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FRONT COVER:
Sergeant Taryn Allen, an Airborne Electronics Analyst of No. 11 Squadron, Royal Australian Air Force, onboard a P-8A Poseidon maritime patrol aircraft on 25 July 2021 during Exercise Talisman Sabre 2021. Major General Susan Coyle discusses cyber and electronic warfare at pp. 13 – 17. More information on Talisman Sabre 2021 is at pp. 5 and 17. [Source: LACW Emma Schwenke, Department of Defence]
Dear David,

I am writing to you on behalf of the Board of RUSI NSW in reply to your advice that you would be stepping down as editor of United Service at the end of 2021, to both congratulate and most sincerely thank you for the enormous range of contributions that you have made to the RUSI in general and to RUSI NSW.

We would like to acknowledge and recognize the major contributions that you have made and continue to make, in your roles as a Council member, President and Past President, Convenor of our RUSI NSW Special Interest Group on Strategy, and in particular, as the long-standing editor of our outstandingly high-quality journal, United Service. We all owe you our most sincere thanks and admiration for this incredibly wide range of contributions over many years.

David, on behalf of all RUSI members and RUSI NSW Board, I offer you our most sincere thanks and gratitude for all that you have contributed to our organization. I now ask if you would accept our congratulations and sincere appreciation for the extremely high standard you have developed and maintained in your long-standing editorship of United Service.

Yours sincerely
Michael Hough

I invite your suggestions for and involvement in the ongoing development of United Service. Please contact me on mhough5@gmail.com.

Michael Hough
INSTITUTE NEWS

Upcoming Events

September Lunchtime-Lecture
Tuesday, 28 September 2021, at 1.00 – 2.00 pm
The Auditorium, Anzac Memorial, Hyde Park South, Sydney*
Speaker: Commander Andrew Hough RAN
Commanding Officer, HMAS Sydney V
Subject: “The history of the Aegis combat system”

October Lunchtime-Lecture
Tuesday, 26 October 2021, at 1.00 – 2.00 pm
The Auditorium, Anzac Memorial, Hyde Park South, Sydney*
Speaker: Vice Admiral Tim Barrett AO CSC RAN (Ret’d)
Subject: “Rebuilding Australia’s maritime fleet”

Annual General Meeting
Tuesday, 26 October 2021, at 2.00 – 3.00 pm
The Auditorium, Anzac Memorial, Hyde Park South, Sydney*
The Institute’s Annual General Meeting (AGM) will follow the Lunchtime-Lecture – see separate AGM notice and call for nominations for office-bearers and Board members below.

November Seminar on Military Operations
Tuesday, 23 November 2021, at 1.00 – 5.00 pm
The Auditorium, Anzac Memorial, Hyde Park South, Sydney*
Subject: “Improving resilience in a rapidly changing region”
Speakers: Her Excellency, The Honourable Margaret Beasley AC QC
Governor of New South Wales
Rear Admiral Mark Hammond AM RAN
Commander Australian Fleet
Major General Matthew Pearse AM
Commander Forces Command
Major General David Thomae (to be confirmed)
Commander 2nd Division
Air Vice-Marshal Joe Iervasi AM CSC
Air Commander Australia
Mr Chris Jenkins
Chief Executive Officer, Thales Australia & New Zealand
Professor Alex Zelinski AO
Vice-Chancellor, University of Newcastle

There will be no separate November Lunchtime-lecture.

December Lunchtime-Lecture
Tuesday, 14 December 2021, at 1.00 – 2.00 pm
The Auditorium, Anzac Memorial, Hyde Park South, Sydney*
Speaker: Mr Peter Hartcher
Political and International Editor, The Sydney Morning Herald and The Age
Subject: The 2021 Sir Hermann Black Lecture “2021: the year in review”

Christmas Luncheon
Cellos Grand Dining Room, Castlereagh Boutique Hotel
169-171 Castlereagh Street, Sydney NSW 2000
Speaker: Mr Brad Manera
Senior Historian, The Anzac Memorial

*Notes:
1. Certificates of Continuing Professional Education (CPE Certificates): Defence professionals who attend our educational activities can earn CPE credits – lecture attendance attracts 1 hour, ½-day seminars 4 hours. If you need a CPE certificate, please request it when you register for the event.
2. Should the COVID-19 pandemic preclude an in-person meeting on these dates, these lectures will be made available as video presentations on the Institute’s website [www.rusinsw.org.au] within a few days of the scheduled dates.

Notice of Annual General Meeting

The 2021 Annual General Meeting will be held in the Auditorium, Anzac Memorial, Hyde Park South, Sydney, on Tuesday, 26 October 2021, at 2.00 pm.

Agenda

1. Attendance: To record the attendance, confirm eligibility to vote, confirm that a quorum (10 members eligible to vote) is present and receive any apologies.
2. Minutes: To confirm the minutes of the Annual General Meeting held on 24 November 2020.
3. Board’s Report: To receive the Board’s report on the activities of the Institute during the 2020-21 year.
4. Financial Statements: To receive and consider the financial statements for the year ending 30 June 2021.
5. Board Elections: To elect the Institute’s office-bearers and Board members for 2021-22.
6. Auditor: To elect a suitably qualified person as auditor.

Notes: Any member who has paid all moneys s/he owes to the Institute, other than the 2021-22 subscription, will be eligible to vote. The minutes, Board’s report, and the financial statements will be published on the Institute’s website at www.rusinsw.org.au prior to the meeting; and paper copies will be available at the meeting and may be requested from the Institute’s office.

Election of Office-Bearers and Board Members for 2021-22

Nominations are hereby called for the following positions for the 2021-22 Board year: Vice-President – 1 position; Secretary; Treasurer; Board Members – up to 4 positions.

Notes:
1. Any member who has paid all moneys s/he owes to the Institute, other than the 2021-22 subscription, is eligible for election as an office-bearer or Board member. Subject to satisfying this requirement, current office-bearers and Board members whose 3-year terms are expiring at this AGM will be eligible to nominate for re-election.
2. Nominations of candidates for election as office-bearers or Board members must be made in writing, be signed by one or more members of the Institute, and be accompanied by the written consent of the nominee (which may be endorsed on the form of nomination). A form for this purpose is available from the office, but its use is not mandatory.
3. Nominations must be delivered to the Office Manager by close of business on Friday, 15 October 2021. They may be mailed to the Office Manager, or lodged by email or in person at the Institute's office, Anzac Memorial, Hyde Park South, Sydney. The email address is office@rusinsw.org.au and the postal address is: The Office Manager, RUSI NSW, PO Box A778, Sydney South NSW 1235.

Keith Morris
Acting Secretary
1 July 2021
China’s ambitions for Taiwan

In a speech on 1 July 2021 marking the centenary of the founding of the Chinese Communist Party, President Xi Jinping warned the world that Taiwan would be incorporated in China under the ‘one-China’ policy, by force if necessary. He said: “Resolving the Taiwan question and realising China’s complete reunification is … an unshakable commitment of the Communist Party of China … We will uphold the one-China principle … [and] take resolute action to utterly defeat any attempt toward ‘Taiwan independence’.”

From the 1980s, the People’s Republic of China (China), under Chinese Communist Party (CCP)2 rule since 1949, pursued a strategy to make the country the primary manufacturing hub in the world and to boost its technological capabilities to First World levels. In both aims, China has been remarkably successful, lifting hundreds of millions of its citizens out of poverty towards prosperity. More recently, under President Xi Jinping, the nation’s focus has changed to being the leading world power by 2050, with its interests overriding those of the international community and itself exempt from international norms of trade, diplomacy and international relations. This change of direction has brought China into disagreement with its neighbours and with the West generally.

Trading on the long-standing CCP grievance of China’s ‘bullying’ by foreign powers during previous centuries, for reasons which are opaque, President Xi has convinced the CCP that foreign powers are intent on disrupting the industrial and commercial infrastructure along its east coast through military action. China, thus, has invested immense sums in the People’s Liberation Army (PLA), creating the world’s largest navy and matching capacities in missiles and air power. The CCP ousted neighbouring countries from South China Sea islands and defied international law to occupy and militarise adjacent reefs, which are now part of China’s ‘First Island Chain’3 of defence. This leads us to the issue of Taiwan, a cornerstone of the part of China’s ‘First Island Chain’ of defence. The CCP ousted neighbouring countries from the coast of mainland east Asia. It extends from the Kamchatka Peninsula in the northeast to the Malay Peninsula in the southwest; and incorporates the Kuril Islands, the Japanese Archipelago, the Ryukyu Islands, Taiwan, the northern Philippines, and Borneo; and encloses the Sea of Okhotsk, Sea of Japan, Yellow Sea, East China Sea, Taiwan Strait and South China Sea.

The Republic of Taiwan occupies around 36,000 km². Largely mountainous, nearly 25 million citizens call the main island home, putting it amongst the world’s most densely populated countries. Ethnic Chinese immigration began in the 17th century when the Dutch ruled Taiwan, and it was annexed by the Qing Dynasty in 1683. Ceded to the Japanese in 1895, it was to Taiwan that the defeated Nationalist Chinese (KMT)4 forces withdrew in 1949. The CCP regards Taiwan as a province of China to be recovered, forcibly if necessary, a stance tacitly supported internationally by acceptance of the ‘one-China’ policy, which has isolated Taiwan diplomatically.

From the 1960s, Taiwan experienced rapid industrial and technological development. It produces 40 per cent of the world’s computer chips, is the 12th largest steel manufacturer, and chemical production accounts for one third of its gross domestic product (GDP). Four of the world’s top 20 container shipping lines are headquartered in Taiwan. The nation’s GDP is ranked 20th in the world – Australia is 13th – and Taiwan is our 7th largest trading partner. This century Taiwan witnessed political renaissance, with KMT influence declining from 2014 and the rise of new democratic – and Taiwan-centric – parties. Close and mutually beneficial industrial ties with China in the period 2005-2014 have been dissolved under the leadership of current President Tsai Ing-wen, and the island nation has striven for international recognition and release from any Chinese threat of forcible reunification.

The Taiwanese are clearly serious about defending their own territory. Its defence force numbers 165,000 regulars and ten times more reservists. It operates 739 military aircraft, including 286 fighters and an anti-submarine wing; its navy has 117 ships in commission, including four destroyers, 22 frigates and four submarines; the land forces operate 1160 tanks, 8275 amphibious combat vehicles5, 257 self-propelled artillery vehicles and 1160 towed artillery pieces.

