

Australian Army Journal

An Army in Motion

Army in Motion Edition Volume XIV, Number 3

Chief of Army Land Forces Seminar 2018

Serving our Nation



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The Australian Army Journal CALFS18 Staff

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A Note from the Publications Manager

This edition of the Australian Army Journal – An Army in Motion – Chief of Army Land Forces Seminar 2019 has been published as an extraordinary edition of the journal. The Chief of Army, Lieutenant General Rick Burr, hosted allies, colleagues, dignitaries and academics to discuss aspects of the seminar's theme: The Application of Land Power in the Indo-Pacific.

In the words of Lieutenant General Burr:

This special edition of the Australian Army Journal captures the proceedings of the seminar. It provides an enduring record of the three days of insight, collaboration and shared understanding developed as we examined the theme of 'The application of Land Power in the Indo Pacific'. I commend it to you.

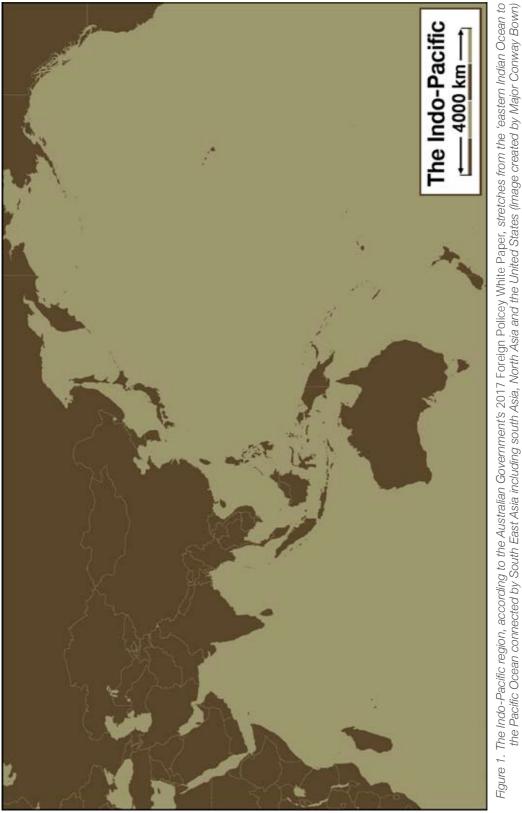
The articles in this edition are edited transcripts of most of the public speeches from that seminar created for the benefit of those who have an interest in the topic but who were unable to attend.

Because the journal is an 'enduring record of the seminar', great pains have been taken to ensure that it is not only reflective of what was said by the guest speakers, but that it is also readable in a clear and effective manner.

To that end, the editing of the speeches has been done to keep the resultant articles as close as possible to what was actually said as required by Commonwealth law. Where electronic recordings of the speeches have been provided to Defence, they have been published on the Army's website and are held in Defence's authorised content management system as required by departmental policy.

In some cases, transcripts were provided which contained discrepancies, transcription errors or grammatical errors. These discrepancies have been corrected as far as is reasonably practical in order to keep them as true to the speeches as they were delivered while still allowing for readability. If a paper has been provided instead of a transcript, or if the speech script that was intended to be delivered has been provided to the publisher and the speaker diverged significantly from the script, then these papers/scripts have been published in lieu and are so indicated.

Where a speaker's native tongue is not English, any errors in grammar have been corrected without altering the meaning or intention of the message. If any changes in the content or meaning have occurred, they are unintentional.



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Foreword

Major General Rick Burr, AO, DSC, MVO

Chief of Army

Australia's Army is an **Army in Motion**. Army is a multi-purpose and decisive force, offering broad utility to Government to operate in multiple theatres and domains at the same time. Our **Army in Motion** is



focussed on **preparedness, our people, and our profession** in order to meet our full **potential**. We do this in partnership with the other Services, Government, academia, industry, and international partners. These tenets form the basis of how we build the capability and capacity of Army.

As an Army, we will be required to operate in an environment of simultaneous **cooperation, competition** and **conflict** which now supersedes the traditional linear view of the Peace-War spectrum. The **rapid rate of technological change** will change how we fight, and the methods employed by both state and non-state actors. Military forces are no longer the sole leaders of technology innovation. **Domain integration** provides Army opportunities to increase our support to the joint force, but also presents new challenges to our systems and networks that must be considered through an integrated-by-design approach.

