large **Airbus** customer, **US Airways**. The final numbers of each variant have not been announced. In April, **International Aero Engines (IAE)**, the supplier of engines for **American's** A321s, said the airline had ordered 65 of each type. When the merger with **US Airways** is finalized in the third quarter that airline's management will take over and will have final say as to what planes it will accept. **US Airways** is the world's largest operator of narrowbody **Airbus** aircraft with 93 A319s, 72 A320s and 85 A321s in its fleet. It has another A319, 10 A320s and 27 A321s on order. **US Airways** has preferred the largest member of the A320 Family in recent years. It has taken delivery of 34 A321s since 2010, while its last new A320 arrived in 2010 and its last A319 was delivered in 2006. **American's** A319s and A321s will replace its fleet of 176 MD-82s and MD-83, which seat 155 passengers in two-class configuration.

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-232/W (SN 5641) to **IndiGo**. In Europe, **Lufthansa** bought two -214/Ws (SN 5635 & 5658), and it has 15 more on order for delivery by 2015. **EasyJet** acquired its 59th -214 (SN 5638), **Niki Luftfahrt** accepted -214/W (SN 5648), and **Wizz Air Hungary** took delivery of another Sharklet-fitted -232/W (SN 5660). **LATAM Airlines Group**, the holding company for **LAN** and **TAM Airlines**, took delivery of its 200th A320 aircraft at **Paris Air Show** in June. The **TAM** -214/W (SN 5643) was equipped with **Sharklets** and powered by CFM56 engines. Elsewhere in the Americas, **Avianca** leased one -214/W (SN 5632) and **Volaris** leased one -233/W (SN 5651), each from **Wells Fargo Bank Northwest**, trustee. **Interjet** acquired -214/W (SN 5653).

GE Capital Aviation Services (GECAS) leased an A320-214 to new customer **Tianjin Airlines** in July, to expand the carrier's fleet. **Tianjin Airlines** operates a fleet of more than 75 aircraft to some 60 destinations in China.

GE Capital Aviation Services (GECAS) leased one Airbus A321 to Turkish airline **Atlasjet Havacilik A.S.** to help expand the carrier's fleet. **Atlasjet** operates a fleet of 15 aircraft to some 20 domestic and international destinations.

South African Airways (SAA) took delivery of its first two of 20 A320 Family aircraft ordered from **Airbus** in 2010. The two -232s (SN 5637 & 5680) were handed over in July and will deliver cost efficiencies and allow **SAA** to expand its Sub-Sahara regional route network and boost revenue in the rapidly growing market. The airline's A320s are powered by IAE-V2500 engines, and feature a two-class cabin layout, seating 24 passengers in business class and 114 in economy. The A320s will replace its present fleet of 737-800s and will augment the A319s **SAA** already has in service.

Airbus A321. **Airbus** delivered eight A321s in June, including two -211s (SN 5644 & 5659) to **US Airways**, two -231s (SN 5663 & 5667) to **Turkish Airlines** and two -231 (SN 5647 & 5670) to **Sichuan Airlines**. **China Southern Airlines** acquired one -231 (SN 5655) and **IBCB Financial Leasing** leased -231 (SN 5636) to **Asiana**.

UTair, one of Russia's leading carriers, took delivery of its first new A321-211 (SN 5681) in July. The aircraft is part of a firm order for 20 A321s signed by **UTair** in July 2012. **UTair's** A321 is powered by CFM56 engines and features a single-class cabin layout seating 220 passengers. The airline is planning to operate its A321s to further develop its high density route network. There are currently about 260 **Airbus** aircraft in operation at 11 Russian carriers. **UTair**, one of the most dynamic Russian carriers, was founded as part of **Aeroflot** in 1967. The airline operates a fleet of some 180 aircraft to over 60 domestic and 40 international destinations.

Avinco, an aircraft investment manager and remarketing specialist, leased a 1998 vintage A321-200 aircraft, (SN 852) to **Kolavia-Metrojet**. It will be operated on behalf of a subsidiary of **TUI Travel**. The A321 was handed over to the Russian charter airline on June 5, on a five-year operating lease. The aircraft had been operated by **Thomsonfly** in the U.K. since it was new. **Avinco** is working under an exclusive remarketing mandate from TUI and has added the aircraft to its growing portfolio. **Avinco** will next try to sell the aircraft with the new **Kolavia** lease attached.

Airbus A330. **Airbus** delivered three -200s and five -300s in June. **China Eastern Airlines** acquired its 16th of 21 -243s (SN 1421), and **Hawaiian Airlines** took delivery of its ninth of 18 -243s (SN 1422).

