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ADM AUSTRALIAN DEFENCE MAGAZINE

DEFENCE WEEK

PREMIUM EDITION NEWS | INTELLIGENCE | BUSINESS OPPORTUNITIES | EVENTS

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Why the delay with JP2008 5B1?

Defence has made, and continues to make, heavy investments in satellite communications capability through JP 2008 and JP2072, aimed at providing strategic and tactical satellite communications capabilities to support ADF operations.

Now further acquisitions are underway for land elements.

Under JP 2008, two phases (3H and 5B) are involved with the acquisition of wideband terrestrial terminals in three sizes ie Small (<one metre); Medium (1.2-2.4 metres); and Large (2.4-3.9 metres).

The Phase 3H requirement, for which **L-3 Nautronics** was selected last year, is for 45 medium-size terminals with an initial supply of 10 terminals by July 2013 and the remainder by December 2013. Terminal size was left to tenderers based on meeting throughput performance criteria – perhaps L-3 proposed their WGS-capable NCW-1200 1.2 metre flyaway terminal? ▶

Clarification

ADM would like to apologise for any misunderstanding in relation to our news story last week **"DB-110s for RAAF?".** The RAAF has not shown an acquisition interest in the system for the AP-3C Orion fleet and discussions for the Super Hornet are in a very early stage. Our apologies for any confusion.

The updated story is available on the ADM website under edition 214 of Defence Week Premium.

Because 2nd pass approval is not anticipated until later this year, contract signature is not expected before the first quarter 2013, with initial delivery later that year.

Phase 5B1, for which the RFT has been released, closing in September, is aimed at the acquisition and support of the balance of the three types of transportable wideband ground terminals for land forces. There is a preference for a single acquisition contract with the potential to leverage off the Phase 3H contract for the medium class of terminals.

The RFT calls for WGS certified, COTS/MOTS terminals in the following classes:

- Small Terminals (X and Ka band terminals) – Carry on luggage to Australian Standards on medium to large passenger aircraft – maximum data rate possible (not less than 1 Mbps);
- Medium Terminals (X and Ka and optional Ku) – suitable for transport in an ADF trailer in its transport state – maximum data rate possible (not less than 3 Mbps); and
- Large Terminals (X and Ka and optional Ku) – suitable for transport in an ADF trailer in its transport state (larger envelope) – maximum data possible (not less than 16 Mbps).

With 2nd Pass scheduled for mid-2014, initial delivery is not required until the second quarter of 2015 with final materiel release towards the end of 2016.

One might wonder why the RFT was released some three years or so in advance of the requirement and whether this seemingly deferred acquisition has been caught up by the government's push for a budget surplus in 2013. If so are the satcom acquisitions under JP2072 also going to be pushed back?

US ship sunk by HMAS Farncomb – now has problems

The RAN's Collins Class submarine *HMAS Farncomb* has successfully sunk the 12,106-tonne former *USN Ship Kilauea* in Hawaii. *Farncomb* fired one Mk 48 torpedo and achieved a hit just below the bridge of the ship as part of a sinking exercise, or "SINKEX," at RIMPAC 2012. The target ship broke into two parts and sank about 40 minutes later.

Australia is among 22 nations attending Exercise RIMPAC that includes six submarines and 40 surface ships participating in a realistic maritime warfare scenario. ADSF members from 1 RAR are also participating in the amphibious aspect of the exercise, alongside US Marines. RAAF AP-3C Orions and a Wedgetail aircraft are also providing air support. RIMPAC 2012 will conclude on 3 August 2012.

On Wednesday 25 July (Australian Eastern Standard Time), while participating in Exercise RIMPAC, *HMAS Farncomb* suffered a minor flood in one of the submarine's machinery spaces. At the time of the incident, the submarine was at periscope depth operating its diesel engines to charge the battery.

Standard pre-planned procedures were immediately executed and the situation

was dealt with quickly. The submarine surfaced as part of this normal response. The incident has been traced to a split in a hose on the submarine's weight compensation system.

No personnel were injured and *Farncomb* is currently returning to Pearl Harbour in Hawaii to replace the hose. An investigation is yet to commence.

There are number of hoses fitted to systems in the Collins class submarine that use the supply of sea water as part of their operation. Weight compensation is one such system, moving water in and out of the submarine to maintain neutral buoyancy.

