



SENSOR

Promoting National Security and Defence

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452

PRESIDENT'S REPORT

Language or Languish

It was a special opportunity and one which RUSI-SA responded to with considerable fervour. I refer of course to the consultation meeting with three members of the Expert Panel which has been appointed to support the development of the 2015 Defence White Paper and to provide independent advice to the Minister.

As such the role of the Panel goes well beyond that of undertaking a public consultation process. The Panel, which brings a mixture of relevant government, military, industry and academic experience to the White Paper process will contribute to the vigorous analysis and drafting of the White Paper and Force Structure Review; challenge key assumptions; and, provide independent views on submissions to Government.

So it was that quite a few souls ventured out on a cold evening at the end of the first week in August to meet with three members of the Panel; Rear Admiral James Goldrick (Retd) from ANU and ADFA, Mr Rory Medcalf from the Lowy Institute and Dr Stephan Fruhling from ANU. I have known James for some time and it was good to see him in such rude health and enthusiastic about his business. Rear Admiral Goldrick led a spirited discussion for around two hours with a group that comprised both RUSI-SA members and members of the public and filled the Air Force Room at the Naval, Military and Air Force Club on Hutt Street. He used a number of questions to focus the dialogue and to provide a comparative basis with other consultations. The Chatham House rule was the order of the day but I think I can provide an understanding of the scope of the discussions without breaking that convention.

The discussions centred on threats and opportunities in the strategic environment from now out to 2035 before looking at what the ADF should be able to do in that context. The discourse then turned to the different directions, multilateral and bilateral, international relationships might or should take in that period. Capabilities and policy levers were then examined in detail with issues such as affordability and any attendant force rebalancing options receiving due attention. Next, Defence Industry received a good airing and I will return to that subject a bit later on. People are the force enabler at the end of the day and that was the final question addressed, including a discourse on Reserves and Cadets. I was particularly drawn to the notion of the ADF and Defence being 'in' and 'of' community in this last series of questions. To round out the meeting every person present was given the opportunity to make a statement about their

'burning issue' to which the vast majority of the group responded. I caught up with Rear Admiral Goldrick after the meeting and he has since sent me an e-mail to thank RUSI-SA for sponsoring the community consultation process in South Australia in recognition of RUSI's role and standing in the Defence domain. All in all he felt it was a valuable exercise. Thank you to all who participated.

As I foreshadowed, let me return to the issue of Defence Industry and how it appears to be being treated in the context of the White Paper. I firmly believe that the language around an issue can self-determine related policies. I am reminded about the review into command and control of the ADF's helicopter capability, which saw the Army take over the rotary wing force from Air Force. It was always going to be difficult for the RAAF to argue that it should command and control the 'Battlefield Helicopter', a term which belied the utility of the platform. There is a similar problem with how Defence Industry is characterised in the Defence Issues Paper – a discussion paper to inform the 2015 Defence White Paper - released in late July 2014.

The Issues Paper indicates that the Government's position is that capability acquisition and sustainment decisions are made on the basis of defence imperatives and considerations of cost and risk. Decisions are not made on the basis of industry assistance or regional assistance imperatives. I have no problem with the latter position but the language is all wrong. It frames the discussion into a simplistic paradigm when in fact the considerations are much broader, more complex and require careful analysis. Where is the notion of high level defence strategy or indeed national security strategy in its broadest sense? In the absence of such language the policy development process will simply languish. It has probably never been more important than it is now to get a Defence White Paper right. This is the case for all the areas of enquiry laid out in the Defence Issues Paper but especially for Defence Industry.

Brent Espeland
State President

WWI - 100 YEARS ON

Our regular monthly presentation luncheon coincided with an important anniversary last month and provided attending members with the opportunity to reflect on the impact of an event 100 years ago on the lives of millions around the world.

4 August 1914 marked the outbreak of the Great War, as it was known then and for a number of years following until another global conflict saw it renamed World War I. The struggle was epic and bloody with an appalling loss of life while the wounded suffered greatly. A generation of young men was deeply affected and the effect on families and nations would be felt for years to come.

