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Australian Defence Industry



Defence is a major supporter of the Australian industry. It is indicative that defence acquisitions and equipment maintenance and support activities provide work for over 28,000 Australians. Additionally, the country's defence industry plays a critical role in assisting the DMO to meet the materiel and sustainment needs of the Australian Defence Force (ADF). This is highlighted by the fact that the Defence Materiel Organisation (DMO) will spend in Australia this financial year, around \$6.1 billion.

Despite the fact that DMO is deliberately trying to help the local defence industry the trends in the acquisitions completed by the DMO for the period July 2007 to June 2014 have shown that there is a decreasing amount of DMO contracts (by value) being awarded to companies within Australia and a corresponding increase in contracts being placed with offshore entities, particularly direct to the US Government.



Percentage of DMO Contracts Awarded to Australian-operating companies 2007/08 – 2013/145

In order to amplify this and to help local companies to be modernized, the Australian authorities have streamlined the Skilling Australia's Defence Industry Program, and launched a \$61 million Industry Skilling Program Enhancement, to prepare the industry for modern equipment production. From this amount over \$20 million has been provided for the Defence Industry Innovation Centre to work with small and medium defence enterprises to boost their productivity and innovation, and increase their competitiveness.

The Australian defence industry comprises an important part of the country's wider national economic and industrial capacity. The local authorities acknowledged this and have created new programs that will further enhance the industry's innovation, productivity and competitiveness.

Kyriazis Vasileios, Epicos Newsletter Head Editor

Australian first F-35A pilot, took his first flight in an F-35A aircraft



Hight in an F-35A aircraft The F-35A will meet Australia's future air combat and strike needs, providing a networked force-multiplier effect in terms of situational awareness and combat effectiveness. At the end of the previous week, a big step was made regarding the future of F35A in Australia, as the Australian first F-35A pilot, Squadron

Leader Andrew Jackson, took his first flight in an F-35A aircraft at Eglin Air Force Base, Florida, United States. The flight was carried out using a United States Air Force F-35A aircraft, as the Australian F-35A aircraft are currently located at Luke Air Force Base, in anticipation of the opening of the international pilot training centre in mid-2015.

The first F-35A aircraft will arrive in Australia at the end of 2018 with the first operational squadron to be established by 2020. The F-35A will replace the aging F/A-18A/B Hornets at RAAF Bases Williamtown (NSW) and Tindal (NT). Eventually, some 100 fifth generation F-35As will transform the RAAF into a next generation net-centric fighter force that is capable of assuring the nation's territorial integrity

and national security.

The Lockheed Martin F-35 is the world's most advanced 5th generation fighter aircraft. The program has partners from nine countries around the world – Australia, Canada,



Denmark, Italy, the Netherlands, Norway, Turkey, UK and the United States.

Regarding the participation of Australia to the F-35 project it must be further noticed that two Australian companies, BAE Systems Australia and TAE, have secured in February regional maintenance, repair, overhaul, and upgrade responsibilities for the F-35 Joint Strike Fighter (JSF) airframe and engine.

Kyriazis Vasileios, Epicos Newsletter Head Editor

Epicos "Industrial Cooperation and Offset Projects"

Epicos "Industrial Cooperation and Offset Projects" provides a unique set of online tools enabling the structure, identification and implementation of compareheasive Offsets programs through a set



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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Customized design, modification and installation of an emergency braking system for tracked armoured vehicles



A leading company in the design, development, manufacture and integration of turn-key systems and products, is proposing the development and installation of an EBS (Emergency Braking System), enabling the vehicle's commander to stop the vehicle by the push of a button. The system can be used either on an existing platform (in the frame of an upgrade program), or in a new vehicle design, maximizing crew safety & survivability.

For Further Information Contact our ICO Department Mail at: <u>g-menexis@epicos.com</u>

Mini (back-packed) Unmanned Air Vehicle (UAV) for military and homeland security applications



A company with many years of experience in providing innovative surveillance solutions, using various platforms, is proposing cooperation with a local company in targeted country, in order to provide all necessary technology and know-how in the field of lightweight UAV systems. The firm is willing to provide all the necessary equipment, as well as related operational know-how, in order for the target company to develop its own UAV systems.