Taiwan’s principal international defender is the United States (US), which forestalled Chinese attempts to assault the island in 1954-55, 1958 and 1996. The CCP, however, again might attempt to annex Taiwan by force, particularly since President Xi has said that it will if it has to. Equally, there are factors that might stay China’s hand. Against determined Taiwanese resistance, the PLA would need to deploy millions of men and most of its naval and air forces, particularly as

2While usually referred to as the Chinese Communist Party by Western media, the CCP prefers to be known as the Communist Party of China (CPC).
3The first island chain refers to the first chain of major archipelagos out from the coast of mainland east Asia. It extends from the Kamchatka Peninsula in the northeast to the Malay Peninsula in the southwest; and incorporates the Kuril Islands, the Japanese Archipelago, the Ryukyu Islands, Taiwan, the northern Philippines, and Borneo; and encloses the Sea of Okhotsk, Sea of Japan, Yellow Sea, East China Sea, Taiwan Strait and South China Sea.
4KMT: Kuomintang – the Nationalist Party of China, also called the Chinese Nationalist Party.
5ACVs: amphibious armoured personnel carriers.
the Japanese Deputy Prime Minister, Taro Aso, recently signalled his country’s willingness, with the US, to defend Taiwan against Chinese attack. The PLA might lose the military struggle, or suffer significant casualties that make any victory Pyrrhic. ‘Face’ is critically important to the CCP leadership; a setback would unseat Xi. As well, the CCP and PLA cannot discount the US deciding that Taiwan is the line in the sand beyond which it will not countenance Chinese powerplays in the region. Ambiguity over US intentions is a powerful weapon in the counter-China arsenal.

To further curb the CCP’s ardour for armed conflict, ‘push-back’ against Chinese demands should continue and those nations willing to support Taiwan militarily should look to their own abilities and improve upon them. Strengthening and supporting Taiwanese efforts to bolster its own defence capabilities is also sound strategy. Finally, there are numerous other levers the international community have with China to dissuade it from any military assault on Taiwan. Trade, the commercial relationships on which Chinese affluence is built, and access to raw materials are some of them. Reconsideration of acceptance of the ‘one-China’ policy is another.

Collectively, concerned nations should make it clear to the CCP that any attack on Taiwan would have serious consequences, without necessarily spelling out what they would be. The CCP will have to decide whether the risks outweigh the rewards. Let us make sure, however, that we can deliver on our promises of retaliation should the Chinese choose the armed assault option.

Ian Pfennigwerth

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Dr Ian Pfennigwerth, a former Australian defence attaché in Beijing, is a member of the Institute’s Special Interest Group on Strategy. These are his personal views.

LETTER

RUSI Needs to Stay Focused

I feel compelled to offer a comment on the Royal United Services Institute (RUSI) lecture held in Sydney on 25 May 2021.

Given the current events underway in the South China Sea, the lecture was a great disappointment as I had expected that there would have been some discussion concerning the deteriorating strategic situation vis-à-vis China. The fact that China has recently threatened this nation with an intercontinental ballistic missile attack is a matter of great concern to everyone and, in particular, the military fraternity!

In addition, and punctuating the matter further, at the very moment of the lecture, a Royal Navy task force (Carrier Strike Group 21) was preparing to depart Portsmouth for a multitude of joint naval exercises around the world that are to culminate in a six-power naval exercise, that will include the Royal Australian Navy, in the South China Sea.

Putting these observations in the context of my own personal experiences: in 1971 while taking my ship down the Malacca Strait, I observed the final departure of the British Far Eastern Fleet from Singapore, as it passed down my port side. It was a moment in history which I will never forget.

History has at least two elements which I understand to be somewhat constant: ‘that nature abhors a vacuum’ and ‘never back-down to a bully!’ As I understand the history and purpose of the RUSI extending back to the Duke of Wellington, we are about the accurate and timely dissemination of military information and not just about entertaining those who were once involved in the warfighting professions. It is a time for the RUSI to stay focused!

Max Sheridan Wilkinson
Leura NSW
27 May 2021

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Left: Canadian frigate HMCS Calgary (foreground), in company with USS America (left) and Australian frigate HMAS Parramatta (right), off the coast of Queensland, during Exercise Talisman Sabre 21 (TS21) on 31 July 2021. More information on TS21 is at p. 17.

[Photo: Corporal Lynette Ai Dang, Department of Defence]
Australia's sovereign capacities and resilience in crisis and disaster: a defence and industry partnership

A paper based on a presentation to the Institute on 25 May 2021 by

Commodore Chris Smallhorn, RAN (Ret’d)
CEO Coulson Aviation (Australia) Pty. Ltd. 1

Resilience embraces preparation for crises, disasters, calamities and their management to mitigate losses and costs. National resilience is benefited by constructive federalism between our federal entities, states, and territories, supported and enabled by a strong defence and industry capability suite. A co-ordinated and structured response, with appropriate and ideally common command-and-control structures and mechanisms, can assist to mitigate crises and enhance the trust and faith the community has in our emergency-response capabilities at their time of need.

Key words: bushfires; co-ordination; crises; defence; disasters; federalism; floods; industry; pandemics; resilience; sovereign capability.

The Many Lenses of Resilience

The security and resilience environment is constantly changing. This has always been the case. Resilience has many aspects. The safety of every Australian is the key aspect, this is especially relevant today as we, and the world, navigate the ongoing COVID-19 pandemic. Australia's economic resilience, environmental resilience, security and military resilience, diplomatic resilience and cyber resilience all build to contribute to the fabric of our nation's resilience.

Through each of these lenses we find challenges today. Examples include our ability to trade, our geopolitical relationships and appreciation of our wider search-and-rescue responsibilities.

Our ability to trade relies upon our sea-lines of communication. Figure 1 depicts the economic tracks and the maritime routes of communication around Australia. It highlights our economic lifeline where the economic and resources ‘blood’ of the country flows. What is not depicted on that map are the data cables under the sea that keep us connected – the majority of our information flows along the sea floor. Security of our maritime trajectories and sea-lines of communication are the lifeblood of our nation.

Geopolitics is another key lens through which we should look constantly as we develop our strategies to face the challenges ahead. We face challenges in the Western Pacific, the South China Sea has become a zone of great strategic relevance, the Indian Ocean, and in the Middle East, all of which are of crucial significance to Australia and its prosperity. As we try to manage our diverse challenges worldwide, other nations are projecting their influence and pursuing their interests.

Australia's maritime search-and-rescue zone of responsibility is extensive. It is the large box at the bottom of Figure 2 covering 10 per cent of the globe, an area of 53 million square kilometres. It is extraordinary that a country of about 25 million people is responsible for the search-and-rescue response over 10 per cent of the globe. It speaks volumes of what Australia as a nation is capable of, what we do and what the world asks of us. We are seen as a nation that can do these things and is yet another expression of resilient infrastructures and capabilities. The capabilities we bring to bear to ensure we are resilient through these and many other lenses all contribute to our sovereignty as a nation.

Sovereign Capability, Integration, Resilience

This raises the issues of what is ‘sovereignty’ and what is ‘sovereign capability’, topics we often think about in a military context. The Department of Defence has defined sovereign capability as the ability to design, maintain, sustain, enhance and develop capabilities in Australia. It is also the ability to employ, co-ordinate and

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Figure 1: Major maritime lines of communication around the Indo-Pacific, including Australasia
[Source: Australian Maritime Safety Authority]
integrate our sovereign capabilities in the interests of Australia, its states, territories and its allies. Of relevance is having the fundamental capability required to respond to a suite of objectives; and the end-game is the ability to effectively employ that capability in a sustainable manner to achieve those objectives.

In Defence, we strive to achieve high levels of integration of our internal resources and capabilities. This became a leverage-point for Defence to be successful in various complex theatres of operations. Effective coordination and communication are crucial for integration which the nation should strive to achieve across our public and private sector industries.

Sovereignty is generally considered at a federal level, but there is a need to consider and review sovereignty and its national contribution to national resilience across both federal and state levels of government. Sovereignty and resilience are built upon the sum of our nation's capabilities across our states, territories and industries. Just as it is in the Defence sector, so too is this patently true in our nation's ability to respond to crises and natural disasters.

As suggested by Commissioner Shane Fitzsimmons when he addressed the Institute in April 2021 (Fitzsimmons 2021), resilience is our ability to withstand shock, especially during calamitous occurrences, and bounce back better and stronger. Resilience is not just the ability to survive and therefore to move on with what you are doing, it is more than that. If we are to continuously improve and become better as a federation of states and as a nation, we must be stronger post shock. At a whole-of-nation level, we should see every one of our crises and the challenges thereof as an opportunity to be better, an opportunity to improve upon all that we do to co-ordinate, communicate and integrate our disaster management responses.

Resilience during Calamities and Crises in Australia

A number of crises have occurred in Australia in the last two decades. Bushfires (in 2003, 2008/2009, 2015/2016 and 2019/2020), floods, and the current COVID-19 pandemic have impacted on thousands of Australian families. These crises demanded the best responses from national and state agencies and drew on our national resilience capabilities.

But are we resilient? Recently, the Reserve Bank of Australia projected a 3.5 per cent increase in Australia’s gross domestic product (GDP) and a reduction in unemployment back to a pre-pandemic rate of 5.25 per cent (RBA 2021). These are impressive statistics by any measure reflecting strong resilience within our nation.

As we look into the potential for natural disasters to occur in the future and focus on the disasters we have managed in the past, we realise the relevance and importance of having resilience in our planning and coordination. Without it, we cannot bounce back better and stronger from disasters.

The 2020 Royal Commission into National Natural Disaster Arrangements reported that in the fire seasons of 2008/09, 2015/16 and 2019/20, 24 to 35 million hectares of our bushland suffered environmental damage (Binskin et al. 2020). Insurance-related losses totalled $4.5 billion, which exceeds the cost of running our defence force on an annual basis. An estimated 3 million animals died in 2019/20 alone. Such losses on average are costing us $18.2 billion a year and this is projected to rise to $39 billion per year by 2050, not accounting for what climatic change may add over that period. These are extraordinary figures providing perspective for what resilience in disasters means.

Figure 3 gives you a sense of our disaster season in Australia. It runs from July through to May because we face geographic, climatic and weather patterns from subtropical to arid. Hence, disasters challenge our response capabilities through almost the entire year.

Just as the Australian Defence Force has to be responsive throughout the year, so too do industry, the states, the territories and their respective departments need to be able to work collectively to bring together a sovereign capability to respond to calamities and crises.

