

Thursday 1 March 2012 • Issue 194

All stories available to premium subscribers on [www.australiandefence.com.au](http://www.australiandefence.com.au)

All enquiries: Judy Hinz, t. 07 3348 6966, e. [judyhinz@yaffa.com.au](mailto:judyhinz@yaffa.com.au)

## Airbus offers sixth MRTT

**Airbus Military** has revealed it has submitted an unsolicited proposal for a sixth KC-30A Multi-Role Tanker/Transport (MRTT) to the Australian Government.

Speaking to Australian journalists at the Singapore Airshow, Airbus Military CEO Domingo Ureña Raso said the offer was made in January, but there had not been a response from Government at that time.

The RAAF will take delivery of the last of the five aircraft it has on order in June this year. It is currently the fourth and last to be converted to tanker configuration by Qantas Defence Services in Brisbane, the first conversion being undertaken by Airbus Military in Madrid.

Ureña said that Airbus Military was hopeful of winning a competition in India to supply at least six MRTTs, but the Indian requirement for early deliveries will not allow enough time to set up a conversion line in-country in time for the first aircraft. Airbus' other conversion facilities are also fully booked in the near-term.

The sixth aircraft for Australia would provide continuity for the Brisbane facility until it was able to begin work on some of the Indian aircraft, should Airbus Military win the competition, and allow Airbus to offer timely delivery to near-term customers without having to restart the QDS line.

"We have made the unsolicited offer at a very attractive price for the Australian Government," Ureña said.

## L-3, Alenia Aermacchi committed to delivering C-27J

**L-3 Communications** and **Alenia Aermacchi**, announced today that the companies are committed to meeting the needs of the Commonwealth of Australia with the C-27J Spartan medium airlifter.

The two companies offer a Battlefield Airlifter (BFA) solution that will complement Australia's tactical airlift fleet with operating efficiency and durability that keeps the aircraft viable for decades.

The Battlefield Airlifter program is a key component in the RAAF's transformation of its fixed-wing fleet. To support the future force, the Battlefield Airlifter must be a multifunctional aircraft, able to perform logistical re-supply, medevac, troop movement, airdrop operations and humanitarian assistance. The C-27J is equipped to address each of these mission requirements.

"The C-27J allows the Commonwealth of Australia to perform its Battlefield Airlift missions with maximum interoperability with its existing fleet and its international partners," said John McNellis, corporate senior vice president and president of L-3 Integrated Systems Group.

Giuseppe Giordo, chief executive officer of Alenia Aermacchi and head of Finmeccanica's Aeronautics sector said "beyond delivering the capability, we are committed to a long term and value added relationship with the Commonwealth that will enable them to operate and maintain the capability autonomously throughout its service life.

## Defence Industry Programs

In his address to last week's ADM Congress, **Brendhan Egan**, Director-General, Export Programs and Industry Engagement, provided the following updates on current Defence programs for industry.

### Defence Export Unit

- Assisted 180 Australian defence companies to win \$750 million in export sales since 2007.
- In 2010-11, over 100 companies participated in eight international trade events.
- Recent enhancements include the removal of Team Australia participation charges and prioritised assistance for companies that support a Priority or Strategic Industry Capability.

### Defence Industry Innovation Centre

- Funded by DMO, run by DIISRTE through Enterprise Connect, it has assisted 700 companies in the two years since its inception; assistance worth \$1.8 million over the 2010-12 period.
- Four Tailored Advisory Service grants approved for a total of \$41,850 for Defence SMEs to undertake projects to improve business management and productivity, with \$91125 committed for further grants.
- 17 Workshop, Industry, Intelligence and Networking (WIIN) grants for a total of \$667,323, for delivery of 52 workshops/seminars in addition to one-on-one coaching sessions with planned participants.
- A grant of \$250,000 has been provided to defence SME Electromold during FY2011-12.