For Further Information Contact our ICO Department Mail at: g-menexis@epicos.com

News from our A&D Business Network



TenCate Cetex[®] thermoplastic composite for AstroMesh[®] deployable mesh reflector on NASA SMAP spacecraft



TenCate Advanced Composites, a leading developer and manufacturer of advanced composite materials, provides Northrop Grumman's Astro Aerospace to utilize TenCate Cetex[®] thermoplastic composites for the

AstroMesh[®] deployable mesh reflector on the NASA Soil Moisture Active Passive spacecraft. This reflector uses TenCate Cetex[®] to achieve parabolic shape design, strength, durability, and weight savings.

NASA's Soil Moisture Active Passive (SMAP) spacecraft launched January 31, 2015, will provide global measurements of soil moisture and indicate whether it is frozen or thawed. The data will be used to understand the processes that link Earth's water, energy and carbon cycles and improve weather and climate prediction models.

The SMAP spacecraft, developed by NASA's Jet Propulsion Laboratory in Pasadena (California), USA, uses a 6 meter (19 foot) AstroMesh[®] deployable mesh reflector and boom from Astro Aerospace, a Northrop Grumman company. The reflector, which will spin atop the spacecraft at nearly 15 revolutions per minute, provides for total global mapping every 2 to 3 days. The reflector uses TenCate Cetex[®] thermoplastic composites to achieve the strength, durability, and weight savings needed.

Daniel Ochoa, Product Development Manager at Northrop Grumman's Astro Aerospace states: "TenCate Cetex[®] thermoplastics are integral to the structure of our mesh reflectors as they help to create the parabolic shape of the antenna. The material has been extensively tested as part of the unit prior to flight, and is durable and stiff, which is critical to the functioning of the antenna."

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Airbus Helicopters presents its humanitarian missions' dedicated helicopters in Dubai



Dubai, United Arab Emirates, Airbus Helicopters' commitment to address the needs and requirements of International, Governmental and non-Governmental Organizations engaged in peacekeeping and humanitarian efforts will be

highlighted during this month's 12th edition of the Dubai International Humanitarian Aid & Development Conference & Exhibition (DIHAD).

Airbus Helicopters will emphasize the company's innovative helicopter solutions that can enhance most humanitarian actors' performance, in particular by providing the highest level of air transport efficiency to organizations such as international agencies, governmental and non-governmental organizations, foundations and charities, Red Cross and Red Crescent Societies as well as private logistics companies.

Airbus Helicopters and its partner operators are continuously striving to create innovative helicopter services' solutions that fully meet the requirement of humanitarian missions, ensuring that those missions benefit from the highest standards of helicopters availability, fuel efficiency, safety and cost efficiency.

With humanitarian missions operating in some of the harshest and most challenging environmental conditions, Airbus Helicopters is committed to ensure that the people devoted to help others can also benefit from the highest helicopter standards available on the market. Saving lives, bringing doctors to remote locations, transporting food & medicines or perform medical evacuations are what Airbus Helicopters' dedicated helicopters can do to bring safety and efficiency to humanitarian missions.

Conference participants will be particularly invited to pay attention to the AS332 C1e, a medium-heavy, twin-engine helicopter that belongs to the well-known Super-Puma/Cougar family and which offers outstanding performance with long-range capabilities. This powerful and fast helicopter can perform a large spectrum of missions serving air crane and air transport private and/or para-public operators engaged in emergency humanitarian aid. Its useful load together with its outstanding capability for heavy lift operations make it a versatile Helicopter.

The AS332 C1e is also able to operate in harsh conditions such as snow, sand or high and hot environments. Thanks to its state-of-the-art avionics and EASA/FAA certifications, it ensures a high level of safety for pilots and passengers.

