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# Aircraft's Long- term Market: Boeing's Projections



Boeing forecasts in its annual report a demand

of 36,770 new airplanes, valued at \$5.2 trillion until 2033. Boeing, projects that 15,500 of these new airplanes will replace older and less efficient airplanes whereas approximately 21,270 airplanes will be for fleet growth, stimulating expansion in emerging markets and innovative

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airline business models. Additionally, approximately 25,680 airplanes will be single-aisle airplanes and 8,600 will be wide-body.

According to Boeing, commercial fleet will grow from 20,910 airplanes today to 43,180 by 2033. Today the world's largest fleets are in the United States, China, Russia, the United Kingdom, and Germany. From the 36,770 new airplanes, more than 30%, 13,000 airplanes have already been sold and United States, China, Indonesia, Russia, and India are the countries with the largest backlog. The replacement market tends to be driven by the more mature aviation markets, such as Europe and North America. Growth is being driven by the emerging markets, such as Latin America and Asia Pacific, and by the low-cost carrier and sixth freedom business models.



According to Boeing, global GDP will grow by 3.2%. Based on that the US conglomerate projects that airline passenger traffic will grow at 5.0% and air cargo traffic at 4.7%. Passenger traffic within China will be the largest travel market, expected to grow at 6.6% annually. Travel within North America and Europe, while growing below trend, will be the second and third largest markets, with growth rates at 2.3% and 3.5%. Traffic to and from the Middle East and Asia Pacific, within Asia Pacific (excluding China), and within Latin America will be among the fastest to grow.

Kyriazis Vasileios, Epicos Newsletter Head Editor

# Europe: Aircraft's Long- term Market



Europe is currently experiencing one of the worst global economic crises in more than 80 years. Nevertheless, the European aviation market remained strong in 2013. It is indicative that the Association of European Airlines reports that member airlines carried 0.2% more passengers in 2013 than in the previous year, while members of the European Low Fares Airline Association reported a 6.7% increase in passengers over 2012 levels. Finally, European airlines acquired more than 180 new airplanes in 2013, of which 78% were single aisle. It is expected that aviation growth will continue over the next 20 years and European airlines forecast to acquire 7,450 new airplanes valued at

\$1,040 billion.

Single-aisle airplanes will account for the majority of deliveries, representing a 79% share of total deliveries. More specifically from the 7,450 new airplanes to be delivered over the next 20 years, 5,870 will be single aisle. Additionally, 810 will be small wide-body (11% of the total market), 590 will be medium widebody (8%), 120 regional jets and 60 large wide-body.

As all the other "mature" markets Europe will be a "replacement" market. On the other hand "growth" market will be mostly driven by the emerging markets, such as Latin

Europe Key indicators and new airplane markets			
Growth measures (%) Economy (GDP) 1.9 Traffic (RPK) 3.9 Cargo (RTK) 3.5 Airplane fleet 2.9	air Large widebody Medium widebody Small widebody Single aisle Regional jet	New planes 60 590 810 5,870 120	Share by size (%) 1 8 11 79 1
MarketsizeDeliveries7,450Market value\$1,040BAverage value\$140M	Total Large widebody Medium widebody Small widebody Single aisle	<b>7,450</b> <b>2013</b> <b>fleet</b> 180 360 350 3,120	<b>2033</b> fleet 110 640 980 5,830
Source: Boeing	Regional jet Total	340 <b>4,350</b>	150 <b>7,710</b>

America and Asia Pacific, and by the low-cost carrier.

Thus, European aviation growth is not as rapid as aviation growth in the world's emerging economies. Nevertheless, the region's large installed base of more than 4,300 airplanes supports a substantial demand for replacement airplanes. Replacement demand will account for 55% of Europe's total market for new airplanes.

Kyriazis Vasileios, Epicos Newsletter Head Editor

# Epicos "Industrial Cooperation and Offset Projects"

Cpicos.com Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of comprehensive Offsets programs, through a searchable database. By introducing different offset projects and ideas proposed by local A&D industry it ensures the optimum cost for Prime Contractors and reassures that the priorities of local industry are fully met...

### For Further Information Press Here

### Producing and installing complete checkpoint equipment



A company specializing in services related to the production and construction of steel structures, from project planning to turnkey projects, in the frame of an offset program, is proposing collaboration as a subcontractor to a foreign company active in the steel construction industry, for the supply and installation of complete checkpoints, or various checkpoint equipment, such as looking towers, cordons, fire positions, bolt holes, barbed wire, etc. As part of the project, the foreign company will transfer its knowhow on the required equipment and set-up of a checkpoint training facility for the training of soldiers, before deployment for peacekeeping and other operations.