### Global Supply Chain Program

- Launched in 2009, the program promotes greater competitiveness and innovation by facilitating Australian company entry into global defence contractor supply chains. DMO negotiates with global defence primes to identify and provide opportunities for Australian industry in the supply chains of the company and its major suppliers.
- Successful negotiation of deeds with Lockheed Martin and BAE Systems, signed at Pacific 2012.
- Attained a cumulative value to Australian industry of approximately AUD437 million since the program's inception.

### New Air Combat Capability Industry Support Program

- Aims to enable Australian entities to support the development of new/improved capability to win work in the production, sustainment and follow-on development phases of the JSF program.
- Program launched in 2011, currently one agreement has been signed. \$3.5 million (of \$7.5 million) has been committed for seven applications under the first stage of the program. Funding agreements signed with Electromold Australia and Ferra Engineering, for a combined value of \$900,000.
- Second stage of the program expected to be approved under the Second Pass approval later in 2012.

### Priority Industry Capability Innovation Program

- Aims to support innovative projects that will enhance or improve a PIC. The program will invest up to \$45 million in grants, over the next eight years, into innovations in Australia's defence industry.
- Funding will target defence industry projects that may support and enhance the sustainability, strategic advantage and self-reliance of the Australian Defence Force (ADF).
- Program launched in late 2011, 18 applications were received. Results of assessment panel to be released by end March 2012. Round 2 to be launched in 2012-13.

## EOS announces new \$25 million contract

**Electro Optic Systems** has announced a new contract valued at \$25 million for the manufacture and delivery of remote weapon systems over the next 30 months for an existing customer.

"This order is for our most advanced model of remote weapon system and brings to over 300 units the total number of orders for this model," said chief executive of EOS Defence Systems business, Mark Bornholt.

"It will be filled in EOS' production facilities in Australia and the US. This order will see production of that configuration continue with regular monthly shipments to late in 2014.

"We expect a significant proportion of this order will be produced in Huntsville, Alabama, under the consolidation of remote weapons system capabilities announced by EOS in December 2011."

EOS CEO, Dr Ben Greene, said that the contract award was particularly satisfying as it is from an existing customer.

"EOS is proud of its products and customer-focused culture, but the most important indicator of how well we embody these qualities is customer feedback and follow-on contracts.

"The order raises EOS' backlog of confirmed, unfilled orders for all products and services to

around \$45 million deliverable over the next 2.5 years. This backlog is around 1.5 years of revenue at current performance levels, and is strong in terms of past sales performance."

## AeroVironment and Sentient sign exclusive global agreement

**AeroVironment** and **Sentient** have signed an exclusive global license agreement that allows AeroVironment to distribute Sentient's automatic target detection software for full motion video for use with small unmanned aircraft systems (UAS).

Sentient's Kestrel Land MTITier I is specifically designed to enable automated detection of targets, in real time, from small UAS. Over the past 18 months Sentient and AeroVironment have optimised and integrated the software with AeroVironment's existing common Ground Control System (GCS), which serves the Puma, Raven and Wasp small UAS.

"The Kestrel software adds capability to our existing small UAS by automatically detecting moving objects on the video screen and presenting that information visually to the operator," said Tom Herring, AeroVironment senior vice president and general manager of Unmanned Aircraft Systems. "This software makes it much easier to detect and track multiple moving objects in the battle space, thus delivering improved situational awareness to the system operator and tactical commander."

Military forces frequently deploy AeroVironment's small UAS in dynamic and complex operating environments. Kestrel has the ability to give operators an immediate cue to potential threats. This capability enhances situational awareness on the ground, which can help save lives.

The license agreement between AeroVironment and Sentient does not include Sentient's automated target detection software solutions Kestrel Land MTITier II, Kestrel Land MTITier III and Kestrel Maritime. The original Kestrel design was part of DSTO's CTD program.

## US Navy's Hornets nest is full

**Boeing** has completed delivery of 257 F/A-18E/F Super Hornet strike fighters and EA-18G Growler electronic attack aircraft to the US Navy. Each aircraft was delivered ahead of schedule and within the contract budget.

The aircraft were delivered to the Navy from 2007 through 2011 under a multi-year procurement (MYP) contract awarded to Boeing on December 29, 2003. The Navy purchased the aircraft during fiscal years 2005-2009.

