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Croatia: Equipping the National Armed Forces



Throughout the years Croatian authorities are trying to further modernize the national armed forces and to align them with the developments in the international scene. The fact that Croatia is a full member of NATO since April 1, 2009, has definitely helped the country develop its national armed forces as the fulfillment of obligations resulting from NATO membership put before

Croatian armed forces (CAF) have redefined their missions and tasks and gave them a detailed "roadmap" for achieving the modernization developments required.

For the following years, CAF has planned a series of armament modernization. Regarding infantry weapons for the period 2015-2024 the following projects/programs will be carried out:

A total of 48 tanks will be retained in operational use in the Armed Forces and they will be subjected to revision process; one Tank Company will be modernized;

> End of equipping and phasing into operational use of the APC Patria with other

- weapon and military systems (anti-armor system, remote weapon station of 30 mm, communication equipment);
- Maintenance and modernization of the infantry combat vehicle BVP M-80, including modernization with new anti-armor systems;
- > Equipping with new mobile anti-armor system.
- Equipping with Man Portable Short Range Air Defense System (MANPADS).
- Further development of the Engineer branch and phasing in of the mines with self-destruction or



self-deactivation, the system of distance mine planting, the system of quick opening of passages in mine fields and replacement of the launching systems for quick bridging over and floating bridges systems;

Equipping with engineer assets and equipment for general and combat support and explosive ordnance disposal (EOD).

Regarding the Navy, for the period 2015-2024 the following projects/programs will be carried out:

- Equipping with Coastal Patrol Boat;
- Equipping with Offshore Patrol Vessel (OPV);
- > Equipping with Anti-Ship Missile System.

Regarding the Air Force and Air Defense, for the period 2015-2024 the following projects/programs will be carried out:

- By the end of the year 2016 decision will be made regarding retaining or abandoning Autonomous Protection of the Air Space;
- > Equipping with Air Defense system of mid-range.

Kyriazis Vasileios, Epicos Newsletter Head Editor

Croatia: Memorandum of Understanding on MATC



Ministry of Defence of the Republic of Croatia

The main defence goal of Croatia is the development and maintenance of adequate defense capabilities for deterrence of threats to vital national

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interests. Apart from that, another important defence goal is the successful contribution of the Croatian Armed Forces to the efforts of the country in building confidence and security in the international scene through participation in military operations, which support international security and peace and through international defense cooperation. Under this concept, Croatian authorities are deliberately trying to enhance the connection the national army has with the armies of other countries. Towards this direction, Croatian Defence Minister Mr. Ante Kotromanovic, signed a Memorandum of Understanding on the establishment of the Multinational Aviation Training Centre (MATC), alongside the counterparts of other participating countries namely the Czech Republic, Slovakia and Hungary.

The MATC project was launched to standardise the training of air forces, enhance interoperability and the training activity effectiveness economising through multinational co-operation within the Smart Defence initiative.

The MATC constitutes a new phase in the years-long successful co-operation of the participating nations in pre-deployment training of aircraft crews serving in NATO-led operations. The Centre is expected to open by the end of the current year, and to achieve the FOC in 2017 respectively.

Kyriazis Vasileios, Epicos Newsletter Head Editor

Epicos "Industrial Cooperation and Offset Projects"

epicos.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...

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Semi-inertial navigation system to be installed on-board tactical military armoured and utility vehicles



A company with long standing experience in the development and production of electromechanical instruments and avionics systems, is proposing the installation of a semi-inertial navigation system on tactical armoured vehicles. The system will provide low cost and adequate accuracy for ground vehicles, improving situation awareness, while at the same time promote the integration of almost all types of vehicles in a common information network. The potential utilization of existing know-how in the field of land vehicle navigation in order to fulfil related navigation requirements of future soldier

systems (in a miniaturised version), is also proposed as part of the project.