With regard to aerial firefighting, we rely heavily on overseas air tankers for the singular reason that the industry does not exist in Australia yet. Currently, acquiring aerial firefighting tankers tends to be reactive to a crisis – not the proactive response for which we should strive. I applaud the decision made by the New South Wales Government to invest in acquiring aerial tankers to build the state’s own fleet capability – that contributes to the national response options.
During the fires in February this year in Western Australia, the Commissioner of the New South Wales Rural Fire Service contacted the Commissioner of Emergency Services in Western Australia and this resulted in a Boeing 737 Fireliner air tanker and a Cessna Bird Dog jet observation aircraft being deployed in one day across the continent and beginning fighting fires before sunset in Western Australia. Agile deployable assets and decision-making in the broader national-resilience interest contributed to a timely response that ultimately saved infrastructure and potentially lives.

Our ability to respond as a nation with collective, co-ordinated and integrated capabilities may be measured by the time it takes to tackle the threat. Equally our ability to get back on our feet post disaster is a measure of success.

Exploring the value of some of our national infrastructure that may be threatened by natural disasters can be informative. In 2018/19, Port Hedland in Western Australia contributed 4.6 per cent of the nation’s GDP. Some 130,000 full-time equivalent jobs in the country relied on the primary and secondary industries and flow-on logistic industries that were enabled by Port Hedland; as also did $4 billion in taxes and one-in-12 jobs in Western Australia. Western Australia comprises 33 per cent of our nation by area yet only 12 per cent of our population. It has one of the lowest tax bases in the country and the biggest land mass. It relies heavily on Port Hedland for its ongoing survival and economic success. If Port Headland gets struck by a natural disaster for a week, we could forfeit approximately 0.1 per cent of GDP (based on 2018/19 GDP).

Our disaster response infrastructure, if well co-ordinated and well equipped, can move quickly to return such infrastructure to operations. To express one commissioner of an emergency service in Australia, it may be but for a commercial generator that we can return a piece of national infrastructure to at least partial operation ... but when that infrastructure is remote, we need a co-ordinated response to rapidly achieve that outcome.

Collaboration between Industry and Defence in Crisis Management

I will now address co-ordination between industry and Defence in response to different national disasters over the past couple of years, and some of the capabilities that exist to deal with crises and natural disasters.

Volunteerism in Australia is active and has strong work ethics. There are some 152,000 volunteer firefighters and 20,700 professional firefighters in Australia. The New South Wales Rural Fire Service comprises some 76,000 volunteer firefighters and is the largest such service globally. Its urban counterpart, Fire and Rescue New South Wales, comprises 6800 professional firefighters and 4800 volunteer firefighters, making it the world’s third largest urban fire and rescue service. Overall, we have about 173,500 people in the country dedicated to fire and rescue services. In addition, there are over 80,000 full-time emergency services personnel and the Department of Defence has 85,000 people. Bringing all these resources together, we then have a significant sovereign capability to respond to calamities and crises.

Industry has been defined by Defence as a fundamental input to defence capability. Likewise, it is also a fundamental input for natural disaster and crisis responses. This is true when considering any lens through which you may view our nation’s resilience. Our ability to use industry well relies upon a good level of understanding of industry’s capabilities, the ability to integrate the capabilities with state capabilities, and the ability to both acquire and sustain the right equipment.

In the last few years, the Defence sector has become familiar with sovereign industrial capability. That narrative has penetrated Defence which continues to work towards building the sovereign knowledge base to strengthen our own industries. Where we source knowledge and expertise from overseas, we equally should structure those commercial relationships to transfer the overseas knowledge into the Australia industry.

The Power of Federalism and Modern Communications Technology

In some industry sectors federalism and the individual nature of each state and territory is referred to negatively, a barrier to success. An alternative view can be offered. Constructive and co-operative federalism is a force multiplier within the fabric of our constitution. Our nation’s response to the ongoing COVID-19 pandemic, wherein the national security council broadened its mandate and membership to include the states built initial confidence among our citizenry. A major contributor to, or perhaps a cornerstone of, success will be how we build strong connectivity and sinews among the states, our federal assets and industry. Industry, with the benefit of no borders, has an important part to play in enhancing such connectivity.

We have reached a point in time now where numerous factors are aligning through an awareness of the devastating effects of natural disasters and pandemics, alongside economic and technological factors that create a unique opportunity for informed and supported action.

Our nation’s communities demand seamless response to disaster. The devastating events of recent history have heightened community awareness. The Royal Commission into the fire events of 2018/19 (Binskin et al. 2020) has provided two key important outcomes: the awareness of the citizenry who have a reasonable expectation there will be action; and a road map to improve our future response.

The access to and rates of development of technology today are arguably unparalleled and they
are not slowing down. Where once the military and government led in the technology-development space, today industry holds that mantle.

Of these technologies, and relevant to a co-ordinated crisis response across states and territories, is reliable and seamless communication, data and information-sharing networks. Figure 4 depicts a command-control-communications-computer (C4) mesh network† overlayed on a disaster-management asset suite that would allow Defence assets to ‘plug-in’ with relative ease. Such networks, enabled by integrated management systems (or in military parlance, combat management systems) allow each node to contribute to the common operating picture and, dependent on the access protocols, each user may access all information on the network. These systems are finding their way into the emergency and disaster relief landscape. A national-level strategy, however, ensuring integration and common protocols is not yet evident.

By acquiring capability under common specifications that ensure such integration, underpinned by an integrated management system that can share and transmit the relevant information for our community members, first responders and joint command, we can provide the opportunity to gain a force-multiplier effect. Efficient and timely tasking, informed by good and broad situational awareness, ensures the best safety outcome for those in harm’s way, and vastly improves the value-for-money gained from each investment in capability. If as a nation we are to achieve these outcomes, it is necessary that the initial capability acquisition phases specify integration across state, territory and federal jurisdictions.

Also of difference today, in the aviation space in particular, is the fact that the capital expenditure required to purchase many large aircraft is exceptionally low. The COVID-19 pandemic has had a devastating effect on airlines and the global aviation industry. This, however, has left aircraft suitable for conversion to multi-role disaster relief missions available at extremely low costs relative to pre-pandemic costs. Indeed, the opportunity now exists to acquire capital assets that could accelerate the development of a whole new aviation industry sector in Australia.

The question is, will we as a nation capitalise on the alignment of these unique historic factors: viz. heightened community awareness of the devastating effects of natural disasters and an expectation of action; a Royal Commission that recommended such actions; access to technology; and the ability to acquire some core assets at exceptionally low investment levels? Time will tell.

Conclusion

In Australia, the costs of managing recurring natural disasters and crises, coupled with overlapping seasons that extend to almost 11 months of the year, and the projected costs of managing future ones, are extraordinary. Our disaster management experiences thus far and the ongoing geopolitical dynamics challenge our sovereign capabilities and resilience in crises and disasters. Industry, Defence, states and territories should work in partnership within federal structures employing co-ordinated decision-making capabilities, seamless, integrated command-and-control and co-ordinated utilisation of national assets. Australians expect that we as a nation will be resilient in managing the challenges during calamities and will bounce back strongly from crises.

The Author: Commodore Chris Smallhorn RAN (Ret’d) is currently Chief Executive Officer of Coulson Aviation (Australia) Pty. Ltd., a division Coulson Airplane Ltd. of Canada. He is also Vice-Chairman of Safeskies Australia, an independent, not-for-profit organisation promoting aviation safety through safety education. An aeronautical engineer, he served in the Royal Australian Navy (RAN) from 1987 to 2019 and is a former commander of the RAN’s Fleet Air Arm. [Photo of the author: Chris Smallhorn]

References


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†A mesh network is a type of local communications network in which all the nodes within the infrastructure connect non-hierarchically, directly and dynamically. The nodes co-operate and share data via the most efficient path. It is designed for a collective computing capacity.
Scouting builds resilience for life. This is confirmed by empirical data now to hand which show the positive role the Scouting Movement plays in building the resilience of young people to cope and thrive during challenging times. Scouts Australia has embraced resilience as a concept and strives to develop resilience in its many thousands of youth members, equipping them to become better citizens and make positive contributions to society. Scouting, too, is contributing in other ways to enhance the resilience of local communities in times of disaster.

Key words: Australia; communities; community service; diversity; resilience; the Scout movement; Scouts; youth.

This paper will be about Scouting, youth and community resilience. Scouting is a values-based, volunteer, outdoors-focused Movement with over 54 million members worldwide. The purpose of Scouting is to develop young people from five to 25 years of age to be better citizens of their local communities and to help build a better world. Through an age-specific programme, we develop the leadership skills, the self-confidence and the resilience of our young people. We learn by doing. Our founder, Lord Robert Baden-Powell, a highly-decorated military leader, was himself a visionary and a world leader. To our delight, the World Scouting Movement has been nominated for the Nobel Peace Prize in 2021 with the outcome to be revealed in October. Scouts appear to be the only organisation in the world working on all 17 of the Sustainable Development Goals promulgated by the United Nations. Scouting enjoys a presence in 216 countries and territories around the world – that is all countries of the world except five which are predominantly communist.

Scouts Australia

At Scouts Australia, we are incredibly proud of our 113-year history and currently have around 72,000 members. We are the largest youth development organisation, both Australia-wide and in each state and territory. Across New South Wales (NSW), we have some 18,000 members, comprising 15,000 youth and 3000 volunteer leaders. We have a state-wide footprint with close to half of our 418 Scout groups in regional New South Wales.

Another feature is our diversity. Nearly 40 per cent of our members are female. Muslim Scouts is one of our fastest growing formations. In metropolitan New South Wales, we have Vietnamese Scouts and Jewish Scouts amongst others. We have programmes for children with additional needs. In regional and remote areas, we have the largest number of Lone Scouts in Australia. We also have a Scout programme for the sons and daughters of serving Australian Defence Force members.

As a volunteer-based organisation, we contribute over 1.5 million volunteer hours annually to the New South Wales economy, which is valued at about $65.5 million. Over our 113-year history, we have empowered more than one million young Australians to help create a better world. This led the Australian Government in 2008, our centenary year, to declare 2008 as the Year of the Scout; with a one-dollar circulating coin minted in our honour.

The Impact of Scouting on Australian Youth and their Resilience

Our founder, Lord Baden-Powell said: “The Scouting Method affords an opportunity for initiative, self-control, self-reliance and self-direction” (Reynolds 1943). Of course, these characteristics of Scouting underpin personal resilience. He also coined the motto “Be prepared”. A Scout is never taken by surprise; they know exactly what to do when anything unexpected happens. Through Scouting, we want to give our young...
people the courage, the positivity, and the resilience to keep going, through good times and bad.

While this has been our goal, we were never sure until recently what actual impact we were having on young people. In 2019, Scouts Australia partnered with the organisation Resilient Youth Australia\(^2\) and the University of South Australia, to seek independent measurement and validation of the impact that the Scouting programme is having on our youth. As part of the methodology, over 1000 Scouts aged between 8 and 18 years across Australia were surveyed. Their answers to the survey were compared with answers given by some 50,000 youth in the same age cohorts in 2019 who together comprised the Australian norm dataset.