The initial MYP II contract award included 210 F/A-18E/F and EA-18G aircraft. Through fiscal year 2009, 47 more aircraft were added to the contract, including 24 F/A-18Fs acquired by the Royal Australian Air Force under a Foreign Military Sales agreement with the US Navy.

## ADF and US troops to share UHF capacity

With the ADF's access to UHF capacity on **Leasat 5** and **Skynet 5B** coming to an end, an agreement was signed in April 2010 with the **US military** to share UHF capacity. Under the agreement the ADF will have access to the Mobile User Objective System (MUOS) constellation's UHF links to deployed troops, for Pacific Region coverage. In return, US forces will have access to the ADF's 18-channel UHF payload to be launched on the Intelsat IS-22 satellite this year (2012). IS-22 will be stationed at 72 degrees east longitude for Indian Ocean Region coverage.

The first MUOS satellite was launched recently and, when fully operational in 2014, the five-satellite UHF Mobile User Objective System will significantly improve ground communications for US and Australian deployed forces. For ADF access the MUOS ground station is collocated with the Australian Defence Satellite Communications Ground Station at Kojarena, 30 km east of Geraldton WA, but will be managed separately. Boeing Australia Ltd was awarded a contract to develop the MUOS compound at the Australian ground site.

The US Navy is responsible for the MUOS program with Lockheed Martin Space Systems Company the MUOS prime contractor and lead system integrator.

## One for FOB surveillance?

Developed by **Sky Sapience**, the HoverMast is a hovering surveillance machine that can be deployed from a small tactical vehicle to an altitude of up to 50 meters within 10-15 seconds. Because the machine is tethered, a hard-wired power connection allows the HoverMast to hover

as long as there is fuel in the tank in the vehicle to which it's anchored. Cables also provide a data link to send live pictures back to the ground.

The machine is equipped with real time video cameras capable of both day and night-time surveillance, but it can carry an additional payload of 6-9 kg (13-20 pounds) which, according to sUAS News, might include additional sensors, radar, signals intelligence or even laser designators - potentially identifying targets for missiles or artillery.

The HoverMast can be landed and stowed in 10-15 seconds and operates in maximum winds of 25 km/h. A prototype HoverMast is set to be demonstrated in April, with line production commencing before the end of the year—Sky Sapience

## BAMS radar developments

**Northrop Grumman Corporation** has commenced flight tests of the first developmental multi-function active sensor (MFAS) radar destined for the US Navy's MQ-4C Broad Area Maritime Surveillance Unmanned Aircraft System (BAMS UAS). The MFAS sensor has been integrated into the company's Gulfstream II testbed aircraft based in Palmdale, CA, for flight testing after having completed ground station testing in late November at the company's Electronics Systems facility.

Over the next several months, testing of the MFAS radar will be broken down into three phases; radar integration, mode integration and refinement, and data collection. Each phase tests the various capabilities and modes of the radar that will be used by the Navy to provide a persistent common picture of the maritime surface traffic. The MFAS sensor is the first radar system to provide full 360-degree persistent coverage of both open oceans and littoral regions from extremely long ranges.

The MFAS sensor operates with a rotating sensor that incorporates electronic scanning and provides mode agility to switch between various surveillance methods. These include maritime-surface-search (MSS) mode for tracking maritime targets and inverse-synthetic-aperture radar (ISAR) mode for classifying ships. Image-while-scan capability is used to interleave very short duration ISAR functions (ISAR snapshot and high-range resolution) during MSS scans. Two synthetic aperture radar (SAR) modes are used for ground searches; spot SAR for images of the ground and stationary targets and strip SAR for images along a fixed line.

Once targets are detected by MFAS, the data is sent to ground station units in the form of tracks, single frame snapshots, as well as high resolution snapshots while still maintaining 360 degree coverage

## Austal to build more JHSVs for US Navy

The United States Navy has exercised contract options funding the construction of the eighth and ninth Joint High Speed Vessels (JHSVs).