The ode and a minutes silence to honour the fallen in this War was observed prior to our lunch on 4 August 2014 but there was another observation that was noted – the folly of it all.

Folly because the truth of the conduct of war, as it was then, had been lost. Fifty years before the changes to weapons technology that were a feature of the American Civil War had forged the ascendancy of defence over offence. Improvements to artillery and the rifling of bores, together with the use of the machine gun and other innovations provided the fire power to decimate a frontal attack - as the hundreds of thousands of casualties in the Civil War would attest to.

All of this would have been observed by the many European officers who accompanied the forces on both sides and carefully reported back to their respective

general staffs. Yet nothing changed. Manoeuvre was persevered in circumstances where its use would render attrition.

As we remember the carnage of World War I, let us not forget that the profession of arms owes society the highest standard of diligence.

Brent Espeland
State President



WWI horse drawn Ambulance Wagon Mk VI, displayed in the Melbourne Museum, Victoria.

This ambulance carried twelve seated patients or four stretcher cases. A locker under the floor held medical supplies and dressings and there was a water tank under the tailgate.

Monthly Luncheons

Monday 1 September 2014

Speaker: CAPT Shane Casbault RAN
Air Warfare Destroyer Programme

Subject: TBA

Wines presented to guest speakers are generously donated by SKYE CELLARS, 578 The Parade, Auldana 5072.

SKYE CELLARS has been operating for over 28 years. It is a family owned and operated business situated in the heritage listed Auldana Estate Winery in the Adelaide foothills.

All members are invited to attend our luncheons. Indeed you are encouraged to invite partners, friends and colleagues to join us and, if they like what they see and hear, to nominate them for membership.

The dress code for the luncheon is neat casual. We assemble in Building 34A, Keswick Barracks, Keswick, at approximately 11.30 am for drinks and good fellowship. Members are asked to be seated by 12.00 noon when our President welcomes members and guests and lunch is served.

The cost of the buffet is \$26 for members and \$31 for non-members. Wines, beer and soft drinks will be available for purchase. We also conduct a raffle to help cover expenses. Our caterer has agreed to provide vegetarian meals and sweets for diabetics, but these must be ordered before midday on the Friday before the lunch.

For those who do not have time to enjoy lunch, but wish to hear the lecture, chairs are provided around the perimeter of the hall. Please be seated before 12.55 pm. The address is of about 30 to 35 minutes duration with 15 minutes for questions, after which coffee or tea is available. We aim to complete the program by 2.00 pm.

Cancellations must be advised to the RUSI-SA Office by midday of the Friday before the lunch. Subsequent cancellations will attract a fee of \$26.

SEAHAWK HELICOPTER

Aircraft 902 from NUSQN 725 fires the first 'Hellfire' missile from the MH-60R Seahawk 'Romeo', in Florida, USA



The RAN's newest maritime combat helicopter, the MH-60R Seahawk 'Romeo', successfully fired its first 'Hellfire' missile on 26 July 2014.

The AGM-114 Hellfire air-to-surface missile was fired by Navy's 725 Sqn from aircraft currently deployed to the USN's Atlantic Undersea Test and Evaluation Centre off the Florida coast.

Commander Australian Fleet, RADM Stuart Mayer, said the Seahawk Romeo's cutting edge mission systems provided a formidable naval platform. *"Navy's next generation submarine hunter and anti-surface warfare helicopter will be the cornerstone of our working Navy's aviation combat capability. The new aircraft's multi-mission and multi-target precision strike capabilities will increase our versatility and potency as a high-end fighting force,"* RADM Mayer said.

The head of the Helicopter and Guided Weapons Division in the DMO, RADM Tony Dalton, said the successful Hellfire missile firing was a major milestone in delivering Defence's Project AIR 9000 Phase 8. *"This \$3.2 billion acquisition program is providing Navy with a state-of-the-art, helicopter based, war-fighting capability - our journey through production, acceptance and now testing of the aircraft's major weapon systems has been steady, effective, ahead of schedule, and on budget. The Seahawk Romeo is a quantum leap over Navy's current combat helicopter force - both in numbers and capability,"* RADM Dalton said.