Following the failure of a sea water cooling hose in *HMAS Dechaineux* in 2003, there were immediate changes made to procedures and the development of equipment changes commenced. One of these changes was automation of the closure of all hull valves should a similar situation arise. This change has been installed in *HMAS Farncomb*.

HMAS Farncomb is currently on a 13,000 nautical mile, five month deployment having departed her home base in Western Australia in May of this year. The submarine has spent the last 15 days at sea participating in Exercise RIMPAC.

Codan introduces 3G ALE Waveform for 2110M military high frequency radios

At the recent Eurosatory exhibition in Paris, Codan Radio Communications announced the launch of the Codan Envoy, a software-defined HF radio platform and the availability of third-generation (3G) automatic link establishment (ALE) in Codan's 2110M series HF manpack radio.

The Envoy provides the advantages of software-defined radio – the ability to add new capabilities to the radio through software upgrades – in an affordable commercial platform.

The Envoy provides users with advanced internal features such as automatic link establishment, encryption, high-speed data, GPS and IP interface. A true digital radio, the Envoy offers scalable solutions for mobile, deployed and base station requirements.

The Envoy, with an icon-based user interface inspired by today's smartphones, incorporates an intuitive and simple to use, high resolution, colour, graphical user handset for radio operation and control.

"The state of the art user interface of the Envoy advances ease of use for an HF radio, while the IP capability allows customers to seamlessly integrate the radio into their communications networks, making HF more accessible," said **Kevin Kane,** president and general manager, **Codan Radio Communications Division**.

The announcement of 3G ALE in the Codan 2110M Manpack builds on the success of the 2110M Manpack in the military market.

"The 2110M manpack is still the lightest HF manpack available today, and features the longest battery life. It already offers embedded MIL-STD high speed data, second generation automatic link establishment, frequency hopping, encryption, and GPS. The addition of 3G ALE capability makes the best value HF manpack available today even better," said Kane.

The waveform, based on the Standard NATO Agreement (STANAG 4538), supports enhanced data throughput and linking performance over noisy HF Skywave channels. Integration of the ALE linking protocol and the data transport mechanism provides effective increased data throughput and shorter linking times in difficult HF conditions. To fully exploit the capabilities of Codan's 3G ALE waveform, Codan will offer a software applications suite enabling end user benefits such as email, messaging and situational awareness, enhanced by the benefits of the high performance low-latency waveform.

Broens awarded contract to support F-35 Lightning II powering

Pratt & Whitney has awarded Broens Industries a follow on purchase order to manufacture complex support equipment for the sustainment solution of the F135 propulsion system powering the F-35 Lightning II.

This new order valued at approximately $300,000 is for units which will be utilized at the first operational and training bases in the US.

Pratt & Whitney previously awarded **Broens Industries** a purchase order to develop and prototype complex support equipment specifically for removing and installing the F135 engine gearbox. This new order initiates the production phase of the project, with a potential value estimated at more than $7 million.

The F135 gearbox is a complex and critical component located on the bottom of the engine. The gearbox jack designed by Broens is capable of lifting the component and maneuvering the gearbox module to and from its position under the F135 engine.

"Broens has designed and delivered an innovative solution for safely and easily removing and installing the F135 engine's gearbox," said Chris Flynn, vice president, Pratt & Whitney F135/F119 Engine Programs.

Prepare for Pitch Black 2012

This is perhaps one of the biggest and most capable Pitch Black exercise to date. The RAAF is fielding the Wedgetail, Super Hornet and KC-30A (the latter in a limited capacity) for the first time at a Pitch Black, while Singapore is bringing their F-15SGs and Gulfstream G550 Conformal Airborne Early Warning to Pitch Black for the first time.

The Indonesians are scheduled to arrive – for the first time at Pitch Black – with their SU-30 Flankers this week, making this jet's debut appearance at this exercise.

Coupled with returning all-stars from across the RAAF (including the C-130Hs final tactical exercise), RSAF, USMC, Royal Thai Air Force, the scale of airpower seen at this exercise is unlike anything which has come before.

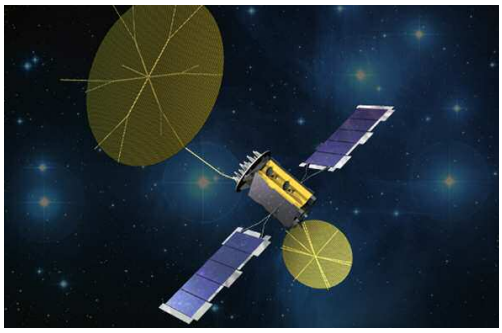
The RNZAF will be assisting with the Combat Support element for the duration as well.