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The national carrier, **Libyan Airlines**, bought its first -202 (SN 1424), becoming a new operator for the type. The carrier currently operates seven A320s, and has three more A330-200 and four A350-800 aircraft on order. The airplane is fitted with 24 business and 235 economy seats, and powered by **GE CF6-80** engines. It will be deployed on Middle Eastern, Asian and European trunk routes. **Cebu Pacific** leased its first of four -343Es (SN 1420) from U.S. lessor **CIT Leasing**. The aircraft apparently was sold to **AWAS** with the lease attached. It will be used to launch the carrier's new long-haul low-fare operations and is fitted with 436 tourist class seats. **AirAsia X** received its 10th of 26-343Es (SN 1423), and **China Southern Airlines** acquired its 10th of 14 -343Es (SN 1425). **Singapore Airlines** leased the first of two -343E (SN 1427) from the **Commonwealth Bank of Australia**. **Iberia** received its fourth -302 (SN 1426). The airline has four more on order.

IBA placed an ex-**Virgin Atlantic** A340-600 with **Hi-Fly Malta**, on behalf of a syndicate of banks. The aircraft is the first of its type to transition into the secondary market following its return off lease from **Virgin** last year. **IBA** acted as Technical Adviser during both, the original redelivery from **Virgin** and for the delivery to **Hi-Fly Malta**. There are 94 A340-600 aircraft currently in service and three are parked in **Tarbes Lourdes Pyrénées Airport**, France.

AWAS leased A330-343E (SN 1097) from its current portfolio to **Air Europa**. The A330 was previously leased to **Orbest** and it will be used on trans-Atlantic services.

Airbus Celebrated the Delivery of the 1,000th A330 in July. The A330-343E (SN 1436), powered by **Rolls-Royce Trent 700** engines, was handed over to **Cathay Pacific Airways** at Toulouse. Cathay Pacific together with its sister airline **Dragonair** is the world's largest operator of the A330, with a total of 56 now in service. The **Cathay Pacific Group** has outstanding orders for 10 more A330-300s, and 48 all-new A350 XWBs including two leased aircraft.

Arik Air, Nigeria, expanded its international fleet with the acquisition of two A330-200s. The new aircraft will enter service on long-haul routes, including **Heathrow**, **New York JFK** and **Johannesburg's Oliver Tambo Airports**. The **Arik Air** fleet consists of 24 aircraft and the airline has another two dozen on order.

Airbus A380. **Emirates** accepted two more -861s (SN 119 & 123) in June, for a fleet total of 35. Another 55 are on order. **Airbus** displayed **British Airways'** first -841 (SN 095) at the **Paris Air Show** in mid-June and delivered it to the airline on July 3. **British Airways (BA)** became the tenth A380 operator and it has 11 more on order. It will deploy its new flagship aircraft on routes from **London Heathrow** to Los Angeles and Hong Kong on September 24, and October 22, respectively. **BA** will receive its second -841 (SN 121) in September, and the third in early 2013. All of **BA's** A380s will be powered by **Rolls-Royce Trent 900** engines.

Boeing

Boeing 737 NG. **Boeing** delivered 39 737s in June, and **American Airlines** received three of them. The airline acquired three -823/Ws (SN 31172, 33322 & 33487), and sold them to the **Wells Fargo Bank Northwest**, trustee, for lease back. **United Airlines** bought two -924ER/Ws (SN 31647 & 38703). **GECAS** took delivery of three -86N/Ws and leased -one -86N/W (SN 38040) to **Garuda Indonesia**

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Airways. It leased another -86N/W (SN 38046) to **Skymark Airlines**, and leased one -86N/W (SN 41260) to **Spicejet**. **China Southern Airlines** took delivery of four -81B/Ws (SN 38947, 38948, 38952 & 38961). **Lion Air** received one -8GP (SN 38691) and two -9GPER/Ws (SN 38690 & 38732). The -900ERs were leased to **Batik Air**. The -800 was sold to **Avolon** and leased back. **Boeing** delivered two -85C/Ws (SN 38382 & 38401) to **Xiamen Airlines**, and two -8FE/Ws (SN 41010 & 41011) to **Virgin Australia**. **GOL Airlines** accepted two -8EH/Ws (SN 39618 & 39619) for a total of 78. **Shandong Airlines** took delivery of -85N/W (SN 39111) and leased -85N/W (SN 39332) from **Babcock & Brown Asset Management**. **Air China** received -89L/W (SN 40043), and sold it to **Shandong Airlines**. Elsewhere in China, **China Eastern Airlines** acquired -89P/W (SN 39726), and **Shenzhen Airlines** accepted -87L/W (SN 39133). **Boeing** delivered only one -700 in June, -74P/W (SN 39200) to **Hainan Airlines**, which leased it and a sistership (SN 39199) to **Lucky Air**. **Air Lease Corp.** leased a third -89P/W (SN 41304) to **China Southern Airlines**, which subleased it to **China United Airlines**. In the Asia Pacific region, **Qantas** accepted its 66th -838/W (SN 39371). The airline has nine more on order. **Korean Air** received one -9B5ER/W (SN 42174), **Malaysia Airlines** acquired -8H6/W (SN 40147), and **Jet Airways** took delivery of -8AL/W (SN 39059). The **Indian Navy** accepted its fourth -8FV/W – P-8I Poseidon (SN 40613), and it has four more on order. **Boeing** delivered two P-8s in the first quarter and three more in the second quarter of 2013. The 37th -82R/W (SN 40881) was delivered to **Pegasus Airlines**. The airline has four more on order. **Aviation Capital Group** leased a second -8U3/W (SN 38885) to **Garuda Indonesia Airways**. **China Airlines** leased a third -8Q8/W (SN 41788) from **International Lease Finance Corporation (ILFC)**. Elsewhere in the world, **Boeing Business Jet** took delivery of -8LZ/W- BBJ2 (SN 42510). It is operated by **Geermu**. **Air Berlin** received its 71st -86J/W (SN 37780), and **Aeromexico** purchased its 10th -852/W (SN 36703) and has six more on order.