The **changing character of war** will require close attention and consideration by Army as we rapidly adjust to new systems, new threats and new methods in our operations. It is imperative for Army to think boldly about these challenges, for our response to be versatile, and to consider how to **scale** rapidly to meet future requirements. The accelerating changes demand anticipation and innovation from Army. To achieve this, Army must balance the competing priorities of being **Ready Now, and Future Ready**. That is, the dynamic task of delivering capability for joint force operations now, and adapting our preparedness to meet future challenges, is the essence of being an **Army in Motion**.

Success in this environment requires a **contest of ideas** across the entire Defence enterprise, including our international partners, academia, think-tanks, small-to-medium enterprises, and Government.

An important part of this **contest of ideas** was the conduct of the Chief of Army Land Forces Seminar 2018, held at the Adelaide Convention Centre in South Australia during September 2018. The theme of the seminar was 'The Application of Land Power in the Indo-Pacific'.

The Land Forces Seminar provided a forum for bold thinking and an opportunity to consider our Army's response to an environment characterised by **Accelerated Warfare**. It was a world-class event which connected national, regional and global partners in discussions on the opportunities and challenges of today. The event provided a forum for senior leaders from the Department of Defence, international senior military chiefs and commanders, industry and academics to contribute to discussions about our shared national security challenges, with a specific focus on the Indo-Pacific region.

This special edition of the Australian Army Journal captures the proceedings of the seminar. It provides an enduring record of the three days of insight, collaboration and shared understanding developed as we examined the theme of 'The Application of Land Power in the Indo-Pacific'. But this is much more than a simple record of proceedings; this is an entry point into the discussion and **contest of ideas** for the members of our profession.

I encourage you to challenge the ideas presented at the Chief of Army Land Forces Seminar 2018, and contribute to the ongoing discussion.

I look forward to your professional engagement and your contribution to developing Army's future.

Good soldiering.

Building a Resilient and Rules-based Security Community in the Indo-Pacific Region

The Honourable Christopher Pyne, Member of Parliament,

Minister for Defence

'Good afternoon ladies and gentlemen.

'To members of the international military leadership who are here today; to the Chief of the Australian Defence Force, General Angus Campbell; to current and former members of the Australian Defence Force, particularly the leadership of the Australian Army: the Chief of Army, Lieutenant General Rick Burr; the Deputy Chief of Army, Major General Jake Ellwood; Head Land Capability, Major General Kath Toohey; Army's Generals and the broader members of the Defence senior leadership group.

'Welcome to you all.

'The Australian Army and the Australian Defence Force have built a close network of relationships, both globally and in our own region—the Indo-Pacific—reflected by your presence here today.

'The Government of Australia is absolutely committed to widening,

deepening and strengthening these ties—as foreshadowed formally in the 2016 Defence White Paper, which I will talk about shortly.

'The Chief of Army's Land Forces Seminar is a great opportunity to increase understanding across a broad range of areas, not the least showcasing Defence capability and industry, but it also provides a unique opportunity to increase understanding between respective defence forces.

'Increased cooperation with like-minded international partners and continued regional engagement is a high priority for the Australian Government, and this was clearly set out in the 2016 Defence White Paper and reinforced in the 2017 Foreign Policy White Paper.

'And this is for a good reason—namely—to help us anticipate and resolve challenges before they become conflicts, not just respond to them, within the Indo-Pacific and further afield.

'Australia has a long history of regional engagement based on strong people-to-people links, ranging from capacity-building to joint exercises, humanitarian and disaster relief assistance and by supporting and leading training activities with our partners.

'We recognise that the Indo-Pacific region is extremely dynamic, with militaries modernising rapidly as economic and strategic weight shifts, and this only serves to reinforce the need for deeper understanding and greater cooperation.

'In the spirit of regional cooperation and engagement, it is interesting to see so many international delegations here for the Chief of Army's Land Forces seminar.

'Your presence here over the next three days is an important opportunity to discuss our mutual views and share our experiences and understanding to identify the areas for the application of land power, particularly in the Indo-Pacific.

'This year's Chief of Army Land Forces Seminar addresses key questions on how international partnerships can help build, develop, and sustain land power to respond to the complex range of security challenges that shape our strategic environment and the future of land forces in the Indo-Pacific.

'The emphasis on the role of land forces is an important focus for us all.

Land forces are that essential element of national capability that provides access and influence in the very domain where people live.

'This is fundamental, as we examine how collectively our nations' land forces operate to ensure security of our nations' interests and protect our sovereignty.