New Business Development Head for Marshall Land Systems Australia

Marshall Land Systems Australia (MLSA) has appointed Iain Watt as Head of Business Development. Watt joins MLSA after a distinguished career with The Australian Army (Royal Australian Armoured Corps), Defence Materiel Organisation and Mercedes-Benz Australia/Pacific.

Watt will be co-located and work with the Business Development team of **Tectonica** Australia Pty Ltd in Melbourne. He is pictured above being welcomed by **Peter Callaghan.**

On-Orbit testing of first US Navy MUOS satellite



Earlier this month Lockheed Martin announced that it had completed on-orbit testing of the first Mobile User Objective System (MUOS) satellite, designated MUOS-1, paving the way for the US Navy's multi-service operational test and evaluation phase in preparation for the start of operations in August 2012.

The MUOS will be the successor to the Navy's UHF Follow On (UFO) satellite communications system. When fully operational in 2014, the five-satellite UHF MUOS system will significantly improve ground communications for US and Australian deployed forces.

A next-generation narrowband tactical satellite communications system, MUOS will provide significantly improved and secure communications for mobile warfighters, including simultaneous voice, video and data. A single MUOS satellite will provide four times the capacity of the entire UHF Follow-On (UFO) constellation of eight satellites. Each MUOS satellite also includes a legacy UHF payload that is fully compatible with the current UFO system and legacy terminals. This dual-payload design ensures a smooth transition to the cutting-edge WCDMA technology while the UFO system is phased out.

The first MUOS satellite and associated ground system will provide initial on-orbit capability this year, followed by the launch of the second spacecraft in 2013.

The five-satellite global constellation is expected to achieve full operational capability in 2015, extending UHF narrowband communications availability to the armed forces well past 2030.

Under a UHF sharing agreement with the United States, the ADF will have access to the MUOS constellation's UHF links to deployed troops, for Pacific Region coverage. In return, US forces have access to the ADF's 18-channel UHF payload launched on the Intelsat IS-22 satellite earlier this year (2012).

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.

UK Falcon tactical comms field trial

BAE Systems has confirmed the completion of the Systems Field Trial (SFT) for the UK's new Falcon tactical area communications system. The SFT was conducted in the UK by the British Army's 22 Signals Regiment and the Royal Air Force's (RAF's) Tactical Communications Wing (TCW) between the end of April and early June, but was only announced at the Farnborough Airshow.

The trial allowed the UK Ministry of Defence (MoD) to assess and prove that Falcon can be deployed to deliver the required military capability. During the trial data was successfully exchanged and networks linked across six main locations in the UK.

ADM believes the Falcon tactical comms system has some applicability to the ADF's proposed battlefield telecommunications network (BTN) under **JP2072 Phase 2B**. The likely contenders for this phase include **BAE Systems** and **Thales**, both JP2072 incumbents, and both are also incumbents with the UK MOD's Falcon tactical networking system.

Designed around an IP architecture, the system replaces ageing asynchronous transfer mode (ATM) equipment (similar to Parakeet) with a scalable application that can be configured rapidly to meet the needs of an expeditionary force.

Falcon operates as a meshed network consisting of nodes deployed in mobile shelters mounted on the back of Supacat transport vehicles. First introduced in 2010, it replaces the British army's older Ptarmigan system—which was designed primarily for voice communications instead of data—and the Royal Air Force's Tactical Trunk System/Deployed Local Area Network application.

And while ADM has been led to understand that the ADF does not want the Falcon system as such, the ADF is believed to be especially impressed by the four levels of security that Falcon offers for data and voice. In addition, the fact that Falcon comes in transit cases is believed to be of great interest.

There are also other valuable components available and both BAE Systems and Thales, in addition to their communications expertise, have extensive inventories of capabilities that leverage both UK and Australian communications programs. At the tactical level BAE Systems has developed the Parakeet trunking system and has been responsible for its upgrading to ATM access and maintaining the Raven CNR systems.

The company has been involved in many major satellite communications projects in ADF land and naval domains.

In singing the praises of the UK's Falcon comms and its potential for JP2072 Phase 2B, ADN nevertheless suspect it may well be overshadowed by the WIN-T MOTS solution proposed by Raytheon and General Dynamics. And then of course Lockheed Martin and Elbit Systems have their own designs on Phase 2B about which we know nothing!