The survey involved youth answering 75 multiple-choice questions against the components of resilience as specified by Resilient Youth Australia, which defines resilience as “the ability to draw upon the strengths within yourself and around you to flexibly respond to life while remaining true to yourself and creating relationships with others”. The 75 questions covered a range of areas including the participant’s strengths, life satisfaction, hopefulness, coping style, mental health and protective behaviours. The results were statistically analysed and validated. They were made publicly available as a 15-page report titled *The Scouting effect: measuring Scouting’s impact on the resilience of young people in Australia* (Wicking *et al.*, 2020). The detailed survey results can be accessed at the Scouts Australia website\(^3\), where there is also a two-minute video by our Chief Commissioner of Australia, Phil Harrison, together with infographics summarising the key outcomes\(^4\).

The outcomes were very reassuring for us. They confirmed officially that Scouting builds resilience for life. We now have empirical evidence of the positive role Scouting plays in building the resilience of young people to help them cope and, indeed, thrive during even the most challenging times.

The specific results of the independent resilience survey found that young people involved in Scouts have an overall better life satisfaction than their non-Scouting peers. Also, the longer our youth members stay in Scouts, the more resilient they are likely to become; from being able to find ways to solve a problem to being more likely to forgive themselves if they make a mistake. Scouts demonstrate a far wider range of resilient behaviours than young Australians of the same age. Scouts are 12 per cent more likely to feel good about themselves, 13 per cent more likely to trust others, 15 per cent more likely to feel they have made a positive contribution to their community, 8 per cent more likely to forgive themselves if they make a mistake, and 12 per cent less likely to report feeling tired or having little energy. Scouts also have a healthier mental state than non-Scouts by 13 per cent, which is especially important during the COVID-19 pandemic. They also report they have a healthy body 12 per cent more than non-Scouts.

At a time when everyone needs some extra positivity in their lives, we are proud of the significant contributions Scouting is making across New South Wales and Australia, both in metropolitan and, importantly, in regional New South Wales. It is those regional areas that had to endure the effects of the pandemic, droughts, floods and bushfires.

The report draws out the contribution that Scouting is making to equip a new generation of youth with the essential skills they need to bounce back from challenges and face the world with confidence. These findings are ground-breaking and are exciting for Scouts Australia as they reaffirm the essential service that Scouting has delivered, and continues to deliver, to our local communities, viz the Scouting spirit of resilience.

### Scouting During the COVID-19 Pandemic

As a result of the public health orders in New South Wales due to the COVID-19 pandemic, we were not able to hold our regular Scout meetings nor were we able to hold our regular outdoor activities, including adventurous activities, our camps and our major events. Our Movement, however, quickly developed online Scouting, “Scouting@home”, where the Scouting programme was delivered over the internet, and activities were conducted in the home and in the backyard, all in compliance with the public health order restrictions. One particularly memorable experience was the number of our young people who observed ANZAC Day from the end of their driveway. Interestingly, it was our youth and our young leaders who led the charge in developing the “Scouting@home”

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\(^1\)Resilient Youth Australia is an organisation committed to measurably improving the resilience of young people. It employs a measurement methodology developed in conjunction with the University of South Australia. [http://resilientyouth.org](http://resilientyouth.org)

\(^2\)https://static1.squarespace.com/static/5850e095414fb5946daf8f2c/t/602db6d650e22859939472bc/1613608682937/ResilienceSurvey4PageBrochure_NoBleed.pdf


\(^4\)![The front over of the report](https://static1.squarespace.com/static/5850e095414fb5946daf8f2c/t/602db6d650e22859939472bc/1613608682937/ResilienceSurvey4PageBrochure_NoBleed.pdf)
programme. They taught their older adult leaders how it could best be done.

I acknowledge we lost members through COVID-19, largely from families who felt that they joined Scouting to do outdoor adventure and that online Scouting was not delivering what they wanted. That is entirely understandable. Scouts NSW, however, has now regained in absolute numbers all those members lost during the early days of the pandemic.

As a result of the pandemic, many more families are looking for a values-based and outdoors-focused organisation for their sons and daughters to join. That has led to many more families who have had no previous association with Scouting now turning to the Scout Movement. Our task is to deliver those expectations at a time when COVID-19 is still restricting what we can do, when we can do it, and how it can be done.

**Scouting’s Footprint in the Community**

It is important that community groups, such as Scouts, work in partnership with the state government and its emergency services to further improve the overall resilience of our local communities. Scouts NSW has a state-wide footprint through its Scout halls, campsites and activity centres. These can be, and have been, used by the State Emergency Service together with the Rural Fire Service at times of a disaster, including in the 2019-2020 bushfires and also in the 2021 floods.

In Murrumbateman, nestled between Yass and Canberra, our Scout Group is building a hall that also will be a training centre for the local Rural Fire Service. We are now working with the Resilience NSW Commissioner, Shane Fitzsimmons, as well as the Australian Red Cross to reassess our Scout halls and campgrounds as safe havens and as places of retreat during a disaster. This is about building future disaster resilience in local communities with Scouts being part of the solution.

Scouts NSW is also active in assisting local communities to cope with and to recover from natural disasters. A number of our Rovers [Scouts aged between 18 and 25 years], as well as our leaders, also volunteer with the State Emergency Service and the Rural Fire Service. In the recent bushfires, our youth members were among the first to prepare meals for the firefighters and the many hundreds of evacuated families. We welcomed the Country Women’s Association into our kitchens. We delivered thousands of face masks both as the bushfire clean-up began and during the early days of the pandemic. We distributed hundreds of quilts donated to us from all around Australia for families who lost their homes to the bushfires. One of our many community projects involved building shelters and making hundreds of pouches for injured wildlife to assist them to recover. This is about service to community.

The foregoing are just a few more examples of how Scouting is working in a different way to build resilience in our local communities. We want Scouting to not only build resilience in young people, but also to be part of local communities and assist them to build their resilience.

**Conclusion**

Scouts NSW is proud to be building resilience among our youth, and this is confirmed by the empirical data now to hand. We also are proud to be contributing in other ways to enhance the resilience of local communities at times of disaster. On behalf of Scouts Australia (NSW Branch) I am grateful for the opportunity to share the Scouting story with you.

The Author: Neville Tomkins, OAM, BA (Hons), Dip Mgt, FAIM, GAICD, JP became Chief Commissioner of the New South Wales Branch of Scouts Australia on 1 August 2016, after completing 36 years in the Commonwealth Public Service, including 25 years in the Senior Executive Service. Previously, he served as Chief Commissioner of Scouts for the Australian Capital Territory for nine years. He also led the rebuilding of Camp Cottermouth following its near destruction by fire in 2003. Later, as International Commissioner for Scouts Australia for six years, he and his team led a reform programme which saw thousands more youth participating in international Scouting activities. He continues to serve in multiple Scouts Australia appointments, including that of National Co-ordinator for Redress. He has served on the National Executive of Scouts Australia, and as a National Councillor for the past 19 years.

Neville was awarded the Medal of the Order of Australia in 2010 for service to the community, particularly through leadership roles in the Scouting Movement. In January 2016, he was awarded the Surgeon-General John White Medal for service to health. He has received various international Scouting awards, including the Silver Sakura Award for his promotion of understanding and co-operation between the Scout Association of Japan and Scouts Australia. In 2018, he received the highest Australian Scouting award, the Silver Kangaroo, for eminent achievement and meritorious service to the Association. Neville is also a lifetime blood donor with the Australian Red Cross and an Ambassador for the St Vincent de Paul Society. [Photo of Commissioner Tomkins: Scouts Australia]

**References**


Information and cyber today constitute a 5th warfighting domain. This domain can be either an enabler for the traditional sea, land, air, and space warfighting domains or the primary domain on which the other domains are critically dependent. Cyberspace is software-defined, virtualised and non-physical, but resides upon physical hardware, so can be targeted with kinetic effects. Cyber warfare is influenced by its domain characteristics: speed, reach, span of consequence, scale of effects, state of flux, complexity and the challenge of attribution. A Defence cyberworthiness framework seeks to ensure warfighting capabilities survive against adversary actions in cyberspace across all phases of war, including grey-zone operations.

Key words: cyber resilience; cyberspace; cyber warfare; cyberworthiness; information and cyber domain; information warfare; national security; survivability; 5th warfighting domain.

In June 2021, the Department of Defence (Defence) advised the Senate Estimates Committee that Defence is a “target for persistent cyber threats and attacks ranging from issue-motivated individuals and groups, through to nation-state actors and trusted insiders” (Pearson 2021). How, therefore, as Head of Information Warfare, can I enhance our cyber resilience in the context of Australia’s defence and national security?

Before I get to what successful resilience looks like, I will take you through the vocabulary we are developing for what we call the 5th warfighting domain – the information and cyber domain.

Information Warfare

What is information warfare? In April 2021, at the Chief of Army Symposium, in the context of discussing the relationship and interconnectedness between the information and cyber domain and the land domain, I said that: “Information warfare is the contest for the provision and assurance of information to support friendly decision-making, whilst denying and degrading that of adversaries” (Coyle 2021).

Information warfare is timeless. It was as equally applicable in ancient times, as attested by Sun Tzu in the widely known *Art of War* (Sun Tzu 1963), as it is in the new digital age, where a pervasive cyberspace allows the transmission and manipulation of information to span the globe within milliseconds.

The character of future warfare will not resemble that for which we have traditionally prepared. Indeed, that future has already arrived. We need to understand better, and rapidly drive towards, a new vision of what it means for Defence to contribute information and cyber domain support for our national and military objectives. We need to understand faster, manage our cyber and operational risks, make superior decisions and act at a new speed of war.

Defence capability development is now more sophisticated, particularly in our approach to the *information* aspect of our recently declared 5th warfighting domain – but that is not the focus per se of this paper. That focus is *cyberspace* – specifically how we enhance its resilience in support of our mission. Towards this end, in the Joint Cyber Directorate, my team and I are addressing how Defence capabilities will operate in a contested and hostile cyberspace environment across the “shape, deter and respond” continuum in a rapidly evolving strategic environment and threat landscape.