'I commend and seek to reinforce the importance of these collective investments by our governments. As we all are acutely aware, we continue to live at an interesting time in world affairs.

'In the past year alone we've seen rapid economic and military growth across Asia, improvement in the prospect for peace on the Korean peninsula and a terrorism threat that has evolved in unexpected ways.

'In this setting, strengthening international military cooperation can only be viewed as an important means to help promote and build upon regional security.

'For Australia, the Indo-Pacific region fills our vision across the cardinals of the compass and is the arena where our common future will unfold.

'Australia lies at the geographic centre of this region and holds the fulcrum between the Indian and Pacific corners of Asia. Australia's continued engagement and close work with regional partners is an absolute must.

'The unfolding positive shades of the Indo-Pacific region's geo-strategic diversity are truly remarkable and significant for Australia's security and prosperity, and understanding this diversity can help us appreciate the regional dynamics.

'This is a region of widening and deepening activities that contribute significantly to globalisation. Against this backdrop are eight of the 10 most populous nations on Earth, 50 per cent of the world's population, and the largest democratic nation in the world.

'It contains 12 member states of the G20.

'The three largest economies in the world are Indo-Pacific nations.

'Ten of the world's fourteen smallest economies, including some of the most climatically fragile, are in the Indo-Pacific.

'The busiest international sea lanes are in this region, and nine of the world's ten busiest seaports, as well as most of the world's largest cities of today and tomorrow are here.

'And this is also a region that is heavily militarised—some seven of the world's ten largest standing militaries and five of the world's declared nuclear nations are located in the Indo-Pacific.

'Some might see this diverse array of cultures and ideologies as international policy's greatest challenge.

'I see it as our region's greatest strength.

'Through diversity, there is strength; through a multitude of views, we will find the means to fix the challenges we face together.

'We can build a safe and prosperous community of nations in our region through a shared understanding of the challenges.

'And Land Forces 2018 provides a forum for countries near and far to strengthen shared interests and build resilient networks of peace and prosperity. Defence is a part of this process.

'I want to emphasise here the paramount importance of partnership in achieving this goal. By partnership, I mean:

- Engagement between our forces to help build mutual understanding;
- Building resiliency and strength to aid each other; and
- Sustaining a rules-based order.

'In this setting, Australia's 2016 Defence White Paper and follow on 2017 Foreign Policy White Paper—clearly highlight the importance of continuing to build upon Defence's existing international engagement profile.

'As you would know, Australia's *2016 Defence White Paper* announced a significant investment in new capabilities, notably for Army the \$5.2 billion dollar Combat Reconnaissance Vehicle, that, combined with broader Defence capabilities, enable the Australian Army and the Australian Defence Force to respond to crises and maintain security within the Indo-Pacific region.

'However, the Defence White Paper also specifically calls on Defence

to increase its investment in the Defence Cooperation Program to build confidence and the capacity of countries in the Indo-Pacific and to contribute to our collective security.

'Our commitment to these goals is represented by the amount of training that Australia provides for international military students in Australia; the number of exercises that the Australian Defence Force participates in across our region, and the number of Australian Defence Force personnel located overseas to conduct international engagement with partner nations.

'The Australian Army—including through its engagement with your countries—plays a critical role in this growth structure from which all partners benefit.

'Engaging with nations in our region and beyond, bilaterally, regionally and globally, and doing so through collaborative activities will help us understand our strategic environment to respond to those shared challenges which I mentioned earlier.

'By generating active and effective security partnerships and building relationships we create strong regional and international security architectures that provide safety and security to our people and strengthen our economic activities. Deepening our practical engagement with partners remain of vital interest.

'The Australian Army has a key role to play in this endeavour which is best captured under what Lieutenant General Burr describes as 'Army in Motion'.

'That's commitment through a persistent engagement that ensures we have a force posture to respond to the continued challenges both traditional and non-traditional, that we remain agile, and leverage the collective knowledge of our various armies.

'As I know is evident to this audience, deeper engagement between the armies in our region alongside strengthening regional cooperative mechanisms such as ASEAN, the Pacific Islands Forum, and the East Asia Summit, serves to enhance our collective understanding and perspectives.

'Importantly, this kind of cooperation between countries serves to reinforce the rules-based system for preserving lasting peace and security in the region. 'It also presents a clear example to all of how competing economies can cooperate and demonstrate the importance of the region's openness to the world.