SAS Group finalized the sale and leaseback of six Boeing 737-600's to **Deucalion Capital X Limited** (advised by the German Bank **DVB Bank SE**) and the Irish-based engine leasing company **ELFC (Engine Lease Finance Cooperation)**. "This sale and leaseback transaction represents an important step in the improvement of **SAS'** financial position. In February, we succeeded with a sale and leaseback agreement on spare engines and we now further increase our liquidity from asset sales with this agreement," said **SAS Group's** CFO, **Göran Jansson**. The deal was completed in July. The lease periods are from four to five and a half years. Net cash effect for **SAS Group** is estimated at SEK 500 million, the airline said.

AWAS leased a third new 737-81D/W (SN 39431) to **Solaseed Air**, Japan, from its order backlog. The airline also leases four -800s from **GECAS**. **Solaseed** code shares with **ANA**, and its 737s are painted in a fresh pistachio green livery. It symbolizes youth, energy, and represents the beautiful, natural landscape of Kyushu, the western island, where the airline is headquartered in Miyazaki. **Solaseed** served over 1.3 million passengers in 2012 which was 15.9 percent growth from the prior year.

FLY Leasing acquired two nearly new -800s which were manufactured in 2013. The aircraft are on ten-year leases to leading carriers in the United States and in China. The acquisitions were financed with a combination of **FLY's** unrestricted cash and its aircraft acquisition facility, the lessor said.

International Lease Finance Corporation (ILFC) delivered a new 737-8Q8/W (SN 41789) to Tianjin-based **Okay Airways Company Limited (Okay Airways)** in July. The airline will expand services to meet the growing demand within its route network linking Tianjin with other major cities in China.

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Avolon leased a third 737-89P/W to **China Eastern Airlines** in July. The 737 is being operated by **China United Airlines**.

Boeing 747. Boeing handed over two 747s to customers in June, including the eighth 747-830 (SN 37834) to **Deutsche Lufthansa**. It delivered one 747-8F freighter to an "unidentified customer." The press reported that **Saudi Arabian Airlines** acquired the second of three -87UFs (SN 37563) that **Atlas Air** cancelled last year. Both deliveries are still allocated to an unidentified customer in **Boeing's Order and Deliveries** webpage. The third ex-**Atlas** -87UF (SN 37564) has not yet been allocated to another customer.

China Southern Airlines took delivery of its second and third 787-8s (SN 34927 & 34929) in July. The first plane was the 10th Dreamliner to be built on the Charleston assembly line. The airline will receive another five 787s this year and its last two in 2014. **Hainan Airlines** received its first two -8s (SN 34939 & 34944). The first was the sixth 787 to be completed in **Boeing's** Charleston plant. **Boeing** delivered one -8 (SN 34830) to **United Airlines**, one -8 (SN 34743) to **Ethiopian Airlines**, two -8s (SN 38323 & 38325) to **Qatar Airways**, and one -8 (SN 36285) to **Air India**.

Boeing 767. **LAN Airlines** received its 34th and final -316ER (SN 419967) in June. It was fitted with **APB** winglets in Mexico City. **Uzbekistan Airways** received its ninth and final -33PER (SN 40535). **United Parcel Service-UPS** accepted its 56th -34AF (SN 37864) and it has three more on order. **Boeing** has four 767-2Cs, three passenger 767-300ERs and 49 767-300Fs on back order. Forty-six of the 767Fs were ordered by **FedEx Express** and the 767-2Cs are tanker-transport for the **U.S. Air Force**.