Defence took delivery of the first two of 24 Seahawk Romeos in the United States in December 2013 at Lockheed Martin's Mission Systems Facility in Owego, New York. Two more aircraft were accepted in February 2014. All four aircraft are being operated by Navy's 725 Squadron alongside three US Navy Seahawk Romeo squadrons based out of the US Navy's Jacksonville air station in Florida. Ultimately, two Seahawk Romeo squadrons will be home based at Navy's Nowra, New South Wales, air station, with 725 Squadron conducting Seahawk Romeo training and 816 Squadron flying the Seahawk Romeo from Navy's ANZAC Class frigates and the new Hobart Class destroyers. A further two MH-60R will be delivered in October 2014. Deliveries will continue during 2015 with the 24th and final aircraft being delivered in 2016. 725 Squadron personnel and their aircraft will be brought home to Australia at the end of 2014.

Above text and photograph were taken from the Australian Defence Image Library,

On Monday, 2 June 2014, CMDR Andrei Ezergailis addressed the RUSI of SA on “Australia’s Future Submarine Capability”, focussing on the why and the what.

His talk covered the issues for Australia, i.e. why we trade, domestic and international maritime trade, the key strategic drivers, defence and security, the maritime environment and the strategic problem. For the submarines, the talk covered solving the strategic problem, why submarines are important, disproportionate examples, the things that only submarines can do, force structure considerations and design issues. Following is a summary of the presentation compiled from the information on his slides.

Australia is a stable, democratic nation in the fastest growing region of the world. We have strong trade and economic links with Asia-Pacific countries and we are well placed to take advantage of the growing opportunities in the region.

Australia has a strong financial system with low unemployment and public debt. We have a highly skilled workforce, an export-oriented economy with a strong focus on minerals and energy, premium quality agricultural and services products, innovation and creativity. In 2011, the value of Australia's trade with the world totalled more than \$600 billion.

Trade allows selection of the most competitively priced goods and services from around the world. It allows Australia to specialise in the production of goods and services in which we have comparative advantage, thereby maximising our economic growth. Our exports are equivalent to more than 21% of our Gross Domestic Product, building the nation's wealth and prosperity. Foreign investment plays an important role in our economic development and



provides capital to fund business expansion.

Movement by sea accounts for 99% of Australia's international freight by volume and 76% by value. 97% of the transport sector relies on petroleum products of which 76% is imported. Australian self-sufficiency on oil is predicted to decrease from 84% to 20% over the next 20 years. Indigenous refining capacity is declining and being replaced by offshore refineries. The developing countries in our region are experiencing huge increases in their own energy requirements and we have a growing dependence on imported oil and petroleum imports, refined in countries that are themselves increasingly vulnerable to an interruption in supplies.

Australia works closely with other countries to promote security and stability in our immediate region and globally. Our response to security challenges such as the proliferation of weapons of mass destruction, terrorism, cyber threats, maritime security and weak and failing states, is multi-dimensional. The Department of Foreign Affairs and Trade, the Department of Defence, the Australian Federal Police, the Attorney-General's Department, the Customs and Border Protection Service, state law enforcement agencies and intelligence agencies, all play a role. A versatile and modern defence force, strong bilateral links

and an ongoing commitment to a rules-based global order and the United Nations are all key elements of Australia's approach.

Bilaterally, the alliance with the United States remains vital. Long-term links with New Zealand, and growing ties with Indonesia, Japan and the Republic of Korea, are increasingly valued in pursuing common strategic interests. Australia also has longstanding and valuable defence ties with Malaysia, Singapore, Thailand, the Philippines and Papua New Guinea. We have growing and productive relationships with India, China and Vietnam and we provide assistance to Timor-Leste, Papua New Guinea and other Pacific island countries to enable them to maintain stability and protect their security. Australia is also working with Pakistan, Iraq, Jordan, Yemen and Indonesia on law enforcement and counter-terrorism capacity building. Regionally and multilaterally, Australia continues to work with others to address traditional and non-traditional security issues. Australia is a significant non-NATO contributor to the International Stability Assistance Force in Afghanistan and we are leaders in global efforts for non-proliferation and disarmament, and counter-terrorism.