Beyond these characteristics, this Super Puma has an excellent availability rate with optimized maintenance and operating costs.

About Airbus Helicopters

Airbus Helicopters is a division of Airbus Group, a global pioneer in aerospace and defense related services. Airbus Helicopters is the world's No. 1 helicopter manufacturer and employs more than 23,000 people worldwide. With 44 percent market share in civil and parapublic sectors, the company's fleet in service includes some 12,000 helicopters operated by more than 3,000 customers in more than 150 countries. Airbus Helicopters' international presence is marked by its 29 customer centers and participations and its worldwide network of service centers, training facilities, distributors and certified agents. Airbus Helicopters' range of civil and military helicopters is the world's largest; its aircraft account for one third of the worldwide civil and parapublic fleet. The company's chief priority is to ensure the safe operation of its aircraft for the thousands of people who fly more than 3 million hours per year.

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Epicos Newsroom



USMC Awards Elbit Systems of America a \$73.4 million IDIQ Contract for the Commos Laser Range Finder - Integrated Capability

The United States Marine Corps awarded a subsidiary of Elbit Systems of America, LLC, a wholly-owned subsidiary of Elbit Systems Ltd., a \$73.4 million, Indefinite Delivery/Indefinite Quantity contract for the Common Laser Range Finder-Integrated Capability (CLRF-IC). Work will be performed in Merrimack, New Hampshire. The period of the IDIQ contract extends through March 2020. To date, Elbit Systems of America has received an initial order in the amount of \$7.5 million under the IDIQ contract.

"We are pleased to provide the USMC with their new rugged CLRF-IC, a lightweight system that is mission-ready and safer for the foot-mobile Marine," commented Raanan Horowitz, President and Chief Executive Officer of Elbit Systems of America. "Leveraging the innovative capabilities of our imaging, range finding, and degraded environment navigation solutions, Marines are now able to acquire targets without breaking cover from their concealed fighting positions and minimize impact while on the move."

The CLRF-IC replaces the Marine's currently fielded equipment with a system that provides 24-hour observation capability; accurate range to targets; the ability to confirm spot on target with laser designation systems; and accurate target location in a variety of conditions, including magnetically disturbed environments, areas with overhead clutter, and in GPS-denied situations. The CLRF-IC's highly reliable performance and minimal life cycle cost give the warfighter a more affordable mission capability.

About Elbit Systems of America, LLC

Elbit Systems of America is a leading provider of high performance products, system solutions, and support services focusing on the commercial aviation, defense, homeland security, cyber security, and medical instrumentation markets. With facilities throughout the United States, Elbit Systems of America is dedicated to supporting those who contribute daily to the safety and security of the United States. Elbit Systems of America, LLC is wholly owned by Elbit Systems Ltd. (NASDAQ and TASE: ESLT), a global electronics company engaged in a wide range of programs for innovative defense and commercial applications. For additional information, visit: <u>http://www.elbitsystems-us.com</u> or follow on Twitter.

About Elbit Systems

Elbit Systems Ltd. is an international high technology company engaged in a wide range of defense, homeland security and commercial programs throughout the world. The Company, which includes Elbit Systems and its subsidiaries, operates in the areas of aerospace, land and naval systems, command, control, communications, computers, intelligence surveillance

and reconnaissance ("C4ISR"), unmanned aircraft systems, advanced electro-optics, electrooptic space systems, EW suites, signal intelligence systems, data links and communications systems and radios. The Company also focuses on the upgrading of existing platforms, developing new technologies for defense, homeland security and commercial aviation applications and providing a range of support services, including training and simulation systems.

For additional information, visit: <u>http://www.elbitsystems.com</u> or follow on Twitter

Source: Epicos, Elbit Systems

Japan's Okinawa orders halt to US military base work

The governor of Okinawa Monday ordered a halt to construction of a controversial US military airbase, the latest twist in a saga that has riven southern Japan for decades.