Cyberspace

What is cyberspace? We think of cyberspace as the global digital environment of partitioned and interdependent logical and hardware infrastructures, networks, systems, information and services. This definition is not constrained to the internet, computer systems and telecommunications networks (information and communications technology – ICT). Much of cyberspace is not an interdependent network, and is

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2The “shape, deter and respond” continuum is a reference to Australia’s 2020 Defence Strategic Update (Defence 2020a) which replaced the strategic defence framework set out in the 2016 Defence White Paper (Defence 2016) with three new strategic objectives: to shape Australia’s strategic environment; to deter actions against Australia’s interests; and to respond with credible military force, when required.
Defence Strategic Update (Defence 2020a), there has been significant focus on the Government’s direction to enhance the lethality of the Australian Defence Force (ADF) for high-intensity operations, especially as to what this means for Defence’s kinetic options through area denial and long-range strike capabilities. This is understandable as increasing our resilience and self-reliance means that Australia is positioned to make an even stronger contribution to regional security and to our alliance with the United States. This focus, however, looks past an important part of lethality – the ability of our force elements to survive. Survivability is a key concept that underpins lethality as it allows systems to remain mission capable, maintain their presence, and continue to deliver effects (Coyle 2021). We are ensuring survivability is a key consideration for all Defence capabilities.

Defence (2020a) also stated that Defence should move to contest in the ‘grey-zone’, taking a persistent engagement posture short of war. Defence also must be capable of conducting and responding to information warfare and its effects as part of high-end conflict (Coyle 2021).

Let us now consider what resilience means in a non-technical sense. Various dictionary sources have described it as: the capacity to recover quickly from difficulties; tough yet elastic; the ability to spring back into shape; and the ability to respond to, or recover readily from, disruption, shock or crisis.

These could be equally considered in terms of people, processes and technology. Indeed, we need to consider all three for Defence, as resilience must mean our capacity to recover must be strong, our layers must be deep, and we must be able to fight even when hurt. Resilience means survivability.

Cyber Resilience

We now arrive at the core question I have been asked to address in this paper: what is cyber resilience? I will answer this not from the perspective of what will be done at a technical level, but from what that means for Defence and our capabilities across all five warfighting domains. And that answer is the word: ‘cyberworthiness’.

ADF operations are the headline of the work government tasks Defence to undertake. It is what we focus on, what we train for, and for what many of us in uniform signed on. But in the realm of cyberspace and the critical dependency of traditional domain operations on it, a resilient foundation is vital. For us, this means a secure, assured and survivable cyberspace and the ecosystem that surrounds it. That, in turn, postures us to maintain the confidentiality, integrity, availability and survivability of the information resident in and through cyberspace. We must prioritise and focus our efforts through the lens of our missions and tasks. Without this, our house is built on quicksand or will be overrun with things we do not need or, more to the point, no longer need, and our operations will never be as effective as we designed them to be.

Resilience

What is resilience? Since the launch of the 2020 Defence Strategic Update (Defence 2020a), there has been significant focus on the Government’s direction to enhance the lethality of the Australian Defence Force (ADF) for high-intensity operations, especially as to what this means for Defence’s kinetic options through area denial and long-range strike capabilities. This is understandable as increasing our resilience and self-reliance means that Australia is positioned to make an even stronger contribution to regional security and to our alliance with the United States. This focus, however, looks past an important part of lethality – the ability of our force elements to survive. Survivability is a key concept that underpins lethality as it allows systems to remain mission capable, maintain their presence, and continue to deliver effects (Coyle 2021). We are ensuring survivability is a key consideration for all Defence capabilities.

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To that end, the ADF has developed a concept called ‘cyberworthiness’. The term itself may seem vaguely familiar – each of the ADF Services have a worthiness framework that supports technical regulation and assurance in their respective environments. For example – is a Royal Australian Air Force aircraft ‘airworthy’ to fly or not? We have taken this concept and applied it to the cyberspace environment – no simple task! But it is necessary.

Organisationally, our span of cyberspace terrain – which I said before includes a blended information-communications, technology-operational, technology-electronic warfare landscape – is highly complex, difficult to map and can represent a largely unmanaged attack surface for Defence if we are inattentive. This, coupled with very adaptive and malicious cyber threat actors who are presenting a persistent threat to current and future Defence capabilities, means we can no longer address this issue as we have traditionally. And this is not something we can do alone. Our government colleagues and industry partners are key enablers of any success we will achieve in this space.

Cyberworthiness, therefore, encompasses assurance of cyber security and extends this to include the fundamental inputs to capability. Cyberworthiness facilitates an assessment of cyber security risk to mission assurance, in accordance with the capability managers’ operating intent, and is necessarily context dependent.

Put less formally, the ADF cyberworthiness framework is designed to ensure our warfighting capabilities are survivable against adversary actions in cyberspace across all phases of war, including sub-threshold phases such as persistent contest and grey-zone operations and activities. It is, in essence, a risk management and continuous improvement framework, enabling the ADF to effectively manage our risk in cyberspace as we execute our mission.

Cyberworthiness is a key element of defence preparedness, ensuring capability fitness-for-purpose for those who wish to employ it – our Government, Chief of Defence Force or Chief of Joint Operations.

Worthiness is not just about security. Traditional cybersecurity is focused on activities designed to ensure the confidentiality, integrity and availability of systems. Cyberworthiness is rooted in survivability – business continuity, in corporate terms – and assurance of our mission. We view our capabilities as holistic ecosystems, not just bundles of technology, and our worthiness in cyberspace must address the whole rather than the part. Unsurprisingly, therefore, our future cyberworthiness governance framework has been scoped across three key pillars – people, processes and, of course, technology.

When you pause a moment to think about that, across the span of defence capabilities, and through the whole of the life cycle from concept to operation and decommissioning, the breadth of what Defence needs to ensure is cyberworthy – what we need to ensure is resilient – is staggering. But if we are good at anything, Defence is good at planning!

My team and I within Joint Capabilities Group, along with all Services and Groups across the Defence enterprise, are leading a number of people-based and process-based initiatives to advance some of the aspects of what it means to contribute to what we call the Joint Force and its relationship with uplifting Australia’s sovereign capabilities.

We have commenced a pilot, designing a fit-for-purpose maturity model based on global best practice, creating solutions that service the unique defence environment, while also enabling industry to interact with, and support, our efforts in the most robust and mutually beneficial manner. We have commenced a limited implementation internally, selecting within each of Navy, Army and Air Force a focus area to align our practices to the model at the coalface of capability. We also are tackling the broader strategic problem of enterprise-wide implementation across the lifespan of our capabilities, integrated with our industry partners and allies.

People and Organisations

Defence continues to face a significant challenge in the recruitment and retention of a skilled cyber workforce, due to the high market demand and global shortage of cyber practitioners. Workforce resiliency is a vital priority for us. We, therefore, are focusing on what we can uniquely offer and features that may be of deciding value to the sort of people we need as our future operators and leaders of our joint cyber workforce. These include three aspects:

- **mission**: our cyber workforce has access to unique technical or leadership responsibilities in Defence operations or activities that defend and keep safe our cyberspace terrain or project offensive effects;
- **service**: the patriotic pride associated with placing the security and interests of our nation and its people first and above self; and
- **culture**: being a part of a team of Defence people who strive to behave in a way that lives our values of Service, Courage, Respect, Integrity and Excellence (Defence 2020b) – remember, we all volunteer to serve our nation.

Defence has committed to increasing the ADF cyber workforce by 230 positions by January 2024. Yes, we are hiring! I therefore encourage people who gain strength and excitement through the prospect of working for an organisation with the above features of mission, service and culture to please keep us in mind as your career progresses or, indeed, make an appointment with Defence Force Recruiting now!

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*Note: Australian Defence – Future Cyber Concept Operations proposes that the current Australian Defence Force Services only scope of cyberworthiness be extended Defence-wide and, also, to the extent of dependency, be extended to industry.*
ADF Cyber Gap Programme: For those studying a cyber-related tertiary course, we have another initiative underway. Government has asked Defence to provide leadership in uplifting Australia’s national cyber workforce through the ADF Cyber Gap Programme, where benefits flow to Defence and the nation. This programme, led and managed by my staff, in itself is a case study in how people have come together from all areas from which Defence needs to draw its cyber people, to deliver an integrated cyber workforce capability. It is led by an ADF officer supported by two Australian Public Service full-time employees of Defence, contractors from industry with specific expertise, and multiple Defence Force Reserves from Navy, Army and Air Force. The ADF Cyber Gap Programme, over the next three years, will support the skillling and mentoring of 800 Australians, to advance their cyber employment and contribution towards our national security mission. We wish to identify and recruit the best and brightest people into a lifelong career stream that, skilfully and speedily, will shape and control an increasingly software-defined, artificially-intelligent cyberspace.

Defence Cyber College: We also recently broke ground for the construction of a joint information warfare facility at HMAS Harman in Canberra, which is scheduled for completion in February 2023. It will house the soon-to-be-established Defence Cyber College which will enable full-spectrum cyber training for the Defence cyber workforce.

Cyber Units: Another initiative that the ADF has undertaken, which provides an organisational platform for us to further build upon, is the establishment and operational service contributions from four new organisations: Joint Cyber Unit; Fleet Cyber Unit – Navy; 138 Signal Squadron – Army; and No. 462 Squadron – Air Force. These are our front-line units, able to deploy and operate on domain and context-specific cyberspace terrains. They also work in combination and coordination with the successful Defence Security Operation Centre to defend strategic and deployed environments in order to maintain Defence’s mission continuity in a contested cyber environment. They are not solely responsible – it requires everyone in varying degrees to ensure we are resilient. Our new journey has begun to assure our mission and our lethality at the core of our capabilities, fit for the strategic setting in which Australia now finds itself.

Cyber Resilience, Industry Dependencies and Participation

So, how does cyber resilience map to industry dependencies and participation? As I emphasised earlier, we cannot do this alone. Industry is a key component of our fundamental input to capability. We need industry and will engage with industry in new ways that underpin our future concept for cyberspace operations and activities.

We are critically dependent upon the global digital supply chain and how that passes through and into what we call our internal ‘Blue-Terrain’ – that which is owned and managed inside our firewalls or network edge, to use an historic concept of scope demarcation.

Defence has a critical dependency on defence industry as part of its cyberspace environment. For Defence, commercially-owned cyberspace – where the accountabilities for cyberspace infrastructure and systems lie outside Defence – is what we call ‘Grey-Terrain’ and for which we must account in our mission-planning and capability development.

Anything short of a shared appreciation of commercial industry-risk and Defence mission-risk will create exploitable gaps in a specific cyber ecosystem whose vulnerabilities are higher because of their high value as an adversary target. I also can see a future where industry’s status as a core Defence cyber-dependency could combine with Defence’s significant procurement power to develop a Defence-industry cyber ecosystem which generates competitive advantage for industry and the Australian Government alike.

Defence is urgently looking to a new future out of necessity and, as Head of Information Warfare, how we communicate what that looks like to industry is a key focus for me and my team.

Cyber Resilience and the Defence Mission

What does cyber resilience in the context of Australia’s defence and national security mean? Quite simply – it means we can!