For Further Information Contact our ICO Department

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Development of structural composite parts using overbraiding technology for vehicles' ballistic protection



A company, which is a dedicated manufacturer of braided and woven fibres for composite reinforcement and advanced composites applications, is interested in developing structural composite parts for vehicles' ballistic protection. The company is an expert in the overbraiding manufacturing process, which is particularly well suited for circumferential products, like tubes or beams, and offers a number of advantages in comparison with filament winding, such as better crash properties and the possibility to produce more complex shapes. Furthermore, the company is highly experienced in the

use of Aramid fibres, which increase the energy absorption capacity, as well as the damage tolerance of the components. Combining this knowledge and experience, the company is looking for a partner to develop structural composite parts for vehicle protection purposes, using its overbraiding production technology.

For Further Information Contact our ICO Department

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News from our A&D Business Network



First RAAF C-27J Spartan Arrives in Australia



Chief of Air Force, Air Marshal Geoff Brown, AO, welcomed the first RAAF C-27J Spartan battlefield airlift aircraft in Australia at a ceremony at RAAF Base Richmond today. The acquisition of the C-27J Spartan will fill a gap in Australia's military capability for tactical fixed

wing airlift, which has been left open since the retirement of the Caribou fleet in 2009. Air Marshal Brown said the acquisition of ten C-27J aircraft, which has been planned since 2012, signifies a \$1.4 billion investment in Australia's airlift capability.

"This acquisition represents a commitment to Australia's air power capability which is a critical element of Australia's national security and defence strategy," said Air Marshal Brown.

"The C-27J will strengthen the Australia Defence Force's air lift capability by increasing our ability to move troops, equipment and supplies.

"The aircraft will complement the capabilities of the C-130J Hercules and C-17A Globemaster and will be able to carry medium-sized loads and access smaller runways that are not suited to other aircraft.

"This will allow Air Force to support humanitarian missions as well as battlefield airlift in remote locations and unprepared airstrips common in Australia's region.

"Under Plan Jericho, the plan to transform Air Force into a 5th generation fighting force for the information age, the C-27J will operate within an integrated system that is more agile, has an extended reach and gathers and distributes information quicker and more efficiently than ever before."

The C-27J aircraft provides protection from a range of threats through features such as missile warning systems, electronic self-protection, secure communications and battlefield armour.

Initial Operational Capability for the C-27J fleet is planned for late 2016, with Final Operational Capability expected within the following two years.

The fleet of C-27J Spartan aircraft will initially be based at RAAF Base Richmond in New South Wales, until their permanent home at RAAF Base Amberley in Queensland is completed.

For Further Information Click Here

Republic of Singapore Extends Air Grading Contract with BAE Systems



BAE Systems has been awarded an extension to its contract to support the Republic of Singapore Air Force (RSAF) Air Grading Centre (AGC) – Flying Training Institute (FTI) from its Flight Training Academy located in Tamworth,

NSW. BAE Systems will continue to provide the RSAF with aircraft, purpose built training facilities, instructor training, student accommodation and recreational facilities until the end of 2019. Under the contract extension, the RSAF aims to increase the number of students that undertake air grading from 220 to 240 annually. The AGC will continue to be supported by a permanent detachment of 12 RSAF personnel who, along with their families, make a valued contribution to the local Tamworth community.

During the recent AGC Contract Performance Review, the RSAF Head of Air Training, Colonel Ho Yung Peng, stated that the excellent working relationship between the RSAF and BAE Systems has delivered solid contractual outcomes to date.

BAE Systems Australia Director Aerospace Steve Drury said: "We are honoured to continue providing the Singapore Air Force with aircraft and training equipment to meet their future aircrew training needs. We welcome the RSAF's continued support for Flight Training Tamworth and BAE Systems as their on-going partner for air grading activities."

Mr Drury continued: "This extension with the RSAF maintains our broad customer base beyond the Australian Defence Force, which is an important element of our long-term flight training business in Tamworth."

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Epicos NewsRoom



Boeing, Embraer to Collaborate on ecoDemonstrator Technology Tests

Boeing and Embraer S.A. today announced that they intend to collaborate to test environment-focused technologies through the ecoDemonstrator Program in a joint effort to improve aviation's environmental performance. This expands ongoing cooperation between two of the world's largest airplane manufacturers.