Setting up a new clash between the central government in Tokyo and the independently minded semi-tropical island chain, Takeshi Onaga told a news conference he could revoke a drilling permit if the defence ministry does not comply with his order.

Onaga, who opposed the airbase, was elected in November. His predecessor had agreed to the drilling needed in the sparsely populated coastal region to relocate Futenma airbase, which now sits in a crowded urban area.

"Because rock drilling has apparently been carried out (outside the area covered by the permit), I ordered them to suspend the work while the prefecture probes the issue," Onaga said.

Research by the Okinawa government last month found coral reefs in the area had been damaged by one of the concrete blocks sunk there as part of a survey.

In Tokyo, Chief Cabinet Secretary Yoshihide Suga described Onaga's move as "regrettable".

"The construction work is taking place after (Okinawa) agreed on it. It's impossible" that the work be suspended, he told reporters.

Defence minister Gen Nakatani was robust in his rejection of Onaga's move.

"We will continue the work without making a fuss... we don't think there was any wrongdoing," he said.

Around half of the 47,000 US servicemen stationed in Japan are based in Okinawa, a strategically vital archipelago.

While most Japanese value the protection the US military alliance gives them, especially in the context of China's growing assertiveness in regional disputes, many Okinawans want the Americans to leave the island chain.

The shuttering of Futenma and the opening of a replacement base at Nago, 50 kilometres (30 miles) away, was first agreed in 1996 as the US sought to allay local anger after the gang-rape of a schoolgirl by servicemen.

But it has been bogged down ever since, with local politicians blocking the move in an attempt to reduce the American footprint.

In 2013 Onaga's predecessor Hirokazu Nakaima agreed to drop his opposition to the new base in exchange for a hefty annual cash injection to the local economy.

Many islanders saw this as a betrayal and in November booted him out of office in favour of Onaga.

Source: 2015 AFP, Agence France-Presse (AFP)

Construction Underway for U.S. Air Force Space Fence Radar in the Marshall Islands

In a special February ceremony on Kwajalein Atoll in the Pacific Ocean – more than 2,100 nautical miles southwest of Honolulu – the U.S. Air Force and Lockheed Martin broke ground at the future six-acre site of the new Space Fence radar system.

The event marks the official start of construction for the S-band ground-based radar system, designed to replace the 1960s Air Force Space Surveillance System to improve the way objects are tracked in orbit and increase our ability to predict and prevent space-based collisions.

"The number of small satellites and satellite operators around the world is skyrocketing, rapidly crowding an environment already congested by the more than 17,000 pieces of space debris that we are able to track today," said Steve Bruce, vice president for Advanced Systems at Lockheed Martin's Mission Systems and Training business. "By comparison, when it comes online in 2018, Space Fence will enable the Air Force to locate and track hundreds of thousands of objects orbiting Earth with more precision than ever before to help reduce the potential for collisions with our critical space-based infrastructure."

In addition to the radar arrays, the Kwajalein installation will include an on-site operations center and an annex to the current island power plant that will ensure the Space Fence system has everything necessary to provide continuous space situational awareness.

Lockheed Martin won the \$915 million contract in June of 2014 to engineer, manufacture and deploy the Space Fence radar system. The total contract value is estimated at greater than \$1.5 billion over an eight-year period of performance if all options are exercised.

The Lockheed Martin-led team – which includes AMEC Foster Wheeler and General Dynamics SATCOM Technologies – has decades of collective experience in space-related programs, including sensors, mission processing, cataloging, orbital mechanics, net-centric communications and facilities.

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 additional information, visit: <u>http://www.lockheedmartin.com/spacefence</u>

Source: Epicos, Lockheed Martin

Raytheon Recognized by NASA for Small Business Support

NASA selected Raytheon Company (NYSE: RTN) as the Large Business Prime Contractor of the Year in its agency-level awards to recognize small business partnership. Raytheon was nominated for its support to the Goddard Space Flight Center in Greenbelt, Md., and was then advanced to recognition at the agency level for extensive efforts to help NASA meet its goals for small business inclusion.