It means we can have a Navy ship sail where it is tasked to go and perform the missions for which its capabilities were designed – whether they be freedom of navigation, contributing to regional stability efforts with our regional friends and allies, through to, if it comes to it, high-end conflict.

It means an Air Force aircraft is able to take off and undertake its assigned mission, deploying the effects for which it was designed.

It means the Army can operate with the use of cyberspace that may be heavily contested and, indeed, heavily degraded, but it and Army are resilient and are able to continue the fight and prevail.

And finally, it means that, as government (through our Secretary and Chief of the Defence Force) reprioritises and resets whenever needed, we are agile and able to respond in accordance with our national and military mission – and, therefore, we can map that task to our cyberspace terrain and reprioritise our capability development and operation of it.

That is how we are contributing, resiliently and urgently as we must, to a Defence mission that is changing to meet newly-arisen and future national security requirements.

Conclusion

We, collectively, must rise to the resilience challenge. Robust partnering arrangements between Defence services and groups, and our defence industry,
upon which we are critically dependent, need to pivot to align to our new understanding of the warfare domain characteristics of cyberspace and to keep pace with the new speed of war.

I appreciate this is no small challenge, but it is one to which we must rise. Collectively, we need to grow our capacity to reconstitute, regenerate and continue to evolve, at speed, for our cyberspace mission. Successful resilience means survivability of a cyberworthy Australian Defence Force.

The Author: Major General Susan Coyle is Head of Information Warfare for the Australian Defence Force. Born in Kyogle, NSW in 1970, after gaining a degree in science at the Australian Defence Force Academy, she graduated from the Royal Military College in 1992 into the Royal Australian Corps of Signals. She has worked at the tactical, operational and strategic levels in a variety of command and staff appointments, including Commander Joint Task Force 633 (Middle East), Commander 6th Combat Support Brigade, inaugural Commander Task Group Afghanistan, and Commanding Officer 17th Signal Regiment. She was awarded a Distinguished Service Medal as the Deputy Commander JTF 636/Commander Task Group Afghanistan, and a Conspicuous Service Cross as the Commanding Officer 17th Signal Regiment. She holds a Master of Strategic Studies from the United States Army War College, a Master in Organisational Development and Strategic Human Resource Management from the University of New England, and a Master of Management in Defence Studies from the University of Canberra. [Photo of General Coyle: Department of Defence]

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**DEFENCE NEWS**

**Exercise Talisman Sabre 2021** (TS21) began on 14 July 2021 with activities peaking from 18 to 31 July across Queensland. The Talisman Sabre exercise series is held every two years to test Australian interoperability with the United States and other participating forces in complex warfighting scenarios. TS21 also involved participating forces from Canada, Japan, Republic of Korea, New Zealand, and the United Kingdom. The field training component incorporated force preparation (logistic) activities, amphibious landings, ground force manoeuvres, urban operations, air combat and maritime operations. TS21 was a major undertaking for all attending nations and demonstrated the combined capability to achieve large-scale operational outcomes within a COVID-19 safe environment.

*Department of Defence, Australia*

**Royal Navy Carrier Strike Group 21** (CSG21) is a combined naval force which has deployed via the Mediterranean to the Far East on Operation Fortis from May to December 2021 and will include a freedom-of-navigation passage through the South China Sea. At various times, will include Australian, French, Japanese and United States naval units, among others. This first operational deployment of the carrier strike group since 2011 is the first strike group deployment for the new aircraft carrier, HMS *Queen Elizabeth*. CSG21 also is the largest ever single deployment of F-35 Joint Strike Fighters; its air wing is the largest fifth-generation fighter carrier air wing in the world. CSG21 marks the beginning of the British government’s defence and foreign policy tilt towards the Indo-Pacific region.

*United Kingdom Ministry of Defence*

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BOOK REVIEW:

Aircraft of the Royal Australian Air Force

by RAAF History and Heritage Branch

Big Sky Publishing, Newport, NSW; 2021; 610 pp; ISBN 9781922488039 (hard cover); RRP $43.75

Aircraft of the Royal Australian Air Force was published by the Air Force's History and Heritage Branch, with input from 73 aviation and technological experts, to commemorate the centenary of the Royal Australian Air Force (RAAF). It tells the story of the Royal Australian Air Force’s first one hundred years describing the acquisition, operation, and service record of the multitude of aircraft types flown by the Royal Australian Air Force over that period.

Established in 2016, the History and Heritage Branch is part of the RAAF Headquarters. Its role is to collect, study, preserve and manage records, artefacts and estate from the Australian Flying Corps to today’s Air Force.

Chief of Air Force, Air Marshal Mel Hupfeld, endorses the book and invites the reader to embark on a journey through Air Force history. He notes that the evolution of air and space technology in a relatively short time has shaped both the nature of the battlespace and the skills demanded by those who sustain, control and fly the aircraft.

Aircraft of the Royal Australian Air Force tells a story beyond the airframes. It is a history of force evolution; charting Australia’s response to changing strategic circumstances through the harnessing of technology and the innovative skills of Air Force personnel.

It contains the service history of 154 aircraft types, from the flimsy wood and fabric of the D.H. 9a biplane donated to Australia by Great Britain as part of the Imperial Gift to form the Royal Australian Air Force in 1921 through to the modern, lethal, 5th generation, F-35A Lightning II Joint Strike Fighter and the MQ-4C Triton Unmanned Aircraft System.

Aircraft are presented in Series Order using the A-number system. Over the century there have been three A-number series of registered aircraft types: Series 1 from 1921 to 1934; Series 2 from 1934 to 1961; and Series 3 from 1961 onwards. Each aircraft type is identified with the prefix A and a numeral. Use of the A-number system rather than by role – fighter, bomber or transport aircraft – provides the reader with a logical and historical perspective with an ordered presentation of the development and the increasing sophistication of aircraft types used by the Air Force.

Each aircraft type features a narrative that varies in length although most are three to four pages long, which are informative, interesting and easy to read. They address the means of production or acquisition of the aircraft type; it’s service life and operational employment; and where appropriate, retirement from service. Each tells its own story and will undoubtedly hold the reader’s interest. A table of technical data of description, power plants, dimensions, weight, armament and performance accompanies each narrative. There are some wonderful photographs of aircraft and often the personnel who maintained and flew them.

There are some interesting insights. For instance, during the 1920s when the Air Force was suffering high accident rates, a D.H. 9a aircraft crashed on Flemington Racecourse during an aerial display. The crowd of onlookers jeered and laughed derisively prompting the clearly frustrated pilot to challenge any takers to a fight! A tribute to Service loyalty.

During World War II, Lancaster Q for Queenie was flown to Australia to participate in a war-bonds drive and to promote recruitment in the Air Force. It was famously flown under Sydney Harbour Bridge. The ill-fated Hawker jet aircraft, which was intended to replace the Royal Australian Air Force’s Mustang and Vampire aircraft, crashed during an inadvertent supersonic dive, resulting in the F-86 Sabre becoming the eventual replacement.

The book has an excellent index, including a Quick Reference Guide by aircraft role, and the narratives are well cross-referenced between aircraft types. They provide easy access to much little-known information and as expected, the variety of aircraft that have been used by the Royal Australian Air Force is most impressive. The multitude of aircraft include those in the Imperial Gift; Australian designed and built aircraft; aircraft built under licence; aircraft impressed from the civilian sector and from foreign air forces during the Second World War; leased aircraft; towed target aircraft; and aircraft purchased from abroad by the Australian Government.

While the services and sacrifices of Air Force personnel are mentioned on occasion, the aircraft are the clear focus – evident from the index which lists only aircraft types.

The book has been published to mark the 100th anniversary of the RAAF but it offers much more. It is an excellent research and reference source and has the presentation of a beautiful coffee table book.

I thoroughly recommend Aircraft of the Royal Australian Air Force to all who have a keen interest in the history of military aviation and the evolving capability of the RAAF. It will be of particular interest to those who have served in the Air Force, and will readily capture the interest of those who wish to gain an appreciation of the Royal Australian Air Force in its centenary year.

Bob Treloar
BOOK REVIEW:

_**Australia’s first campaign: the capture of German New Guinea, 1914**_  
_Australian Army Campaign Series – 29_  
by Robert Stevenson

Big Sky Publishing: Newport, NSW; 2021; 202 pp.; ISBN 9781922387721 (paperback);  
RRP $19.99; Ursula Davidson Library call number 578 STEV 2021

This book provides a concise description and assessment of the capture and initial occupation of German New Guinea in 1914 by the Australian Naval and Military Expeditionary Force (ANMEF) supported by the Royal Australian Navy (RAN). It was the first naval-military expeditionary campaign solely conducted by Australia.

Dr Robert C. Stevenson served in the Australian Army from 1977 to 2011, before becoming a professional historian and writer. He has published two military histories previously: _To win the battle: the 1st Australian Division in the great war, 1914-18_ (Cambridge University Press, Melbourne, 2013); and _The war with Germany_ (Oxford University Press, Melbourne, 2015).

At the outbreak of the Great War on 4 August 1914, Great Britain requested that Australia seize the German wireless stations at Yap, Nauru and New Guinea which Germany used to control its East Asiatic Squadron commanded by Vice-Admiral Maximilian von Spee which operated in the Indian and Pacific Oceans from Qingdao in northern China; and to occupy (not annex) German New Guinea.

The forces that Australia assembled for the operation consisted of: the RAN Fleet Unit comprising the battle cruiser HMAS Australia, three light cruisers, three destroyers, two submarines and several auxiliary/supply vessels, all commanded by Rear-Admiral Sir George Patey KCVO RN; and the ANMEF consisting of a battalion of naval infantry (comprised principally of naval reservists), two infantry battalions (comprised mainly of untrained volunteers), two machine-gun sections and a medical section, all commanded by Colonel William Holmes DSO VC, a citizen soldier and Boer War veteran.

German New Guinea consisted of the German colonies in north-eastern New Guinea (Kaiser Wilhelm Island), the Admiralty and Western Islands, New Britain, New Ireland, and the northern Solomons. It was administered from the Rabaul on the north-east tip of New Britain and included a wireless station at Bita Paka. It was protected by a small force of German settlers (colonial militia) and some 670 Melanesian police, including a 250-man police expeditionary force based in Rabaul. The defenders were led by Captain Carl von Klewitz, a cavalryman.

The capture of German New Guinea initially involved an amphibious operation to seize Kokopo on the south shore of Blanche Bay and the wireless station at Bita Paka in the jungle 8km south of Kabakaul (5km east of Kokopo); followed by the occupation of Rabaul on the north shore of Blanche Bay.