Frederico Curado, president and CEO of Embraer, and Marc Allen, president of Boeing International, signed a Memorandum of Understanding at the Brazil-U.S. Business Summit organized by the Brazil-U.S. Business Council. The business summit, hosted by the U.S. Chamber of Commerce, occurred during an official visit by Brazil's President Dilma Rousseff with U.S. President Barack Obama.

Boeing launched its ecoDemonstrator Program in 2011 to accelerate testing and use of new technologies that can reduce fuel use, carbon emissions and noise. The company has so far tested more than 50 technologies with a Next-Generation 737-800, 787 Dreamliner and, currently, a 757. Through their collaboration, Boeing and Embraer are planning to conduct ecoDemonstrator tests with an Embraer airplane in 2016.

"Innovation is a key pillar of Embraer's strategy, and we are pleased to continue our work with Boeing to support the long-term sustainable growth of our industry," said Curado. "The ecoDemonstrator Program offers a new and valuable opportunity for collaboration between our companies to boost environmental development tests, benefiting customers, our industry and the society."

"Industry leadership in today's world requires creative and global collaborations that ignite progress on hard problems faster than ever," said Allen. "Boeing and Embraer are both industry leaders committed to addressing aviation's environmental goals through innovation and technology. Working together in this exciting new way, our companies will speed progress to improve aviation's efficiency and reduce environmental impact."

The ecoDemonstrator cooperation between Boeing and Embraer advances a relationship that began in 2012 when the manufacturers announced they would cooperate in ways that create value for both companies and their customers. Since then, the manufacturers have worked together to improve runway safety and support Embraer's KC-390 defense aircraft program.

In addition, in 2015, Boeing and Embraer opened a joint biofuel research center in São José dos Campos, Brazil, to perform biofuel research and coordinate research with Brazilian universities and other institutions.

Boeing has worked with suppliers, airlines and government agencies on previous ecoDemonstrator flight tests. Those technologies include a new winglet and "bug-phobic" wing coatings that can improve aerodynamic efficiency, software applications that can improve in-flight efficiency and new types of sustainable aviation biofuel.

Embraer incorporates environmental requisites into product development through its Environmentally Sustainable Products Program (DIPAS). Embraer aircraft are designed with an emphasis on incorporating innovations and adhering to environmental norms. With the ecoDemonstrator platform, new technologies under development that can lessen environmental impact are tested in flight and mature faster.

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For Further Information Please Click Here

Source: Epicos, Boeing

Bombardier Delivers First of Seven CRJ900 Aircraft to Mesa Airlines

Bombardier Commercial Aircraft announced today that it has delivered the first of seven CRJ900 aircraft to Mesa Air Group, Inc. of Phoenix, Arizona (Mesa Airlines). Mesa will operate the aircraft for American Airlines under the American Eagle brand. The aircraft delivered is one of a firm order for seven announced on March 12, 2015.

The CRJ900 delivery ceremony held today at Bombardier's Mirabel, Québec facility, was attended by executives of both Mesa Airlines and Bombardier Commercial Aircraft.

"As the launch customer of the CRJ900 and a Bombardier customer for more than 25 years, we are thrilled to add the newest CRJ900 aircraft to our fleet. Bombardier and the CRJ Series aircraft continue to play a significant role in Mesa's continuing growth strategy," said Jonathan Ornstein, Chairman and Chief Executive Officer. "The CRJ900 aircraft with its advanced technology and enhanced fuel efficiencies remains a reliable and cost-effective regional jet solution for our growing fleet. We would like to thank our longtime friends at Bombardier for their continued collaboration."

"Earlier this month, Mesa Airlines and Bombardier signed a five-year Heavy Maintenance Agreement and today, we celebrate the first delivery of the enhanced CRJ900 aircraft to Mesa Airlines --demonstrating our ongoing collaboration as Mesa looks to increase flight frequencies and open new routes across North America," said Fred Cromer, President, Bombardier Commercial Aircraft. "We are very happy to again be teaming with our loyal customer, Mesa to meet passenger requirements for many years to come."