Boeing 777. In June, **Boeing** delivered one -281ER (SN 40904) to **All Nippon Airways**, one 777-FDZ (SN 39644) to **Qatar Airways** and six 777-300ERs. **American Airlines** accepted its eighth of 20 -323ERs (SN 31548), and **Air Canada** received its 11th -333ER (SN 42218). It has four more on order. **Etihad Airways** acquired one -3FXER (SN 41699), and **Garuda Indonesia** accepted its first of 10 -3U3ERs (SN 40074). **BOC Aviation** leased its fifth -3ALER (SN 41524) to **Thai International Airways**. The lessor has three more -300ERs on order. **Korean Air** took delivery of its 11th -3B5ER (SN 37651). It has four more on backlog.

Boeing 787. **Boeing** delivered a record eight 787-8s in June. **British Airways** took delivery of its first two of 24 ordered 787 Dreamliners (SN 38609 & 38610) in late June. The airline will operate the 787s from **Heathrow** to Toronto starting September 1 and will launch Newark services one month later. The 787s will carry only 214 passengers in a three-class cabin. **International Lease Finance Corporation (ILFC)**, leased its first 787-8 (SN 35304) to **Norwegian Air Shuttle**. It was the 700th aircraft **Boeing** delivered to **ILFC** and also the first 787 to be operated by the lessee, **Norwegian**. **All Nippon Airways** accepted its 20th -8 (SN 34511). Rival **Japan Airlines** received its ninth -8 (SN 34841). It has 16 more on order. **LOT Polish Airlines** acquired its fourth of eight -8s (SN 35941). The airline publicly complained that **Boeing's** offer of compensation for the loss of use of the 787s was inadequate. **TUI Travel PLC-Thomson Airways** accepted its third -8 (SN 34424), and it has another five Dreamliners on order. **Qatar Airways** received its sixth -8 (SN 38322), and **Air India** acquired its seventh -8 (SN 36284).

Regional Jet

Bombardier delivered two CRJ1000 NextGens (SN 19034 & 19035) to **Garuda Indonesia**. The latter airplane was displayed at the **Paris Air Show**.

Embraer. Venezuelan carrier **Conviasa** took delivery of three EMBRAER 190-100 STDs (E190) (SN 19000610, 19000612 & 19000622) in June.

Azerbaijan Airlines (AZAL), the national airline of Azerbaijan, received the first of four EMBRAER 190s in July. The three remaining aircraft are scheduled for delivery by the end of the year. The airline also bought two 76-seat E170s from **ECC Leasing**, which will also join the fleet later this year.

Sukhoi Interjet took delivery of Sukhoi Superjet 100 (SSJ100/95B) (SN 95023) in June. **Sky Aviation** received its second SSJ100/95B (SN 95027) in June and will get its third (SN 95031) soon.

Turboprop Aircraft

ATR. Caribbean regional airline, **LIAT Ltd.**, leased its first new ATR 72-600 (SN 1077) from **GECAS** in June. The plane is the first of four 68-seat ATR 72-600s and four 48-seat ATR 42-600s that will be delivered to **LIAT** during 2013 and 2014. **Kar Star**, Indonesia, took delivery of ATR 72-600 (SN 1080) and **Uni Airways** received -600 (SN 1090). **Aeromar**, a regional airline in Mexico, long-term leased its first of two -600s (SN 1086) from **Air Lease Corporation (ALC)**. **Avianca** took delivery of the first of 15 ATR 72-600s (SN 1092) at the **Paris Air Show**. **Nordic Aviation Capital** leased -600 (SN 1085) to **Air KBZ**. **Azul Linhas Aereas** accepted -600 (SN 1088).

Airstream International Group has arranged the purchase and onward lease of one ATR 42-500 (SN 501) to **Hevilift Group**, Papua New Guinea. The ATR was previously owned by **Danish Air Transport**, Denmark, and it will be added to **Hevilift's** fleet of two ATR 42-320s and three DHC-6 Twin Otters. **Airstream** has concluded the sale and/or lease of 12 aircraft since the start of 2013.

Bombardier. **WestJet Encore** took delivery of the first two of 20 Dash 8Q-402 NextGen (SN 4440 & 4441) in June. The aircraft will serve multiple destinations in Western Canada in its first year of service. **WestJet** holds options for 25 additional Q400 NextGens. **Nordic Aviation Capital** leased new Q400 NextGen (SN 4444) to **Air Baltic**. **ANA Wings**, Japan, accepted Q400 NextGen (SN 4445). The airline will take delivery of Q400 (SN 4443) soon.