At dawn on 11 September 1914, a company of the naval battalion landed at Kabakaul and shortly after the 1st Battalion ANMEF (1ANMEF) landed at Kokopo (then known as Herbertshöhe). During the day, the naval battalion advanced to Bita Paka, initially against stiff German resistance, but by nightfall had captured and destroyed the wireless station. Casualties on both sides were moderate. Meanwhile, 1ANMEF occupied Kokopo unopposed and pushed a patrol inland to look for a supposed second wireless station, but none was found.

On 12 September, 1ANMEF occupied Rabaul unopposed and the next day Colonel Holmes raised the British flag there. The Acting Governor of German New Guinea, Eduard Haber, however, still held out in the hinterland at Toma, some 13km west of Bita Paka. On 14 September, HMAS Encounter shelled the Toma ridge, 1ANMEF advanced to Toma and Haber agreed to surrender. Holmes then negotiated with Haber the surrender of all of German New Guinea. Haber signed the Terms of Capitulation on 17 September and the remaining German forces in New Britain formally surrendered to Holmes at Kokopo on 21 September.

Holmes, with Patey’s assistance, then began to occupy the remaining German possessions: Madang, 24 September; New Ireland, 17 October; Nauru, 6 November; Admiralty and Western Islands, 19 November; and Northern Solomons, 9 December. On 8 January 1915, Holmes handed over administration of German New Guinea and command of the ANMEF to Colonel Samuel Pethbridge. Holmes returned to Australia the following day to join the Australian Imperial Force.

Stevenson’s analysis of the strategic and tactical performance of both sides, especially the leaders, is generally well done. A weakness, though, is his assessment of the Terms of Capitulation that Holmes negotiated with Haber. Holmes did a masterful job that probably only someone with his knowledge of military and administrative law coupled with his vast experience of public administration could have pulled off, especially as his political and military superiors in Australia appeared not to understand the vital distinction between military occupation and annexation.

The book has excellent maps prepared specifically to illustrate the text. While it has a selected bibliography, it lacks literature citations (end notes) to validate the evidence presented which I assume is drawn from secondary sources.

The book’s limitations notwithstanding, it is otherwise an excellent, well-written, concise presentation and analysis of the campaign. I recommend it to anyone interested in Australia’s naval and military history.

David Leece

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*See William Holmes: the soldier’ general by Geoffrey Travers (Big Sky Publishing, Newport, 2020) reviewed in United Service 71 (4), 20 (December 2020).*
BOOK REVIEWS:

**Pompey Elliott at war – in his own words**

by Ross McMullin

*Scribe Publications: Brunswick, Vic.; 2017; 544 pp.; ISBN 9781925322415 (hardcover); RRP $59.99, Ursula Davidson Library call number 570.3 MCMU 2017*

Major-General Harold Edward “Pompey” Elliott, CB, CMG, DSO, DCM, VD (1878–1931), a Boer War veteran, was an officer in the Australian Imperial Force during the Great War and, post-war, was a senator representing Victoria in the Commonwealth parliament. Ross McMullin, the author of Elliott’s biography, *Pompey Elliott* (Scribe, 2002), has collected Elliott’s own words from letters, speeches and diary entries and shaped them into a compelling narrative that follows the course of Elliott’s war.

Elliott was prominent in iconic battles and numerous controversies. As a battalion commander on Gallipoli, he was wounded during the landing, and four of his men were awarded the Victoria Cross for conspicuous bravery at Lone Pine. As a brigadier-general commanding the 15th Brigade (a Victorian brigade), 5th Australian Division, on the Western Front, Elliott played prominent roles at Fromelles in 1916 and in turning defeat into victory at both Polygon Wood in 1917 and Villers–Bretonneux in 1918. McMullin claims that no Australian general was more revered by those he led or more famous outside his own command, but other historians would dispute this. There were several Australian generals who were equally, if not more, revered by their men.

In his correspondence, he maintained a no-secrets pact with his wife throughout the war. The letters and diaries are forthright. Elliott wrote frankly about what happened to him and the men he commanded, and about what he felt about both. He is candid about his volatile emotions. He wrote with fertile imagery and an engaging turn of phrase. His letters to his young children turned even the Western Front into a bedtime story.

McMullin is an historian and biographer who has written extensively about Australia’s involvement in the First World War. His most recent book, *Farewell, Dear People: biographies of Australia’s lost generation* (Scribe, 2012), was awarded the Prime Minister’s Prize for Australian History.

*Pompey Elliott at War* includes a note on sources, an explanation of ‘Pompey idioms’, 16 pages of black-and-white photographs, six clear maps, three charts of formations and commanders, a list of abbreviations, a family tree, notes, and an index. McMullin provides context for the quotes throughout the 25 chapters – but sufficiently lightly so as not to take anything away from Elliott’s own prose.

The book provides a powerful insight into the mind and character of a significant wartime personality. That Elliott argued forcefully for government support for veterans and continued to serve as a senator after the war are more understandable from reading this book – as is his suicide in 1931. *Pompey Elliott at War* is recommended to those who have a deep interest in Australian military history or who are looking for a more humanistic account of the First World War.

*Marcus Fielding*

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**Japan’s Pacific war: personal accounts of the Emperor’s warriors**

by Peter Williams

*Pen & Sword Military: Barnsley, South Yorkshire; 2021; 248 pp; ISBN 9781526796127 (hardcover); RRP $91.99*

Japan’s *Pacific War* is a collection of personal accounts from over 100 former Japanese soldiers, sailors and airmen recorded by Dr Peter Williams when he lived in Japan in the 1980s. It has not been published until now to respect the wishes of some interviewees.


The Japanese Government’s official history of what we call World War II in the Pacific was not commenced until 1955 and was significantly disadvantaged by the deliberate destruction of government records prior to the Allied occupation of Japan. Japan’s *Pacific War* improves our understanding of the ‘enemy’ and complements Steven Bullard’s translation of the Japanese official history *Japanese Army operations*

*Japan's Pacific War* provides insights into the tactical and personal dimensions of the fighting from Japanese combatants and prisoners-of-war. Their candid views are often provocative and surprising, with admissions of brutality, the killing of prisoners and cannibalism. Stark descriptions of appalling conditions and bitter fighting blend with recollections of family life and close co-operation with locals in occupied territories. The Japanese soldiers’ willingness and enthusiasm to give their lives for the Emperor, and their drive to die honourably, contrast starkly with the Allies’ desire to minimise casualties.

Their views on the prowess of their enemy differ – air ace Kazuo Tsunoda believed the Australians were ‘worthy’ foes; others felt that the Allies judicious use of artillery and airpower belied a lack of fighting spirit. Williams also usefully matches many Japanese accounts of encounters with corresponding versions from the official Australian records.

The last two chapters record how Japanese veterans after the war ended were stigmatised and marginalised by both the occupation forces and civilian Japanese. Many suffered from mental health issues, drank excessively or committed suicide. Many felt that they had been forced into the Pacific war by American trade policies preventing import of raw materials. Several saw their mission to be one of freeing east Asia from western colonialism. Some were ashamed of their actions in the war, while others remained unrepentant. “I had no qualms fighting the Australians, just as I have killed without remorse any of the Emperor’s enemies …” states Takahiro Sato.

*Japan’s Pacific War* includes one map, a number of black-and-white photographs and two appendices concerning Japanese air tactics and naval life. The book provides revealing insights into the mind of a formidable adversary. It is highly recommended to military historians as well as those interested in the cultural differences between the Eastern and Western attitude to war.

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**Semut: the untold story of a secret Australian operation in WWII Borneo**

by Christine Helliwell

Penguin Random House: North Sydney, NSW; 2021; 562 pp; ISBN 9780143790020 (paperback); RRP $34.99

If war is innate to human societies, then anthropologist Christine Helliwell is well placed to provide insights that are atypical of most military histories. Her account of this small operation of the Second World War is insightful and fascinating.

Operation Semut was undertaken by Australia’s Services Reconnaissance Department in Sarawak in mid-1945 as part of the Allied campaign to recapture North Borneo. Its two main objectives were to gather intelligence and to encourage the indigenous people to launch a guerrilla war against the Japanese.

The operation was commanded by Major ‘Toby’ Carter and was divided into three main parties: Semut 1, 2 and 3. This book is the first of two volumes and covers Semut 2 and 3, in which 60 Allied soldiers took part. Although some had experience of the conditions and culture in Borneo, for many the cultural ‘shock’ was significant. Most previous accounts of the Semut operations have paid scant attention to the local Dayak people, with whom Semut troops co-operated. To correct this imbalance, Helliwell has conducted hundreds of interviews to recreate a more holistic and detailed record of events.

Helliwell has studied the Dayak peoples, and has a very good understanding of their culture, lifestyle and attitudes as well as their natural environment. She also explores the dynamics between the European, Malay and Chinese expatriates in Borneo, as well as the occupying Japanese. Compared to earlier accounts, her account provides a more balanced perspective on the Semut operations – particularly the complex and nuanced relationships between the various groups.

Helliwell’s narrative critically examines the numerous contradictions between previous accounts of Operation Semut. She also delves deeply into the local Dayak tradition of headhunting which the colonial rulers had worked to eradicate, but which, conversely, was encouraged as part of the campaign.

Semut includes a number of images as well as over a dozen detailed and well-produced maps. This account of Semut and its 78 pages of endnotes and bibliography, well demonstrate Helliwell’s extensive research.

Operation Semut was a short but very successful example of advance force operations to understand and shape the battlespace ahead of conventional operations. *Semut* provides an excellent account of the ‘classic’ special operations mission, and is highly recommended to students of unconventional warfare.

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Marcus Fielding
BOOK REVIEW:

Secret & special: the untold story of Z Special Unit in the Second World
by Will Davies

(soft cover); RRP $27.75

Secret & special: the untold story of Z Special Unit in the Second World recounts the operational history of the Inter-Allied Services Department. It was formed at the request of General Blamey in April 1942, four months after the Japanese attack on Pearl Harbour and the invasion of Malaya. It was styled on its British counterpart, the Special Operations Executive (SOE) and renamed Special Reconnaissance Department (SRD) in 1943.

For 37 years, Will Davies was an independent producer of historical documentaries and series for the ABC and SBS. On retiring in 2010, he began writing books, the first published in 2012, with 10 books since then. They include In the footsteps of Private Lynch (Random House: North Sydney, 2008); Somme mud: the war experiences of an Australian infantryman in France 1916-1919 (Random House: North Sydney, 2010), which he edited; Beneath Hill 60 (Vintage Books: North Sydney, 2010); and The last 100 Days: the Australian road to victory in the First World War (Vintage Books: North Sydney, 2018). He was a member of the New South Wales Anzac Council and leads battlefield tours to the Western Front. In 2018, he gained a Doctorate of Philosophy degree from the Australian National University.