Canadian LAV III upgrade

In October 2011, the Government of Canada announced a CA$1.064 billion contract, awarded to General Dynamics Land Systems for the implementation phase of the LAV III UP project. This phase consists of upgrades to the mobility systems, the weapon system, and installing additional armour and improved seating, strengthening its protection against increased threats.

According to the Canadian DND, the LAV III Upgrade project will capitalise on existing and evolving technology to improve the protection, mobility and lethality of the LAV III fleet. The project will modernise a portion of the existing LAV III fleet to ensure it remains a highly protected, operationally mobile and tactically agile combat vehicle that will remain the backbone of domestic and expeditionary task forces, extending the life span of the LAV III to 2035.

The following upgrades will be performed on the LAV III:

- Upgrade of mobility systems such as powertrain, suspension, running gear and brakes;
- Upgrade of the weapon system; and
- Installation of additional armour, heightening its protection against increased threats.

The LAV III Upgrade project will upgrade 550 vehicles with an option for an additional 80. Initial operational capability is scheduled for 2013.

Janes reports that **General Dynamics Land Systems** has also developed and tested an upgrade package for its **Light Armoured Vehicle II (LAV II) armoured personnel carrier (APC)**, designated the LAV II Double-V Hull (DVH).

The upgrade package is aimed at the export market as a number of countries operate the LAV II, and as the vehicles were supplied some time ago, they will require upgrades in the future to extend their operational life.

Lockheed Martin's MS2 workforce reduced by 740

Lockheed Martin's Mission Systems & Sensors (MS2) business announced a reduction in its workforce of 740 as part of a continuing effort to improve efficiency and affordability amid a challenging budget environment this week.

The company notified 308 US-based employees they will no longer have

employment with the company this week. This action follows a voluntary layoff program that took place in May and resulted in 432 employees voluntarily exiting the business. The combined efforts reduced the total workforce of MS2 by approximately five per cent.

"Given the budget pressures facing our customers, Lockheed Martin is examining every aspect of our business to ensure we are as efficient and cost effective as possible in meeting their needs," Dale P. Bennett, president of Lockheed Martin Mission Systems & Sensors business, said.

"Reducing our workforce is a difficult but necessary decision to position our business for future growth and ensure we remain competitive."

Distinguished war correspondent and author Denis Warner dies

Former war correspondent Denis Warner, an Australian who worked for Reuters in Tokyo during a career that spanned more than 50 years, has died in Melbourne at the age of 94.

Warner, who started his career on the *Hobart Mercury* as a cadet journalist, covered Asia, its conflicts, culture and politics for more than 50 years.

A contemporary of Richard Hughes and Wilfred Burchett, Warner was also a close friend of Keith Murdoch and wrote for the *Melbourne Herald*, Reuters in Tokyo, the UK's *Daily Telegraph*, *Atlantic Monthly* and local defence magazine *Asia Pacific Defence Reporter*. He also wrote many books, including several with his wife Peggy. He was a highly regarded military historian.

He served with the AIF in the Middle East from 1941-43 and then reported on the war in the Pacific as a correspondent for American Forces, at one stage nearly losing his life during a kamikaze attack.

For a list of Forthcoming Events: *Go to page 9* ▶

Back issues of this publication can be accessed via the ADM website at

www.australiandefence.com.au

ADM's Defence Support Services Summit

7-8 August 2012, The Langham Hotel, Melbourne

Inaugural event in association with the Defence Support Group. This event will enable industry to engage fully with Defence Support on current and future collaborative partnerships. It's an event not to be missed!
Further Information: ADM Events - Jamie Burrage, Ph: 02 9080 4321;
Email: jamie.burrage@informa.com.au Web: www.admevents.com.au

ADM's Defence Workforce Participation Summit

27 – 28 September 2012, Hyatt Hotel, Canberra

ADM's annual Defence Skilling Summit is an important event examining the issues of training and maintaining a skilled workforce for Australia's defence industry. It's an event not to be missed!
Further Information: ADM Events - Jamie Burrage, Ph: 02 9080 4321;
Email: jamie.burrage@informa.com.au Web: www.admevents.com.au

UAV Challenge

1-3 October 2012, Kingaroy, Qld

The UAV Challenge - Outback Rescue has been developed to promote UAV's significance to Australia. The UAV Challenge is a joint initiative between the Queensland Government, the Australian Research Centre for Aerospace Automation (ARCAA, a partnership between QUT and CSIRO) , Aviation Development Australia Limited and AUVS-Australia - a prime example of government, industry and research organisations working together.
Further Information: www.uavoutbackchallenge.com.au