Airstream International Group arranged the dry lease of one DHC-8-Q300 (SN499) to **Island Aviation Services** of the Maldives. The aircraft is currently undergoing pre-delivery maintenance in

Malaysia Airlines' regional subsidiary, **Firefly**, has taken ownership of its first new ATR 72-600 (SN 1093) in July. **Malaysia Airlines (MAS)** ordered 20 latest generation ATR 72s, and took 16 options worth \$840 million (\$23.33 million each) in December 2012. **Firefly** currently operates 12 ATR 72-500s. **MASwings Airlines**, another regional subsidiary for **MAS**, received its first ATR 72-600 (SN 1099) at a ceremony in Toulouse in July. Nine of the ATR 72-600s that **MAS** ordered will be delivered to **MASwings** by 2017. The airline will use the new aircraft to open up new routes to Brunei and Indonesia.

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Calgary, Canada, and is expected to enter service later this year.

SAAB. Regional Express (Rex) purchased seven latest generation Saab 340Bplus aircraft from their lessors, after the leases expired July 2, 2013. The acquisition was funded by **Rex's** operating cash flows, and brings **Rex's** owned Saab 340 aircraft fleet to 33.

Antiques and Other Junque

GA Innovation China (GAIC), the newly formed joint venture between **GA Telesis** and **Air China**, started the teardown of a **Boeing 747-400** acquired from **Air China**. The aircraft will be disassembled by **Aircraft Maintenance and Engineering Corporation (AMECO)** and the engines will be exported to the United States. **GAIC** will select parts derived from the disassembly and warehouse them in Beijing for sale in China and the rest of the world. The remaining airframe has been sold to **Beijing Capital International Airport** for utilization in fire department and security drills.

GA Telesis has started the dismantling process for three **Boeing** aircraft, including one Trent 800 powered ex-**Malaysia Airlines'** 777-2H6ER (SN 28418), one ex-**American Airlines** 767-223ER (SN 22326) with CF6-80A engines, and one ex-**United Airlines**. 757-222 (SN 25276) with PW2000 engines. All aircraft have entered the **GA Telesis** disassembly line in the United States. The aircraft dismantling and remarketing efforts will be led by the **GA Telesis** supply chain and global sales teams respectively.

Magellan Aviation Group and **Boeing** have signed an aircraft disassembly and consignment agreement covering several aircraft and engine types for resale in the aftermarket. The first aircraft in the program is an ex-**Singapore Airlines** P&W-powered 747-412 (SN 27067).

Reliance Aircraft International, Austin, Texas, is disassembling ex-**Gulf Air** 767-3P6ER (SN 24485) with **GE CF6-80C2** engines. This is the 10th aircraft disassembled by **RAI** since it was launched in 2011. **Terry Hix**, President of **RAI**, said its "diverse inventory along with the extensive knowledge of both **Boeing** and **Airbus** aircraft by our team, allows us to support a wide spectrum of the commercial aftermarket, all while providing immediate hands on customer service."

EirTrade Aviation Ireland purchased a 737-500 which will be dismantled in their hangar at **Ireland West Airport**, Knock, County Mayo. This is **EirTrade's** first 737 and it will be the third aircraft to be disassembled at their facility this year. The company was founded by a team of aviation professionals in 2010. It provides aircraft and engine teardown management, sales and consignment of aircraft and engine components and back to birth traceability on aircraft engine records to maximize their value, **EirTrade** said.

Werner Aero Services has begun to tear down one A319 that was last operated by **TAM**. The airplane is being dismantled in Arizona and will be completed in August. The components from the A319 will be used to support **Werner's Airbus** customers. "The availability of these components will help us provide quicker turnaround time to our customers and will also be utilized in our exchange program," said **Mike Cazaz**, CEO of **Werner Aero**.

AJW Aviation has completed the part-out of A319 (SN 1066) that was purchased from **Avianca**, Colombia. The 850 parts recovered have already been certified and fed into the **AJW** inventory reserves for sale, exchange and loan.

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US Airways plans to retain only 14 737-400s in its fleet by December 2013. It operated 32 -400s in December 2012, and retired its last 737-300s last year. The 737 Classics are being replaced with **Airbus A321s**.

Accidents and Safety

From Aviation Safety Foundation

Asiana Airlines Boeing 777-28EER (HL7742, SN 29171) landed short of the runway at **San Francisco International Airport** on July 6. Three of the 291 passengers and 16 crew members died and 48 were seriously injured. The pilot was undergoing training and an instructor pilot was acting as co-pilot. The aircraft's speed dropped well below a safe minimum just seconds before impact and the crew tried to accelerate the aircraft and perform a go-around. The main landing gear and rear fuselage struck a sea wall short of the runway, and the tail was sheared off at the rear bulkhead. The airplane came to rest to the left of the runway and caught fire after a fuel tank ruptured. The accident is under intense investigation by the **National Transport Safety Board**, the **FAA** and Korean aviation authorities.