Will Davies provides an interesting overview of Australia between the wars and the desperate endeavour to develop capabilities to successfully defeat the Japanese advance. SRD’s first operation was Operation Jaywick in September 1943, a covert attack on shipping in Singapore Harbour by Z Special Unit, formed within the SRD. Against the chaotic background of the fall of Singapore, Jaywick was the idea of an Australian master mariner who had rescued many civilians fleeing the island, and a British SOE operative.

Jaywick was undertaken by a mixed force of Army and Navy personnel, the majority being drawn from the Navy. Using an old Japanese fishing boat renamed Krait, the operation was a spectacular success – sinking or seriously damaging seven ships totalling over 39,000 tons – and ensured the continued existence of SRD.

The unit was tasked to “obtain and report information of the enemy ... weaken the enemy by sabotage and destruction of morale and to lend aid and assistance to local efforts to the same end in enemy occupied territories”. Over the next two years, SRD conducted numerous operations, planning for which required significant detail and accurate intelligence; and was subject to continually changing Allied objectives.

Z Special Unit operations were conducted in Timor following the Japanese invasion – these operations were far from successful and were compromised by poor planning, inadequate attention to detail and substandard radio procedures which resulted in the deaths of many operatives. Then followed a series of operations along the northern coast of New Guinea – they required operatives to travel long distances to reach their areas of operations, a feat of determination, skill and endurance. In all, Z Special Unit undertook intelligence gathering and raiding missions throughout Southeast Asia including New Guinea, Singapore, Timor, Malaya, Borneo, Vietnam and the Dutch East Indies. Important in their operations were the vessels manned by Navy personnel.

While many of the operations were successful, SRD also suffered some significant disasters. The most notable were those conducted on Timor and a second attempt to sink shipping in Singapore Harbour in October 1944 when all members of the raiding party were either killed, or captured and executed, by the Japanese.

Will Davies has captured the essence of these operations, expertly describing the challenges and often atrocious conditions that faced the men of Z Special Unit, their actions against the enemy and the constant knowledge that capture meant torture and death. He has expertly blended their operations into the mosaic of the war in the Southwest Pacific.

Of note, he has addressed the gamut of operations conducted by Z Special Unit beyond the famous attack on Singapore Harbour (Operation Jaywick), providing an informative and candid appraisal of their operations. He has provided the human touch to a band of men who for many years went without recognition of their feats. While the military value of SRD’s operations has been questioned, the men involved were truly brave men and their exploits were accomplishments.

In 1945, it was reported that SRD guerrilla and intelligence operations had resulted in 7061 Japanese killed and 141 taken prisoner; and the rescue of 1054 servicemen and civilians from enemy-occupied territory. SRD’s stated casualties were 18 killed; 11 executed; two died as prisoners-of-war; 36 believed killed; and four drowned.

Secret & Special is easy to read and is well researched. It has 10 pages of end notes and an effective index. It provides the reader with an informative picture of the war conducted in the jungle and the islands on Australia’s doorstep while detailing the hardships, heroism and resilience of the men of Z Special Unit. It will appeal to readers with even only a passing interest in the military history of Australia’s near north.

Bob Treloar
BOOK REVIEW:

**Shadow wars: the secret struggle for the Middle East**

by Christopher Davidson

Oneworld Publications: London; 2017; 688 pp.; ISBN 9781786071927 (paperback); RRP $34.99

In conversations over raki with my 'middle eastern' friends, the topic sometimes turns to how the West is seeking to destabilise the region and prevent it from realising the peace and opportunities present in much of the rest of the world. Such a view may have had some merit in the days of imperial colonialism, but in this day and age I would typically dismiss it as a classic conspiracy theory.

Having authored many articles and monographs on various aspects of the politics, international relations and political economy of the Persian Gulf, Davidson herein examines events linked to the Arab Spring across the Middle East. Most observers see the Arab Spring as one of the most significant geopolitical shifts globally since the end of the Cold War: yet debates continue about what factors led to its general failure, including violence, extremism, and authoritarian entrenchment.

According to Davidson, for more than a century, successive United States and United Kingdom governments have led a hidden struggle against progressive forces in the Middle East, driven by a desire for geopolitical advantage and the control of oil. Western powers have repeatedly manipulated the region's most powerful actors to ensure the security of their own interests and sought to thwart nationalist, socialist and pro-democracy movements in the Middle East. In doing so, they have given rise to religious politics, sectarian war, bloody counter-revolutions and now one of the most brutal incarnations of Islamic extremism ever seen.

Most shocking is his assertion that United States intelligence agencies continue to regard the Islamic State, like al-Qaeda before it, as a strategic, if volatile, asset to be wielded against their enemies. Notwithstanding the declaration of a 'war on terror', Davidson believes that the preferred instruments of the Americans and the British have been Islamist movements: the Muslim Brotherhood, the Taliban, and, most recently, the Islamic State. The Americans and the British have often found themselves fighting their own proxies, but they knew that would happen, Davidson claims. They therefore fight half-heartedly, he contends, so that such groups continue to survive.

Nearly all of Davidson's sources are in the public domain: he uncovers little original evidence for his argument and instead assembles familiar pieces into an unfamiliar shape. The results are unconvincing. For example, if Western powers fostered Islamic State in order to drive a Sunni wedge between Iran and Syria, why did they bother to topple Saddam Hussein, who already played that role? More troubling, Davidson's analysis denies agency to Islamists, Middle Easterners, and pretty much everyone else: in his view, we are all merely pawns in the shadow wars.

Davidson concludes that Western states, their constituent corporations and regional clients, are threatened by self-determining Arab states. They have foiled the Arab Spring. They have even managed covertly to use the uncertainty of 2011 onwards as a pretext to deepen their interference in the region's political, economic and security landscape; and to strike at their enemies. No one is spared criticism in his analysis: Arab regimes, fundamentalist movements, the West and Israel are all castigated for their responsibility for the suffering of the people of Middle East today.

Davidson is a reader in Middle East politics and a fellow at Britain's Durham University; the author of several books on the Middle East; and a frequent media commentator worldwide. There are no images, maps or bibliography in Shadow Wars, but the notes are comprehensive and the index useful.

Shadow Wars is provocative and alarming, but is it factual? Given that so many of Davidson's sources come from the Internet, I fear this book is a product of the 'post-truth' era in which fact can be difficult to separate from fiction (or conspiracy theory). Shadow Wars may interest those with a deep interest in Middle Eastern geopolitics or those with a particular world view, but, for most readers, it will strain credulity.

Marcus Fielding

**BEQUESTS**

Royal United Services Institute for Defence and Security Studies, New South Wales, Incorporated

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Red Zone focuses on Australia’s relations with China as we enter the 21st century’s third decade. It examines China’s rise to superpower status and the concomitant relative decline in United States influence and power. It seeks to answer the question “What does China want from Australia?”; and to assess how Australia should respond to these developments. It is a revised version of Hartcher’s Quarterly Essay 76 Red flag: waking up to China’s challenge (Black Inc.: Carlton, Vic., 2019).

Peter Hartcher is the political and international editor of The Sydney Morning Herald and The Age. He has won several awards for his journalism. He delivered the Royal United Services Institute of New South Wales’ annual Sir Hermann Black Lecture in 2014, 2015 and 2017; and is a visiting fellow at the Lowy Institute.

Red Zone seeks to place Australia’s current tense relationship with China in the context of the 19th century ‘fall’ of China and its subsequent ‘rise’ under the leadership of the Chinese Communist Party (CCP), especially since China opened up to global trade in the 1980s. China’s border disputes with neighbouring states and territorial claims based on ‘history’ are examined, many being shown to be fallacious.

The primary focus, though, is China under Xi Jinping who has been its leader since 2012. Today, China is the most successful authoritarian regime in modern history, but achieving this status has been an ongoing struggle. Internally, ruthless ‘anti-corruption’ purges of other powerful forces (e.g. other CCP factions and oligarchs) and suppression of ethnic minorities have been necessary and continue. A paranoid Xi desires security first for his extended family, then for his own CCP faction, then for the CCP and only then for China.

Xi also wishes to gain hegemony over his neighbourhood and the wider Indo-Pacific region. Australia, including its natural resources, is a key part of Xi’s equation. Decades of economic dependence on China have left Australia open to Xi’s strategic ambitions. In return for a favourable trading relationship, Xi expects that Australia will meekly support and not question the CCP’s policies – in effect, that Australia will cede its sovereignty to the CCP.

To this end, China is pursuing a covert and overt campaign for influence in Australia – over trade, defence, academia, politics, infrastructure, and the media – and is employing a range of ‘grey zone’ tactics and tools short of traditional warfighting. These include: cyber espionage and warfare; trade restrictions amounting to bullying; theft of scientific, military and commercial secrets; influence buying; infiltration of academia and political parties; purchase of key infrastructure (including the Port of Darwin) and agricultural lands; and the like.

Australia has now woken up to China’s challenge. Australia has established a foreign interference transparency scheme and associated controls, banned Huawei and ZTE from its 5G network, boosted its cyber security, and begun diversifying its trading partners where practicable, among other initiatives.

Since the Trump presidency, Australia also has become less naïve about its relationship with the United States, the ‘guarantees’ provided by the ANZUS Treaty and extended nuclear deterrence. The United States for now remains the world’s most powerful nation and, under the Biden presidency, has returned to emphasising the importance to it of alliances. The relationship, however, while remaining of vital importance to our security, can no longer be relied upon in the way previous Australian governments had assumed. Instead, Hartcher says, Australia must provide for its own defence and security – it can no longer expect the United States or other allies to protect it.

Hartcher presents Xi’s China as a country with great imperial ambitions, intolerant of dissent, determined to make Australia and the world toe the CCP line and ignore its human rights abuses. In response, so that it can engage confidently with China and the world, Australia must protect itself against the CCP’s ambitions, set the terms of its engagement, exercise its sovereignty, and strengthen itself against foreign subversion and domination. Australia can no longer count on anyone else to protect it.

Expert analysts may endorse much of the broad picture painted by Hartcher, but are likely to differ with him on matters of detail especially as he has not cited his sources, except by way of references in the text to politicians and strategic analysts interviewed – no credible literature has been cited and there are no endnotes or a bibliography. That may be acceptable in a newspaper opinion piece, but not in a work of this type and it detracts from the work’s value for scholars. The book also lacks an overarching narrative and the chapter titles give little indication of the contents making it hard for the reader to follow the argument as it develops.

Nonetheless, I recommend Red Zone to both specialists in international relations and to the wider community. It brings an urgent, fresh and realistic perspective to how Australia now needs to manage its relations with both China and the United States.

David Leece