New Zealand Defence Industry Association Forum

16-17 October 2012, Wellington New Zealand

At the forum you can join with other defence industry companies from New Zealand and overseas, and with key members of the New Zealand Defence Force and Ministry of Defence to gain greater understanding of the defence procurement processes and hear about future defence procurement plans.
Further Information: Sue Peck Email: sue@spconferences.co.nz www.nzdia.co.nz

Land Warfare Conference 2012

29 October – 2 November 2012, Melbourne Convention and Exhibition Centre, Melbourne

The Land Warfare Conference is a major event for users, providers, academics, designers and manufacturers to meet, present, share and exchange new and visionary ideas on Land Systems. Academics, commercial organisations, defence research institutions, and military are encouraged to attend and/or offer papers in the field of Land Warfare and related disciplines. An Exhibitor Booth Registration Form and Floor Plan are now available online.
Further Information: Land Warfare Conference Admin Support Office,
Phone: 08 7389 5455; Fax: 08 7389 5196; Email: lwcc@dsto.defence.gov.au
Web: http://www.dsto.defence.gov.au/lwc2012/

MilCIS 2012

6 – 8 November 2012, National Convention Centre, Canberra

MilCIS is an annual conference aimed at attendees from military and government organisations, academia, and defence industry, who contribute to key decisions in investments in communications and information systems. In addition to keynote presentations, technical presentations, panel discussions and tutorials, MilCIS features an exposition that provides an opportunity for exhibitors to demonstrate new technologies and promote their products

and services to attendees. MilCIS is the only Australian conference focussing directly on the crucial technologies, products, systems and services associated with military communications and information systems.

Further Information: Consec – Conference Management, Phone: 02 6251 0675; Fax: 02 6251 0672; Email: milcis2012@consec.com.au; Web: http://www.milcis.com.au/

6th Submarine Institute of Australia (SIA) Biennial Conference 2012

14-15 November 2012, The Shine Dome, Canberra

2012 will be a pivotal year for decisions concerning submarines. With the recent announcement of $214m in funding for the Future Submarine Program and a significant boost in Sustainment funding for the Collins class, the SIA is grasping the opportunity to present powerful arguments to contribute to the development of the 2013 Defence White Paper against the most challenging budgetary circumstances for Defence since 1938. Delegates to the 6th Biennial Conference will hear from a range of influential speakers from Government, overseas and both the Public and Private sectors as they discuss the pivotal considerations for Australia's submarine capability.
Further Information: Mr David Nicholls (Executive Manager),
Email execmgr@submarineinstitute.com Phone: +61 413 133 391 Fax: +61 2 6260 5416

ADM's Social Media in the Defence Environment

5-6 December 2012, Hotel Realm, Canberra

Inaugural event! More details soon.
Further Information: ADM Events - Jamie Burrage, Ph: 02 9080 4321;
Email: jamie.burrage@informa.com.au Web: www.admevents.com.au

ADM2013: 10th Annual ADM Defence/Industry Congress

12 – 13 February 2013, Hyatt Hotel, Canberra

The annual ADM Congress has evolved into a pivotal event in the Defence calendar, attracting senior officials from all areas of the Defence Force and Defence Industry.
It is a critical forum for any organisation operating within the defence business sector.
Also do not miss the ADM Awards Dinner. The dinner is the perfect opportunity for you to continue networking with colleagues and new contacts made at the Congress.
More details to be released closer to the date
Further Information: ADM Events - Jamie Burrage, Ph: 02 9080 4321;
Email: Jamie.burrage@informa.com.au Web: www.admevents.com.au

Avalon 2013: Australian International Airshow and Aerospace & Defence Exposition

26 February - 03 March 2013, Avalon Airport, Geelong

The Australian International Airshow and Aerospace & Defence Exposition is the essential aviation, aerospace and defence event for the Asia Pacific.
Industry-only trade sessions will be held Tuesday to Thursday (all day) and Friday will be both a trade and public day. The exposition will open each day from 9am until 5pm. Associated industry and technology conferences, seminars and symposia will be held at Avalon and in Melbourne and Geelong during show week.
Further Information: Aerospace Maritime Defence Association Ph 03 5282 0500; Email: airshow@amda.com.au; Web: http://www.airshow.net.au ▲