Australia depends on significant and growing trade routes, where surface passage is subject to legal and quasi-legal interference and constraint. China's air space patrol zone includes recognised Japanese air space, and consider China's claims in the South China Sea. Access for surface warships or military aircraft may also be constrained. Overt presence of warships and aircraft can embarrass Nations and covert presence can have an advantage. Australia, with 0.3% of the world's population, is responsible for managing the defence of 20% of the earth's surface.

The advantage of submarines lies in their stealth, long range and endurance, all of which, if specified correctly, provide access

to key areas denied to other platforms. During the Falklands war, the Argentinean Navy had one modern Submarine – the San Luis that was deployed independently, and without co-ordination, having a defective fire control system. The San Luis still conducted three separate attacks, all of which were unsuccessful, possibly due to incorrect torpedo preparation. The San Luis tied up a huge amount of the RN task force time and effort in defending against a threat which was never successfully attacked.

Only a submarine can provide surveillance and intelligence gathering in areas denied to other units, observing and reporting air, sea and undersea activities and the electromagnetic spectrum. A submarine can support a land strike without alerting the adversary and can withdraw quietly if not required.

Only a submarine can offer battle-space preparation by covertly gaining access to denied areas to assess environment and support deployment of adversary forces, relaying information in near real time and deploying special forces. The role of the submarine includes offensive mining using sophisticated, discriminating mines or mobile mines to deny access to selected areas or ports not under our sea or air control.

Anti-submarine warfare is challenged by growth in regional submarine capability and its demanding role requires ongoing research and development to optimise the sensor suite and improve stealth, weapons, countermeasures and training. India and China are acquiring European and Russian technology and Indonesia is acquiring ten Russian Kilo class Submarines. Publicly, by 2025 there will be in excess of 130 modern submarines in our region (excluding Australian and US Submarines). Some nations publicly understate their Defence spending.

In terms of Australia's Force Structure, our geographic area of interest requires long-range capabilities for surveillance, intelligence gathering, indications and early warning. In the event of a contingency, support will be required for land strike, mining, anti-submarine warfare and anti-surface warfare. Consideration also needs to be given to providing support for Task Force operations or Special Forces closer to home and to the attrition of our own submarines. Recent Defence White Papers of 2009 and 2013 each state a requirement for 12 submarines but recent political statements have suggested that the number required is not yet set.

“Australia is one of the few countries to have mastered advanced Defence operations in the underwater environment which cannot readily be matched or countered by most potential adversaries. In many future defence contingencies, this competitive advantage would be extremely useful and in some is likely to prove decisive”. (Australia's Future Underwater Operations and Systems Requirements, Ross Babbage, Kokoda Paper, April 2007, p.3).

Australia's requirements are unique. Our geography and interests drive the design of operational characteristics for long transits to distant patrol areas, littoral operating areas requiring agility and stealth in a wide range of conditions and very low signatures in all spectrums.

To summarise, we are a maritime nation relying on maritime trade both domestically, and internationally. Key strategic drivers highlight our need to influence the maritime domain and to maintain our defence and security with an effective submarine capability.

References:

<http://www.submarineinstitute.com/sia-projects/Submarine-2020.html>

<http://www.navy.gov.au/spc/>



AGM

The Annual General Meeting of RUSI-SA Inc is planned for Monday, 13 October 2013.

Elections will be held for members of RUSI-SA Council for 2014/2015.

In accordance with the Constitution, nominations for Council are to be submitted at least 21 days before the meeting. Consequently, any nominations for Council should be submitted to the RUSI-SA office by Monday 22 September 2014.

Nomination forms are available from the Secretary.

AUSTRALIA POST

On 5 August 2014, Australia Post marked the centenary of Military Aviation and Submarines with a new stamp issue commemorating the first flight by an Australian military aircraft and the commissioning of Australia's first Submarines.



Australia Post Philatelic Manager, Mr Michael Zsolt, said Australia Post is proud to commemorate two significant military centenaries. *"This Australian military inspired stamp release featuring aircraft and submarine vessels is a unique collectable range,"* Mr Zsolt said.