The aircraft delivered today will increase Mesa's fleet of CRJ900 regional jets to 58, reconfirming the airline's standing as one of the largest operators of this aircraft model. Mesa's new CRJ900 aircraft are configured with 76 seats in a dual-class interior. The airline also operates 20 CRJ700 aircraft with 70 seats in a three-class interior. By September 2015, Mesa's currently scheduled deliveries will bring its regional jet fleet total to 115.

As of March 31, 2015, Bombardier had recorded firm orders for 1,865 CRJ Series aircraft, including 391 CRJ900 aircraft.

About CRJ Series Aircraft

Every 10 seconds a CRJ Series regional jet takes off somewhere in the world. The CRJ Series family of aircraft has trans-ported almost 1.6 billion passengers to become the world's most successful regional jet program -- linking people and communities like no other. The CRJ Series regional jets have revolutionized aviation with their proven efficiency, reliability and profitability.

The CRJ Series regional jets share commonality benefits that provide flexibility to operators and allow them to optimize their fleets to meet specific market demands. No other regional aircraft deliver this capability. Optimized for medium-haul regional routes, these aircraft can provide up to 10% cash operating cost advantage over competing jets.

Each of the three CRJ aircraft models offers its own distinct advantages. The CRJ700 regional jet is the lightest aircraft in its category, delivering impressive efficiency, performance and fuel burn savings, while the CRJ900 regional jet offers tremendous flexibility and is ideally suited for growing markets. TheCRJ1000 regional jet, which has the highest passenger capacity in the family, delivers the lowest seat-mile cost in the regional jet market and burns up to 13% less fuel than its competitors.

Since its launch, the CRJ Series family of regional jets has stimulated the regional jet market. In North America alone, it accounts for over 20% of all jet departures. Globally, the family operates more than 200,000 flights per month.

About Mesa Airlines

A multiple-time recipient of Air Transport World's Regional Airline of the Year Award and ranked No. 1 Regional Airline three consecutive years by the DOT Air Travel Consumer Report, Phoenix-based Mesa Airlines operates as American Eagle and US Airways Express from hubs in Phoenix and Dallas/Fort Worth and as United Express from Washington Dulles and Houston. Founded on a mesa in New Mexico in 1982 by Larry and Janie Risley, Mesa currently operates more than 100 aircraft, and over 500 daily system departures to 91 cities, 35 states, the District of Columbia, Canada and Mexico. The company has approximately 2,600 employees and plans to hire an additional 1,000 in the next two years. For more information, www.mesa-air.com visit Facebook go to or page atwww.facebook.com/mesaairlines

About Bombardier

Bombardier is the world's leading manufacturer of both planes and trains. Looking far ahead while delivering today, Bombardier is evolving mobility worldwide by answering the call for more efficient, sustainable and enjoyable transportation everywhere. Our vehicles, services and, most of all, our employees are what make us a global leader in transportation.

Bombardier is headquartered in Montréal, Canada. Our shares are traded on the Toronto Stock Exchange (BBD) and we are listed on the Dow Jones Sustainability World and North America Indices. In the fiscal year ended December 31, 2014, we posted revenues of \$20.1 billion. News and information are available at bombardier.com or follow us on Twitter @Bombardier.

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For Further Information Please Click Here

Source: Epicos, Bombardier

Lockheed Martin Signs Purchase Agreements with Airbus for Two Full Flight Simulators

Lockheed Martin Commercial Flight Training (NYSE:LMT) and Airbus have signed a frame contract enabling Airbus to expedite procurement of flight simulation devices for their customers, Airbus training centers and their affiliates worldwide.

The frame contract emphasizes the shared intent to partner on future training programs, and combines Airbus' and Lockheed Martin Commercial Flight Training's (LMCFT) expertise in the flight simulation industry. As a first example of this process, Airbus Mexico Training Centre has ordered two LMCFT A320 full flight simulators for their operations in Mexico City and Monterrey to be delivered in late 2015 and early 2016.