The contract is valued at US\$321.7 million, taking the total value of JHSV work awarded to **Austal** to approximately US\$1.45 billion.

The options increase Austal's total order backlog to nearly \$2.2 billion, with shipbuilding work secured for the US operation through to mid-2016 and to mid-2015 for the Australian shipyard.

Austal's chief executive officer, Andrew Bellamy, said the new JHSV contract options contributed to stability and future growth.

"These substantial, multi-year projects provide predictable revenue and workload. That enables us to plan our production approach to deliver high quality, affordable ships in the most efficient way possible and to make and implement medium and long-term strategies," he said.

"Each new contract award also reflects the US Navy's confidence in Austal and its products. "

Austal also recently christened a second Independence-variant 127 metre Littoral Combat Ship (LCS) for the US Navy.

Austal's other main government prime contract is for the design, construction and in service support of eight Cape Class Patrol Boats for the Australian Customs and Border Protection Service.

Detailed design work is being finalised, with the first boat expected to be delivered in March 2013 and the last in late 2015.

The vessels will be built at the Australian shipyard.

## Podded transportable IRST

**Lockheed Martin's** SpectIR transportable infrared search and track (IRST) pod successfully acquired, tracked and provided a weapons cue during a recent live fire flight test. The SpectIR pod successfully acquired the target on the first pass and maintained a tight track throughout the engagement, providing the pilot with a passive, weapons-quality cue that enabled weapon employment.

By incorporating IRST capabilities into a pod form, the SpectIR system provides long-range, passive infrared detection and tracking of airborne threats in a transportable configuration. The SpectIR IRST system is planned across numerous platforms including the F/A-18 E/F where the sensor is mounted in the centreline fuel tank.

## Defence and Victoria Police strengthen ties

Parliamentary Secretary for Defence Senator **David Feeney** has announced the signing of a Memorandum of Understanding (MOU) between the Australian Defence Force (ADF) and Victoria Police. This MoU will make it easier for police officers who are also Defence Reservists to serve their community through their roles in the ADF. More than 120 Victoria Police members are also Defence Reservists.

"There are many considerations which employers must take into account when releasing their employees for service on Defence operations," Senator Feeney said. "This MoU will help both the civilian employer and the ADF manage these considerations and their shared workforce.

"This MOU outlines support avenues for Victoria Police members who are also Reservists, and helps streamline their release from police roles when they are required to undertake Defence service."

Chief Commissioner of Police Ken Lay joined Major General Paul Brereton to sign the MOU.

"The MOU will strengthen the management and communication between the two agencies in relation to a shared workforce under the Defence Reserve Service (Protection) Act 2001. This is a positive step in building on what is already a very strong relationship between our two organisations," said Chief Commissioner Lay.

Major General Brereton said Defence was working to formalise relationships with police and emergency services across Australia. "Today, ADF Reservists serve on operation in every theatre in which Australia's servicemen and women are deployed," he said.

## SIA appoints executive director

The **Submarine Institute of Australia (SIA)** has announced the appointment of its first executive director. **Steve Davies** will lead the activities of the not-for-profit body that aims to promote informed discussion on submarine matters.

Davies, a former Royal Australian Navy (RAN) Commodore and Submarine Force commander, takes on the role as the SIA ramps up its "Centenary of Australian Submarines" program towards 2014, the centenary year, and as Government decides on the future shape of the Australian submarine capability.

In addition to his SIA duties Davies is also a consultant to the defence industry.

## SA school wins Australian F1 in Schools GP

A team of students from **Brighton Secondary School** in Adelaide have won the 2012 F1 in Schools Australian Grand Prix which was held in Adelaide this week. "Cold Fusion" consisting of two girls and three boys scored maximum points across 11 categories and beat 25 other teams from around the nation.

They received the gold plated turbo trophy and will go to the F1 in Schools World Finals later this year to race against 30 other nations. Cold Fusion also won the Grand Prix Race Award for consistently setting fast lap times over the two-day event.

F1 in Schools, which encourages engineering, marketing and design skills, is run by Re-engineering Australia and supported by the **DMO**. ▲