On 1 March 1914, the first flight of a military airplane took place when Lieutenant Eric Harrison flew

Bristol Military Biplane CFS-3 at the Army flying field, Point Cook, Victoria. Australia subsequently became the only British dominion to establish a flying corps, the Australian Flying Corps (AFC), for service during World War I.

Australia's first submarines, British-built E-class vessels known as HMAS AE1 and HMAS AE2, were commissioned into the Royal Australian Navy in February 1914 and arrived in Sydney on 24 May.

During World War I both submarines took part in the occupation of Rabaul in German New Guinea. On 14 September 1914 Submarine AE1 disappeared off the coast of Cape Gazelle, New Britain, tragically with all hands on board and is yet to be found.

Submarine AE2 subsequently supported British-led operations off the Gallipoli peninsula in Turkey and on 25 April 1915 was the first British submarine to penetrate the Dardanelles, a narrow strait in north-western Turkey. On 30 April Submarine AE2 was damaged by a Turkish gunboat in the Sea of Marmara, and scuttled by her crew, all of

whom were captured. The wreck was found in 1998 and there have been plans to refloat and preserve the submarine.

The Centenary of Military Aviation and Submarines domestic base rate (70c) stamps are illustrated by Sydney-based illustrators Jamie and Leanne Tufrey.

The stamp issue's associated products include a miniature sheet, first day cover, sheetlet pack, stamp pack, maxicard set of two, booklet of 20 x 70c self-adhesive stamps and a postal and numismatic cover.

The Centenary of Military Aviation and Submarines stamp issue is available from 5 August 2014 at participating Post Offices, via mail order on 1800 331 794 and online at www.auspost.com.au/stamps



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DINING IN NIGHT

The annual Dining In Night for the RUSI of SA was held at the Naval, Military and Air Force Club of SA on the evening of Wednesday 23 July 2014.

This well attended occasion was an opportunity to acknowledge the support of the Governor of SA, His Excellency RADM the Honourable Kevin Scarce AC CSC RANR, as our



Patron and to wish him and his wife farewell as his term of office comes to a close.

During the evening, the President AVM Brent Espeland presented COL David Stoba with Life Membership of the RUSI of SA in recognition of his significant contributions to the organisation as President for two terms of office.

On Tuesday 24 June 2014, Chris Burns, Chief Executive Officer of the Defence Teaming Centre, spoke about the future of South Australia's Defence Industry. Following is a short summary of his presentation, mainly compiled from the slides he used.

The Defence Teaming Centre (DTC) is the defence industry association of South Australia, nationally and internationally recognised as a model industry body that is relevant, responsive and reliable. See <http://www.dtc.org.au/asp/home.aspx>

Australia's defence industry consists of Australian-based businesses that are actually or potentially involved in supplying military capability and/or are influenced by Defence business policies or purchasing decisions.

The DTC accounts for 25% of Defence's indigenous spend and 32% of nation's defence industry workforce with over 27,000

employees in SA. The DTC generates about \$1.8bn per annum.



South Australia is the only State with a Minister and Shadow Minister for Defence Industries and a State Government Defence focussed agency (Defence SA) together with a Defence Advisory Board.

Only South Australia has a Defence Teaming Centre and other states are looking to emulate our success.

Defence Industry in South Australia was responsible for building and is maintaining six

Collins Class submarines – amongst the most capable conventional submarines in the world.

SA Defence Industry is currently building three Hobart Class Air Warfare destroyers, making and maintaining armoured fighting vehicles and maintaining and operating maritime surveillance systems. SA Defence Industry also supports scientific research and development, simulation, cyber security and systems integration.