In its announcement, NASA explained its Small Business Industry Awards program is designed to recognize outstanding contractors that help the agency meet its mission. For 2014, nominations were received from all 10 of NASA's centers.

The Raytheon team was nominated by the Goddard Space Flight Center for support through the Evolution and Development, or EED, program led by NASA's Earth Science and Data Information System Project Office. Raytheon has been NASA's partner on the program for more than 20 years.

"Raytheon's work in support of NASA's Goddard Space Flight Center underpins our nation's continued space exploration and scientific discovery," said Todd Probert, vice president of Mission Support and Modernization for Raytheon Intelligence, Information and Services. "We approach this work as a trusted partner to NASA and are committed to program innovation as we team with, and mentor, small businesses."

Raytheon program manager Tim Ortiz said Raytheon employees partner with smallbusinesses in direct support of NASA's Earth Science Climate Research at the Goddard Space Flight Center. The Raytheon team's integrated partnership means a 42-percent work share for small businesses, exceeding goals set by the Small Business Administration.

Raytheon Company has a history of more than 50 years of partnership with NASA through programs including manufacture of the Apollo flight computer, training astronauts, providing weather and other data analysis, and building space-based environmental sensing instruments for study of geophysical properties of Earth and other planets.

About Raytheon

Raytheon Company, with 2014 sales of \$23 billion and 61,000 employees worldwide, is a technology and innovation leader specializing in defense, security and civil markets throughout the world. With a history of innovation spanning 93 years, Raytheon provides state-of-the-art electronics, mission systems integration and other capabilities in the areas of sensing; effects; and command, control, communications and intelligence systems, as well as cyber security and a broad range of mission support services. Raytheon is headquartered in Waltham, Mass. For more about Raytheon, visit at http://www.raytheon.com and follow on Twitter @raytheon.

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For Further Information Click Here

Source: Epicos, Raytheon

Hainan Airlines places order for Rockwell Collins Head-up Guidance Systems

China-based Hainan Airlines has selected Rockwell Collins' Head-up Guidance System (HGS[™]) for an undisclosed number of new and in-service Next-Generation Boeing 737 aircraft and flight simulators to improve safety and performance. Deliveries will begin this spring.

HGS displays critical flight information in pilots' forward field-of-view, eliminating the need for pilots to transition to the head-down instruments. As a result, pilots can keep their attention focused on the outside world, enhancing overall situational awareness and safety. HGS also provides airlines with cost savings from fewer diversions by enabling more takeoffs and landings in low-visibility conditions.

"We're honored by Hainan's selection of HGS, which delivers enhanced safety and more efficient operations, especially during critical flight phases," said Jim Walker, vice president and managing director, International and Service Solutions, Asia Pacific for Rockwell Collins. "With these HGS installations, Hainan will be the latest China-based airline to benefit from the exclusive lower landing and takeoff minima offered by the CAAC in China."

Currently there are eight airports throughout China approved for lower landing minima by the Civil Aviation Administration of China (CAAC) for aircraft equipped with authorized headup displays (HUDs) such as Rockwell Collins' HGS, including Beijing, Shanghai Pudong, Guangzhou, Chengdu, Xi'an, Qingdao, Jinan and Taizhou. The "China HUD Application Roadmap," released in 2012, calls for all capable in-service airline fleets to be equipped with HUD by 2025.

With more than 6,800 Head-up Guidance Systems delivered to date, Rockwell Collins leads the commercial head-up display market segment. Fifty-four airlines across 33 countries operate the company's HGS every day, along with hundreds of corporate and military transport aircraft operators around the world.

About Rockwell Collins

Rockwell Collins is a pioneer in the development and deployment of innovative communication and aviation electronic solutions for both commercial and government applications. Our expertise in flight deck avionics, cabin electronics, mission communications, simulation and training, and information management is delivered by a global workforce, and a service and support network that crosses more than 150 countries. To find out more, please visit www.rockwellcollins.com.

Source: Epicos, Rockwell Collins