For Further Information Contact our ICO Department

Mail at: g-menexis@epicos.com

# Development of an advanced Fluxset type magnetic field sensor for Airborne Antisubmarine Warfare



A company with vast experience in customized hardware and software solutions, the development of avionics and other high-tech electronics systems and simulators is proposing -in the frame of an offset project- to partner with a prime contractor or a third party company (in a targeted country), specializing in sensing technologies, for the development of an advanced Fluxset type magnetic field sensor for Airborne Antisubmarine Warfare.

For Further Information Contact our ICO Department

Mail at: g-menexis@epicos.com

# *News from our A&D Business Network*

IAI Unveils Its New Counter IED and Counter Mine Suite for Tactical Vehicles



Israel Aerospace Industries (IAI), unveils its new CIMS (Counter IED and Mine Suite) - an integrated suite of sensors, for protection of tactical maneuvering vehicles. CIMS will be displayed at the 2014 Annual Association of the United States Army

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(AUSA) Meeting & Exposition in Washington DC, from October 13-15, 2014 (IAI North America - Booth #2039).

Although mines and IEDs (Improvised Explosive Devices) are not new to the war scene, the use of these devices has become a matter of concern for modern armies both in regular and assymetric warfare. The CIMS suite was designed under the premise that no one sensor can provide the adequate probability of detection and low false-alarm rate required by today's operational needs.

The CIMS suite detects both surface and underground IEDs, mines, and roadside bombs, and consists of an ADS - Above-surface Detection System, and MIDS - underground Mine and IED Detection System. The ADS includes a groundbreaking side-looking SAR radar, high-resolution optical detection system and an infrared multispectral investigation system. MIDS comprises a Ground Penetrating Radar (GPR) and a magnetic detector.

Integration of the sensor suite through a central processing and management system delivers accurate synergetic real-time mapping of IED threats to the warfighter, requiring minimal training and decision-making. The CIMS suite and its subsystems can be adapted to any combat tactical vehicle.

"CIMS was designed first and foremost to save lives," said Nissim Hadas, IAI VP & ELTA President. "Our combination of unique sensors allows a simple and highly effective mine and IED detection system to be provided to forward forces. We see huge potential for this system and consider it to be a groundbreaking solution."

For further information, please contact:

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Or <u>click here</u>

#### GE Capital Aviation Services Delivers an Embraer 190 to New Customer BoraJet



GE Capital Aviation Services Limited (GECAS), the commercial aircraft leasing arm of GE, today announced the delivery of an Embraer 190 to BoraJet Arlines to help the carrier's fleet expansion. This is GECAS' first transaction with BoraJet.

BoraJet, based in Istanbul, operates a fleet of six Embraer 190s to destinations throughout Turkey.

About GE Capital Aviation Services (GECAS)

GECAS, the U.S. and Irish commercial aircraft financing and leasing business of GE, has a fleet of approximately 1,600 owned and serviced aircraft with over 230 airlines. With 40+ years of industry experience, GECAS is recognized as the pre-eminent airline leasing company in the world, offering a wide range of aircraft types and financing options, including operating leases and secured debt financing. GECAS also provides an ever expanding array of productivity solutions including spare engine leasing, aviation consulting services, and spare parts financing and management. GECAS, a unit of GE Capital, has offices in 23 cities around the world, and services customers in 75+ countries. (www.GECAS.com) GE (NYSE: GE) works on things that matter. The best people and the best technologies taking on the toughest challenges. Finding solutions in energy, health and home, transportation and finance. Building, powering, moving and curing the world. Not just imagining. Doing. GE works. For more information, visit the company's website at www.ge.com.

For further information <u>click here</u>

## **Epicos Newsroom**

#### Poland urges NATO to push ahead with missle shield



Poland on Monday urged NATO's new secretary general to push ahead with a missile shield system amid the West's worst standoff with Russia since the Cold War.

"We firmly support the creation of this (missile shield) system as a pan-NATO one because only this makes deep sense both politically and in terms of defence," Poland's President Bronislaw Komorowski said at a joint press conference with NATO Secretary General Jens Stoltenberg.

"Poland is determined to build its missile shield and air defence system -- it's important not only for Poland -- and we uphold our obligations for the US portion of this project," Komorowski said.

Stoltenberg, who chose Warsaw for his first foreign visit, said Poland "was a key contributor to our missile defence system."

The new NATO chief said last week that Russia must reverse course in Ukraine but stressed that the alliance remains ready to have a constructive relationship with Moscow.

Poland said last year it would spend 33.6 billion euros (\$43.3 billion) to set up its own missile shield. NATO's 28 members decided in 2010 to create a missile shield based on US technology. The project is due to be completed in 2020, with significant elements in Romania and Poland.

The Western defence alliance insists the role of the planned shield is a "purely defensive" response to external threats, notably from so-called "rogue states", and is in no way directed against Russia.

But Moscow has taken a dim view of the project, seeing it as a security threat on its very doorstep. The escalation of tensions with Russia since January over its role in the Ukraine crisis has sounded the alarm on NATO's eastern flank in countries that were under Moscow's thumb during the Soviet era.