United Airlines intends to retire ageing **Boeing 757-200s** from its domestic fleet, with the last scheduled to be gone by the end of 2015. The Chicago-based carrier will remove 73 757s and replace them with **Boeing 737-900ERs** over the next two and a half years. **United** only has 48 737-900ERs on order for delivery by December 2015. The airline has 129 757-200s in its fleet and firm orders for 88 737-900ERs. Up to 30 domestic 757s will be sold to **FedEx** under a deal that was announced in March. The international 757s will remain in **United's** fleet for the time being. The plan is to replace the international 757s with larger long-range aircraft. The carrier intends to keep its total fleet count roughly flat over the next five years.

Southwest Airlines Boeing 737-7H4 (N753SW, 29848) was damaged when the nose landing gear collapsed rearward and upward into the fuselage during its landing at **New York-La Guardia Airport**, on July 22. Nine of the 145 passengers and five crew members were treated for minor injuries. The electronics bay and the aircraft's exterior were damaged from sliding 2,175 feet on its nose before coming to rest off to the right side of the runway. It was subsequently believed that the airplane landed on its nose gear before its main gear touched down.

Sukhoi Superjet's test aircraft SSJ100-95 (SN 97005) carried out a gear-up landing at **Reykjavik-Keflavik International Airport**, Iceland, on July 21. One of the five persons on board suffered a minor injury. The airplane was testing the Superjet 100's Category IIIa automatic landing system when it flew several circuits with approaches to the runway. The undercarriage was not down when it landed, and it came to rest in the grass at the end of the runway. Investigators determined that the undercarriage was deployed, but then retracted before the belly landing. The Icelandic aviation authority **RNF** has not yet explained why the aircraft failed to climb away after carrying out a missed approach test at low altitude. Instead the SSJ lost height and struck the runway. The aircraft's belly and engine pods were damaged, but the airplane will be recovered.

Ethiopian Airlines Boeing 787-8 Dreamliner (ET-AOP, SN 34744) was substantially damaged by a ground fire while parked at **London-Heathrow Airport** on July 12. The airplane arrived from Addis Ababa, Ethiopia, in the morning, and a fire was reported 10 hours later. Firefighters found the source of smoke in the ceiling at the rear of the plane and doused the fire with water. The composite structure of

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the roof of the fuselage suffered smoke and heat damage. The preliminary investigation showed that the **Emergency Locator Transmitter (ELT)** and its associated wiring system had shorted out due to condensation. The **ELT** is powered by its own Lithium-Manganese Dioxide (LiMnO₂) batteries, and is made by **Honeywell**. The U.S. **Federal Aviation Administration** called for the inspection of the ELT in all 787s.

The Government of Newfoundland and Labrador's Bombardier CL415 (C-FIZU, SN 2076) was scooping water from **Moosehead Lake**, near Wabush, Canada, on July 3, when the airplane failed to ascend from the lake. Both crew members were slightly injured and the aircraft sank. It will be recovered, but the extent of damage is not known.

Batair Cargo Embraer EMB-110P1 Bandeirante (ZS-NVB, SN 110479) crashed while on approach to **Francistown Airport**, Botswana, on June 29. Both crew members were killed. The plane was making a refueling stop at Francistown on its way to Lubumbashi, Democratic Republic of Congo (D.R.C.), when it made an instrument approach due to shallow fog. The crew performed a go-around, and then tried to approach from the opposite direction under visual rules. The airplane crashed three miles short of the runway.

AVMARK CAPABILITIES

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

ASSET MANAGEMENT PROGRAMS

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

AIRLINE IMPROVEMENT PROGRAMS

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

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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.

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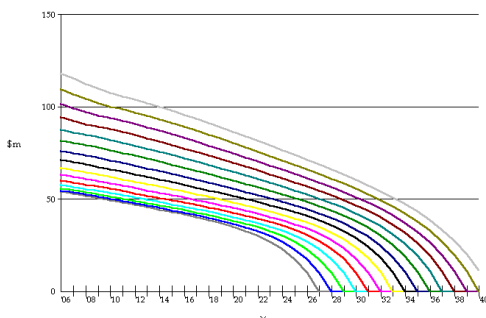
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CAVAS Graph