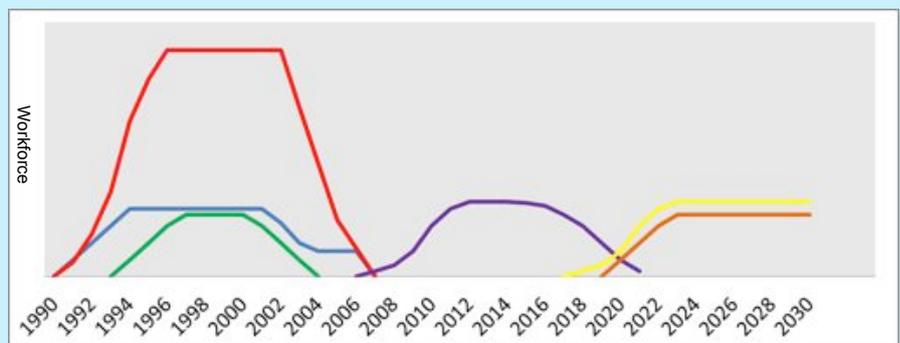
The future for SA Defence Industry is for the continuing development and maintenance of these systems in support maintaining the security of the Indo-Pacific region.

Concern was expressed with the peaks and troughs of the Australian Naval ship building industry. *“There are opportunities in terms of military vehicles and the future submarine project. The situation is desperate. There has been six years of neglect in the defence budget and the defence industry is running on the smell of an oily rag”.* (Advertiser 30 July 2014)

Chris Burns showed how the Australian Naval Ship Building workforce has fluctuated recently and is likely to change in the near future. There is particular concern for the period beyond 2018 when the current Air Warfare Destroyer project nears completion.

Without an ongoing program of associated work, there is a real danger of Australia losing the technical and experienced workforce that is needed to construct shipping for Navy.

Peaks and Troughs of Australian Naval Ship Building



DEFENCE SCIENCE

In the shadow of the recent loss of a Malaysian Airlines aircraft, the Aerospace Division of the Defence Science and Technology Organisation is considering changes to flight data recording that would improve air safety and possibly create the next generation 'Black Box'.

The DSTO has been assisting the Australian Safety Transport Bureau in the search for the missing MH-370 airliner.

The technical changes being considered should improve air safety by allowing more expedient and accurate investigations into aircraft accidents and incidents.

This information was published by the Defence Department and is available through the DSTO App which can be freely downloaded to your tablet or phone either through the Apple Store or Google Play. See <http://www.dsto.defence.gov.au/app/>

Details of improvements being considered for the 'Black Box' and many other details of DSTO activities are available from the App.

LIFE MEMBERSHIP

COL David Stoba receiving his Certificate of Life Membership of the RUSI of SA from the President, AVM Brent Espeland.



FACEBOOK

Follow us on Facebook at RUSI of SA and please 'like' us.

CONSTITUTION

A Special General meeting held in conjunction with the luncheon on Monday 7 July approved changes to the Constitution.

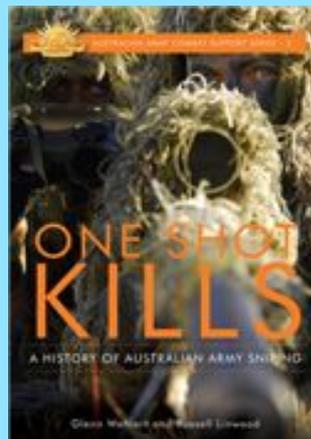
The Resolution passed to amend the constitution was as follows:

That the Royal United Services Institute of South Australia Inc. Constitution dated September 2007 be rescinded and that there be substituted for it a new Constitution in the form as set forth on the website of the RUSI of Australia <https://www.rusi.org.au/> as its proposed new Constitution.

The changes relate to the timing of the Annual General Meeting, the procedure for the election of office bearers and the relationship of designated Service Officers and the Commissioner of police to the RUSI of SA, to be in line with the practice in other Australian RUSIs.

NEW BOOK

***"One Shot Kills, A History of Australian Army Sniping"* by Glenn Wahlert and Russell Linwood, reveals the secretive, complex and often impenetrable world of the military sniper where 'one-shot kills' are the key objective.**



The book contains true stories from actual snipers who reached the peak of their profession in a deadly art. In an age of precision weapons and unmanned drones, this book is about professional soldiers who can clearly see the men they are about to kill, and witness, first-hand, the consequences of their actions.

One Shot Kills is the second book in the Australian Army Combat Support Series - AAHU and is published by Big Sky Publishing, RRP \$19.99.