



NEWSLETTER

APRIL 2012

Date: **Wednesday, 18th April, 2012**

Time: **18:00 for 18:30 hours**

Speaker: **Rowan John TINK, AM**

**Business Development Manager – Amphibious
BAE Systems – Australia**

Topic: **“LHD Amphibious Assault Ships:
Realising Platform Optimisation”**

Venue: **Rupert Myers Theatre**

University of New South Wales, Kensington

Refreshments will be available prior to the commencement of the meeting



PROFILE Rowan Tink graduated from the Royal Military College, Duntroon with a Bachelor of Arts in 1977 and was assigned to the Royal Australian Infantry Corps. He subsequently served for 28 years in a range of military regimental and staff appointments,

including four operational tours of duty. Most significantly, Rowan served as Commander Australian SAS Task Group deployed on combat operations in Afghanistan from February to July 2002. In recognition of his leadership and distinguished combat service in Afghanistan, particularly during Operation ANACONDA, he was awarded the United States of America Bronze Star and his Task Group the Australian ‘Meritorious Unit Citation’. Rowan applied his maritime expertise, forged in the Special Air Service Regiment and the United States Navy SEALs, to the Australian Amphibious Task Group when he was posted as the Chief of Staff in December 2004. In January 2005 he was appointed Deputy Maritime Commander during Australia’s response to the Banda Aceh tsunami (Operation Sumatra Assist). Then in 2006 he was appointed Chief of Staff to Commander Amphibious Task Force during Australia’s response to East Timor unrest (Operation Astute). In July 2006 Rowan was recruited by Tenix Marine as the amphibious operations expert in the Landing Helicopter Dock (LHD) Bid Team. When the Commonwealth contracted Tenix Defence to deliver what will become the Navy’s two largest ever ships he was appointed as the LHD Operations Manager. In mid 2008 Rowan was asked to establish a new BAE Systems – Australia appointment as the Business Development Manager – Amphibious, a position he retains to this day. Rowan is now widely acknowledged as an expert in Special Forces and amphibious operations in Australia and overseas.

SYNOPSIS The Australian Defence Force potential to manoeuvre, deploy and sustain ground forces from the sea will be significantly enhanced from 2014 with the delivery of two LHD Amphibious Assault Ships. At 27,000 tonnes the LHD ships are approximately a third larger than the ex-RAN aircraft carriers *Melbourne* and *Sydney*. Each LHD ship will have a six spot flight deck, 4,300m² of garages and hangar space, an internal dock with four medium landing craft, a hospital with two operating theatres, accommodation support facilities for 1,403 personnel as well as the command and control means to direct operations in the Amphibious Objective Area.

However, the concept basis for the LHD ships to deliver task organised forces to decisive points by air and sea insertion for combat related, disaster relief or humanitarian assistance tasks will be demanding in every respect. While initial capability aspirations will be limited, the road to realising platform optimisation, and therefore effective amphibious capability, is paved with many single service and joint challenges. The presentation will provide an overview of these amazing ships and the path to realising platform optimisation while assessing their potential impact to the future Navy, Army and Air Force.



PARKING: Limited parking is available in surrounding streets with paid parking within the University of NSW car park tower, entry from Barker Street. Please observe parking restrictions

and allow time to drive to the University of NSW, park and walk to the venue. (Refer map)

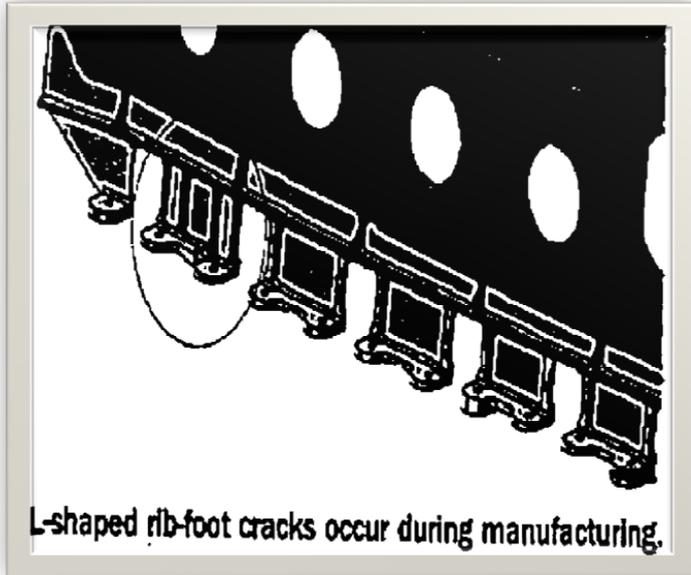
DINNER: After the presentation Rowan has indicated that he will join us for dinner as the guest of the committee. Members and visitors are invited to attend the dinner to be held at Giovanna Italian Restaurant, 285 Anzac Parade, Kingsford. (approx \$35 pp including soft drink wine.)