Profit & Loss Report

Aircraft Type	Period	1	2	3	4	5	6
REVENUES (US\$)							
Passengers	49,328,754	49,270,739	49,212,559	49,154,213	49,095,701	49,037,189	48,978,677
Freight & Mail	8,879,176	8,868,733	8,858,261	8,847,758	8,837,226	8,826,673	8,816,110
Other Revenue	986,575	985,415	984,251	983,084	981,914	980,744	979,574
TOTAL OPERATING REVENUE	59,194,505	59,124,887	59,055,070	58,985,055	58,914,841	58,844,626	58,774,411
VARIABLE EXPENSES							
Fuel	6,918,975	6,917,340	6,915,670	6,913,970	6,912,240	6,910,490	6,908,720
Landing Fees	3,021,823	3,021,823	3,021,823	3,021,823	3,021,823	3,021,823	3,021,823
Enroute Charges	392,440	392,440	392,440	392,440	392,440	392,440	392,440
Pax Commissions	7,399,313	7,399,313	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	1,331,876	1,331,876
Food & Supplies	3,993,194	3,993,194	3,993,194	3,993,194	3,993,194	3,993,194	3,993,194
Passenger Liability Insurance	379,590	379,590	379,590	379,590	379,590	379,590	379,590
TOTAL VARIABLE COST	23,443,212	23,443,212	23,443,212	23,443,212	23,443,212	23,443,212	23,443,212
SEMI-VARIABLE EXPENSES							
Crew Salaries & Expenses	5,177,760	5,177,760	5,177,760	5,177,760	5,177,760	5,177,760	5,177,760
Maintenance & Engineering	587,650	587,650	587,650	587,650	587,650	587,650	587,650
TOTAL SEMI-VARIABLE COST	5,765,410	5,765,410	5,765,410	5,765,410	5,765,410	5,765,410	5,765,410
TOTAL OPERATING COST	29,208,622	29,208,622	29,208,622	29,208,622	29,208,622	29,208,622	29,208,622
OPERATING PROFIT OR LOSS	29,985,883	29,916,265	29,846,448	29,776,631	29,706,814	29,636,997	29,567,180
D-CHECK ADJUSTMENT							
Cumulative Hours	4,830	9,660	14,490	19,320	24,150	28,980	33,810
Cumulative Dollars	315,000	0	0	0	0	0	0
ADJUSTED CASH FLOW	25,841,782	25,329,851	24,506,290	23,686,100	22,869,282	22,052,464	21,235,646
AIRCRAFT LIFE ADJ. CASH FLOW	25,841,782	25,329,851	24,506,290	23,686,100	22,869,282	22,052,464	21,235,646

Profit & Loss Report

Aircraft Type	Period	1	2	3	4	5	6
FIXED EXPENSES							
Station Overhead	346,597	345,923	345,249	344,575	343,901	343,227	342,553
Maintenance Burden	176,295	351,824	526,586	700,581	873,810	1,047,039	1,220,268
Other Overhead	0	0	0	0	0	0	0
TOTAL FIXED COST	522,892	697,747	871,835	1,045,156	1,217,711	1,390,266	1,562,821
TOTAL OPERATING COST	31,464,497	32,185,749	32,903,601	33,618,052	34,329,104	35,039,156	35,749,208
General and Admin. Allocation	1,573,225	1,609,287	1,645,180	1,680,303	1,716,455	1,752,607	1,788,759
TOTAL COST	33,037,722	33,795,036	34,548,781	35,298,355	36,045,559	36,791,763	37,537,967
OPERATING PROFIT OR LOSS	26,156,782	25,329,851	24,506,290	23,686,100	22,869,282	22,052,464	21,235,646
D-CHECK ADJUSTMENT							
Cumulative Hours	4,830	9,660	14,490	19,320	24,150	28,980	33,810
Cumulative Dollars	315,000	0	0	0	0	0	0
ADJUSTED CASH FLOW	25,841,782	25,329,851	24,506,290	23,686,100	22,869,282	22,052,464	21,235,646
AIRCRAFT LIFE ADJ. CASH FLOW	25,841,782	25,329,851	24,506,290	23,686,100	22,869,282	22,052,464	21,235,646