Tension mounted further after Russian President Vladimir Putin was quoted last month as saying that "if I wanted, Russian troops could not only be in Kiev in two days, but in Riga, Vilnius, Tallinn, Warsaw or Bucharest, too."

Stoltenberg, who took over as NATO chief last week, insists that Russia must reverse course in Ukraine but stressed that the alliance remains open to a constructive relationship with Moscow.

#### NATO says will protect Turkey from IS 'spillover'

The new head of NATO said Monday it would protect member Turkey against attacks from the jihadist Islamic State group, which is fighting to capture territory in Iraq and Syria near the Turkish border.

"Turkey is a NATO ally and our main responsibility is to protect the integrity, the borders of Turkey," NATO Secretary General Jens Stoltenberg told reporters.

"We have deployed Patriot missiles in Turkey, to enhance, to strengthen the air defence of Turkey. And Turkey should know that NATO will be there if there is any spillover, any attacks on Turkey as a consequence of the violence we see in Syria."

Stoltenberg spoke after meeting with Poland's defence and foreign ministers in Warsaw, his first foreign visit since taking office last week.

He will also visit Turkey, which is struggling to cope with the spillover from the Syrian and Iraq conflicts.

"I would also like to welcome the actions taken by the United States, of the NATO allies and regional partners to fight ISIL," he said, referring to air strikes targeting IS in Syria and Iraq.

Turkish lawmakers last week authorised the government to join the campaign against IS, but so far no military plans have been announced.

IS, an extremist Sunni Muslim group, has seized large parts of Syria and Iraq, where it has been accused of carrying out widespread atrocities, including mass executions, abductions, torture and forcing women into slavery.

IS militants on Monday attempted again to storm the key Syrian town of Kobane on the Turkish border but Kurdish fighters fought off the fresh assault.

IS began its advance on Kobane on September 16, seeking to cement its grip over a long stretch of the Syria-Turkey border.

The offensive prompted a mass exodus from the town and surrounding countryside, with some 186,000 people fleeing into Turkey.

#### Airbus trails Boeing with 791 aircraft orders in nine months

European aerospace giant Airbus Group said on Monday it has taken 791 net orders for aircraft in the first nine months of the year, putting it clearly behind its main rival US firm Boeing. The US group has reported booking 1,000 net orders. Airbus also delivered fewer aircraft, with a total of 443 to 528 for Boeing.

Airbus said that a notable development in September was the conversion of a draft purchase of eight long-haul A330-200 airliners by British IAG airline group into firm orders.

The aircraft are destined for IAG's subsidiary, Iberia of Spain.

In the segment of medium-range airliners, Airbus said that options for 27 standard Airbus A320 aircraft had been turned into firm orders by low-cost operator easyJet.

Most of the orders booked by Airbus so far this year are for the fuel-efficient medium-range aircraft, the A320neo which accounts for 512 orders, followed by 146 orders for A321neo, which is the biggest aircraft in the group's range of single-aisle planes.

Source: 2014 AFP, Agence France-Presse (AFP)

### Global air cargo traffic to double in 20 years: Boeing

Global air cargo traffic will double in the next 20 years, enjoying annual growth of 4.7 percent as international trade picks up after a long period of stagnation, US aerospace giant Boeing predicted Tuesday.

Major airline operators were severely hit by the global financial crisis in 2008 and, despite a rebound in 2010, worldwide air cargo traffic has remained flat in recent years. But Boeing, in its biennial World Air Cargo Forecast released at an industry expo in Seoul, said traffic had grown 4.4 percent on-year from January to July this year. "We see strong signs of a recovery as air freight traffic levels continue to strengthen after several years of stagnation," said Randy Tinseth, vice president of marketing at Boeing's Commercial Airplanes.

"The air cargo market is now growing at nearly the long-term rates," he said in a statement.

The report predicted cargo traffic between Asia and North America, as well as Asia and Europe would continue to dominate the market, although the fastest growth would be in intra-Asian and Chinese domestic volumes.

#### Virgin Atlantic to shut down UK short-haul service

Richard Branson's Virgin Atlantic will shut its short-haul domestic service in Britain, the airline said Monday, partly owing to a lack of demand for connections with its long-haul operations.

The carrier said in a statement that it will cease its so-called "Little Red" service next year.

The operation was launched in March 2013 and has since flown more than one million passengers between London, Manchester and Scotland.

"Demand has been predominantly from point-to-point customers rather than connecting traffic," the airline added in the statement.

"High levels of connections onto Virgin Atlantic's long haul network have always been important to the success of Little Red."

The company said daily services between London Heathrow and Manchester will continue until the end of March 2015, while flights between London Heathrow and Edinburgh and Aberdeen will continue until September 2015.

British tycoon Branson owns 51 percent of Virgin Atlantic, with the rest in the hands of US group Delta Air Lines.