RSVP: Attendance registration for the Presentation & Dinner afterwards is essential. Please register by clicking on this link: <http://www.raes.org.au/events/> or email by lunchtime Tues 18th April to: sydneybranch@raes.org.au

SINGAPORE AIRSHOW 2012: A380 Wing Glitch

Although Airbus does not put a dollar figure on the cost of inspecting and fixing the A380 fleet due to a wing-component flaw, CEO Tom Enders concedes it will be ‘quite some money’. Airbus is taking full blame for the situation. It is a problem ‘we created ourselves and are fixing ourselves’ Tom Enders said at the Singapore Airshow 2012. Enders continued ‘the situation has sparked an in-depth review to assess why the design and engineering system did not catch the potential for the manufacturing flaw early. Are we learning from this for

other programs? Absolutely', he said. At issue is an A380 fleetwide inspection, mandated by the European Aviation Safety Agency (EASA), on February 8th, 2012 to examine and potentially fix L-shaped rib-feet that have experienced cracks. The same update mandates non destructive testing (NDT) of the component. It is the first time that EASA has specifically called for that technique. However, NDT was already used because Airbus told operators detecting cracks also to use NDT to assess damage. The cracks in the rib-feet occur because of a problem in the manufacturing process that places an extra stress on the component during wing assembly. The manufacturing process is now being changed to avoid inducing the strain on the component. The material in the rib-feet also is being changed.



Presentation by Eminent Speaker Mr Doug Arbuckle joint meeting with Engineers Aust - 13th March, 2012

Some sixty members attended the jointly hosted presentation by Eminent Speaker Mr Doug Arbuckle, who was in Australia recently to talk to AirServices Australia about what's happening with the massive NextGen air traffic management program in the US. This brief extract from the lecture provides a taste of the style and detail that had the audience engaged for well over an hour, including a very interesting Q&A: The technology piece; The transition plan – this is where we were bitten hard and is what Doug calls the 'tribal factors' (the soft stuff that engineers don't really like to deal with - policy, organisation, culture, aka people); The technical challenges - little things like vortex (we still don't have a really good way of predicting them). A copy of Doug's presentation is available from our website: www.raes.org.au/assets/Sydney-Branch-Newsletter-Archive/NextGen-Air-Traffic-Control-Doug-Arbuckle.pdf

Aerospace Futures 10 – 12 July, 2012 to be held at Rydges World Square Resort, 389 Pitt Street, Sydney, NSW:

Registrations have now opened for the Aerospace Futures Conference. Please refer: www.ayaa.com.au/AeroFutures/applications to register. Aerospace Futures is the keynote national event of the Australian Youth Aerospace Association (AYAA) which aims to increase Australia's capabilities in the aeronautical and astronautically industries. It aims to do so by creating a national network of leading, committed and enthusiastic undergraduate aerospace engineers (the Australian Youth Aerospace Association) and

then informing them of their postgraduate research or industry future opportunities so they can well and truly contribute to Australia's Aviation and space activities (Aerospace Futures). Aerospace Futures has been held very successfully for the past two years in Brisbane in 2010 and Melbourne in 2011. During the Conference there will be an evening social event with the Sydney Branch of the Royal Aeronautical Society which strongly supports the Forum.

Nine Flying Robots Play 007 Theme: Nine palm-sized [flying robots](#) work together and play a keyboard, drums, maracas, a cymbal and a "couch guitar" - stretched guitar strings over a wooden couch frame. Agile machines, such as these could help scope out dangerous buildings after disasters such as earthquakes or radiation leaks, The secrets to their smooth, graceful movement are their small size, four rotors and smart on-board processor. By moving each rotor at different speeds, the bots can tilt and turn. Their processors decide the swiftest, smoothest path from Point A to Point B, then send out commands to the rotors 600 times a second. [In a swarm](#), the robots can also monitor where they are compared to their neighbors. It's important that each robot does this by itself, as it would be too difficult to have one central computer controlling each robot as it flies. For more details and to view the videos of the flying robots' activities refer: www.innovationnewsdaily.com/920-flying-robots-play-007-theme.html

RAeS Ties, Coffee Mugs, and Lapel Pins: Selection of RAeS silk Ties direct from London - \$30 each; Sydney Branch coffee mugs & lapel pins available at Branch meetings for \$10 each.

DIARY 2012: 6 May: Historical Aircraft Restoration Society (HARS) – Wings over Illawarra AirShow, Illawarra Regional Airport, Albion Park Rail NSW - refer hars.org.au and woi.org.au Our Branch is planning a presence on the day.

23-24 May: Heli & UV Pacific 2012, RACV Royal Pines Resort, Surfers Paradise.

30 May: Capt Val St Leon - The Lockheed L1049 Super Constellation.

27 June: To be advised.

10-12 July: AYAA Conference. Refer www.ayaa.com.au/AeroFutures/applications

6-9 Aug: AUVSI'S Unmanned Systems North America 2012, Las Vegas. www.auvsi.org

23-28 September, 2012: 28th Congress of the International Council of the Aeronautical Sciences, Brisbane, QLD www.icas.org

Aerospace Websites:

www.aerosocietychannel.com/aerospace-insight/2010/12/exclusive-qantas-qf32-flight-from-the-cockpit/

www.aerosocietychannel.com/aerospace-insight/2011/07/space-shuttle-the-end-of-the-begining/

www.57rescuecanada.com: Follow Capt. Karl Kjarsgaard's adventures to recover Halifax bomber LW170 which is resting beneath 5000ft of water off the Irish coast; www.adastron.com/707/updates/updates.htm: Diary of Boeing 707-138B XBA formally Qantas EBA.

www.airshow.com.au; www.atsb.gov.au;

www.aviationmuseum.com.au - Temora Aviation Museum; www.boxkite2014.org: The Boxkite project.

www.innovationnewsdaily.com/920-flying-robots-play-007-theme.html

www.powerhousemuseum.com/whatson;

www.singapore.com.sg

en.wikipedia.org/wiki/Rolls-Royce_Trent