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 \$118.00m

Estimated Life: 35 years File No. 013

Search Term

Add Modify Delete OK

Aircraft: Airbus A340-300 - Widebody 4 Engine Passenger

CAVAS Figures

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
2006	54.00	54.61	55.83	57.66	60.10	63.14	66.80	71.07	75.94	81.43	87.52	94.23	101.54	109.47	118.00
2007	52.85	53.49	54.70	56.56	58.99	62.01	65.63	69.95	74.86	80.37	85.92	92.18	99.12	106.73	115.25
2008	51.68	52.36	53.61	55.43	57.85	60.84	64.43	68.69	73.65	79.18	84.76	90.48	96.97	104.20	112.39
2009	50.49	51.19	52.46	54.29	56.70	59.67	63.24	67.48	72.48	78.01	83.62	89.40	95.81	103.44	111.63
2010	49.28	49.99	51.27	53.10	55.50	58.46	62.00	66.21	71.18	76.71	82.32	88.09	94.50	102.44	110.63
2011	48.05	48.77	50.05	51.88	54.27	57.21	60.73	64.92	69.87	75.48	81.15	86.96	93.56	101.71	110.00
2012	46.80	47.52	48.80	50.62	53.00	55.92	59.42	63.59	68.52	74.11	79.75	85.53	92.31	100.60	109.00
2013	45.53	46.25	47.52	49.34	51.71	54.62	58.10	62.25	67.16	72.73	78.34	84.06	90.94	99.43	107.92
2014	44.24	44.96	46.23	48.04	50.40	53.30	56.76	60.89	65.78	71.34	76.93	82.63	89.58	98.25	106.73
2015	42.93	43.65	44.91	46.71	49.06	51.95	55.40	59.51	64.38	69.91	75.49	81.18	87.99	96.84	105.31
2016	41.60	42.32	43.57	45.36	47.70	50.58	54.01	58.09	62.89	68.40	73.99	79.74	86.61	95.64	104.15
2017	40.25	40.96	42.21	44.00	46.33	49.20	52.61	56.68	61.46	66.94	72.50	78.12	84.86	93.96	102.44
2018	38.88	39.59	40.83	42.61	44.93	47.79	51.18	55.17	59.74	65.19	70.69	76.32	83.04	92.22	100.63
2019	37.49	38.20	39.43	41.20	43.51	46.35	49.72	53.69	58.24	63.64	69.08	74.64	81.34	90.60	99.00
2020	36.08	36.79	38.01	39.77	42.07	44.89	48.24	52.19	56.72	62.10	67.50	73.00	78.58	85.34	94.63
2021	34.65	35.36	36.57	38.32	40.61	43.41	46.74	50.67	55.18	60.54	65.92	71.39	76.94	83.68	92.97
2022	33.20	33.91	35.11	36.85	39.13	41.91	45.22	49.13	53.62	58.96	64.32	69.77	75.29	82.00	91.29
2023	31.73	32.44	33.63	35.36	37.63	40.40	43.69	47.58	51.95	56.88	62.22	67.61	73.11	78.70	85.39
2024	30.24	30.95	32.13	33.85	36.11	38.87	42.14	45.99	50.34	55.25	60.61	66.00	71.49	77.06	83.75
2025	28.73	29.44	30.61	32.32	34.57	37.32	40.57	44.40	48.70	53.58	58.92	64.29	69.67	75.23	81.92
2026	27.20	27.91	29.07	30.77	33.01	35.74	38.97	42.78	47.05	51.85	57.16	62.50	67.85	73.40	79.99
2027	25.64	26.35	27.50	29.19	31.41	34.12	37.33	41.11	45.36	50.13	55.41	60.70	66.00	71.49	77.06
2028	24.06	24.76	25.90	27.58	29.79	32.48	35.67	39.42	43.64	48.38	53.63	58.88	64.13	69.56	75.06
2029	22.46	23.15	24.28	25.94	28.13	30.80	33.95	37.66	41.84	46.54	51.76	56.96	62.15	67.54	73.02
2030	20.84	21.52	22.63	24.27	26.44	29.08	32.20	35.87	39.99	44.63	49.78	54.93	60.06	65.26	70.72
2031	19.20	19.87	20.96	22.58	24.73	27.34	30.43	34.06	38.14	42.74	47.84	52.91	57.93	63.00	68.13
2032	17.54	18.20	19.27	20.87	23.00	25.58	29.17	32.74	36.79	41.35	46.40	51.41	56.36	61.34	66.45
2033	15.86	16.51	17.56	19.14	21.24	23.79	27.34	30.94	34.94	39.46	44.46	49.41	54.30	59.22	64.27
2034	14.16	14.80	15.83	17.39	19.46	22.00	25.53	29.51	33.49	37.96	42.88	47.77	52.59	57.34	62.02
2035	12.44	13.06	14.07	15.61	17.64	19.99	23.49	27.42	31.34	35.74	40.57	45.31	50.00	54.63	59.19
2036	10.70	11.30	12.29	13.81	15.80	18.12	21.40	25.28	29.14	33.44	38.13	42.74	47.27	51.72	56.10
2037	9.04	9.62	10.59	12.08	14.03	16.32	19.56	23.32	27.05	31.14	35.56	39.92	44.13	48.20	52.13
2038	7.36	7.92	8.87	10.34	12.26	14.54	17.74	21.44	25.11	29.14	33.36	37.50	41.50	45.36	49.00
2039	5.66	6.20	7.13	8.57	10.45	12.69	15.84	19.44	23.00	26.94	31.00	35.00	38.86	42.50	46.00
2040	4.00	4.50	5.40	6.80	8.64	10.80	13.80	17.20	20.50	24.20	28.00	31.50	35.00	38.50	42.00

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