"With this frame contract in place, we look forward to a long and productive partnership with Airbus in support of flight training needs around the world," said Sandy Samuel, vice president and general manager of LMCFT. "Our team is focused on delivering quality simulation devices with the fidelity and reliability needed to maximize pilot throughput in Airbus' Mexico City and Monterrey training centers."

LMCFT offers a complete suite of commercial aviation training products and services including Airbus A320 and A330/340 and Boeing 737, 767, 777 and 787 full flight simulators. The company also provides training services through its international commercial aviation training centers based in São Paulo, Brazil, and Incheon, Korea.

About Lockheed Martin

Headquartered in Bethesda, Maryland, Lockheed Martin is a global security and aerospace company that employs approximately 112,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The Corporation's net sales for 2014 were \$45.6 billion.

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For Further Information Please Click Here

Source: Epicos, Lockheed Martin

Netherlands Orders 12 New Bushmasters

A dozen life-saving Bushmasters are going into production in Bendigo for export to the Netherlands, after the country's Ministry of Defence ordered new vehicles from Thales Australia.

The vehicles will complement the 86 Bushmasters previously purchased by the Dutch customer between 2006 and 2009, and will be delivered by the middle of 2016.

Thales Australia CEO Chris Jenkins said: "The Bushmaster has proven itself on operations with the Dutch military in Afghanistan, and is a vital component of their Light Brigade. This export order shows their continuing confidence in the Bushmaster, its ability to protect troops in theatre and save lives.

"It's also a tribute to the unique skills and in-depth expertise we have at our Bushmaster production facility in Bendigo, Victoria. Generating exports like this is good for us, good for our many local suppliers, and good for the economy as well."

The troop carrier variants will be fitted with additional composite armour, Remote Weapon Stations, and Thales's market-leading SOTAS intercom system.

The Dutch order, whose value remains confidential, follows other Bushmaster exports to Japan and Jamaica over the past 18 months.

About Thales

Thales is a global technology leader for the Aerospace, Transport, Defence and Security markets. With 61,000 employees in 56 countries, Thales reported sales of \leq 13 billion in 2014. With over 20,000 engineers and researchers, Thales has a unique capability to design and deploy equipment, systems and services to meet the most complex security requirements. Its unique international footprint allows it to work closely with its customers all over the world.

Thales Australia is a trusted partner of the Australian Defence Force and is also present in commercial sectors ranging from air traffic management and ground transport systems to security systems and services. Employing around 3,200 people in over 35 sites across the country, Thales Australia recorded revenues of AUD 1 billion in 2014.

For Further Information Please Click Here

Source: Epicos, Thales

Saab Receives Order for Underwater Systems

Defence and security company Saab has received an order on deliveries of underwater systems. The total order value amounts to approximately SEK 429 million. The order was booked as order intake in the second quarter 2015.

Saab has extensive experience in the design and manufacture of underwater systems for both the military and commercial markets.

"We have seen an increasing demand from the market for our unmanned underwater solutions, and we look forward to continue to develop and deliver state-of-the-art products to our customers" says Görgen Johansson, head of Saab business area Dynamics.

"This order is yet another a strong proof of our world-leading position in the area of unmanned underwater systems", says Agneta Kammeby, head of Underwater Systems at Saab business area Dynamics.

Deliveries will take place during 2017 and 2018

Saab offers world leading solutions such as Underwater Weapon Systems, Anti-Submarine Warfare Training, Mine Counter Measures, Surveillance and Underwater operations for both civil and military sub-surface operations as well as state of the art solutions for the off-shore industry. Based on Saabs long experience and involvement in the field of underwater technology, our underwater systems are designed to improve the ability to defeat any threat in the environment.

For further information, please contact:

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Saab serves the global market with world-leading products, services and solutions within military defence and civil security. Saab has operations and employees on all continents around the world. Through innovative, collaborative and pragmatic thinking, Saab develops, adopts and improves new technology to meet customers' changing needs.

Source: Epicos, SAAB