'Colleagues, in conclusion, I want to emphasise the importance of Australia's engagement in the Indio-Pacific region to create a safe and prosperous community of nations.

'A community that respects a free and open region and cooperates closely to achieve shared goals.

'It is events such as the Chief of Army's Land Forces Seminar today that contribute to a better understanding to this end, as well as help our militaries operate alongside each other in support of the rules-based order.

'Collectively, we must deter influences that risk destabilisation, and work together through partnerships to create an Indo-Pacific region that serves our interests as a community of nations and helps us all to move forward and embrace opportunities for greater peace and prosperity for our peoples.

'Thank you.'



Figure 5. The Hon Chris Pyne, MP, Minister for Defence (centre) with Chief of the Defence Force, General Angus Campbell (left), meets with Commander Operation Resolute Support and US Forces Afghanistan, Lietenant General Austin Scott Miller in Kabul. (Image: DoD)



Figure 6. The Hon Chris Pyne, MP, receives a brief on the Hawkei Protected Mobility Vehicle - Light. (Image: DoD)



Figure 7. During a visit to Australian troops in Afghanistan, Minister for Defence Pyne receives a briefing on the current security situation while the Chief of Defence, General Angus Campbell (seated) listens. (Image: DoD)



Figure 8. A Bushmaster PMV is transported ashore from HMAS Adelaide. In the Indo-Pacific, projecting land forces will require joint capabilities. (Images DoD)

Session One

Indo-Pacific: The Region of Global Connection

Synthesis

The first session of the Chief of Army Land Forces Seminar (CALFS) looked to establish an understanding of the complex and volatile operating environment in the Indo-Pacific. The session, and the seminar, was opened by the Chief of Army (Australia) Lieutenant General Rick Burr AO, DSC, MVO. He was followed by the newly appointed Minister for Defence, the Honourable Christopher Pyne, MP.

Presenting after the opening remarks were the Commander of the Sri Lanka Army, Lieutenant General N.U.M. Mahesh W. Senanyake RWP, RSP, USP, psc, Mr Michael Shoebridge from the Australian think tank, the Australian Strategic Policy Institute, and Mr Tom Hamilton, Acting Deputy Security, Strategic Policy and Intelligence, Department of Defence.

Chief of Army Opening Address - Lieutenant General Rick Burr AO, DSC, MVO

In opening CALFS and Session 1, Lieutenant General Burr noted that 'Armies don't operate alone'. Domestically, Lieutenant General Burr referenced the value of a joint Australian Defence Force 'Joint by design, integrated by design'. While internationally he noted that the increasingly complex and constantly changing geo-political environment in the Indo-Pacific region called for a combined approach recognising that 'no nation is an island'.¹ Lieutenant General Burr called on seminar attendees to reflect upon and embrace change, referencing his strategic perspective of the Australian Army as an *Army in Motion* as laid out in his Commander's Statement ² and reinforced in Army's Futures Statement, *Accelerated Warfare*.³ His opening remarks focussed on addressing the four key challenges identified in *Accelerated Warfare*: geopolitics, threat, technology and domains.

Setting the scene for CALFS and the focus on the future of land forces in the Indo-Pacific, Lieutenant General Burr called for the Australian Army to 'create space for our own transformation'. Inclusive in this is the need for Army to engage with technological innovations and to adopt innovations early and rapidly when appropriate. He simultaneously stressed the need to invoke Army's moral foundations in the development and application of technology. Notwithstanding the importance of technology, Lieutenant General Burr acknowledged the important role of people in Army – remarking on the value of relationships domestically between forces and agencies, and through building transparent, trusting, international partnerships. Lieutenant General Burr highlighted the multiple domains across which land forces work – land, maritime, air, cyber and space – and the nature of Army's engagement, which extends beyond combat to humanitarian support in responding to natural disasters, supporting event security as well as local fire and flood relief.

The themes identified by Lieutenant General Burr were echoed throughout the seminar, coalescing into several overarching themes around the importance of partnerships, technology and people to the future of the Indo-Pacific region and the role of armed forces.

The Minister for Defence Opening Address - the Honourable Christopher Pyne, MP^4

Minister Pyne's opening address to CALFS focussed on encouraging continued and increased cooperation and engagement with 'like-minded international partners' in the Indo-Pacific region. He pointed to both the *2016 Defence White Paper* ⁵ and the *2017 Foreign Policy White Paper* ⁶ to demonstrate Australia's commitment to ongoing, increased and strengthened engagement for regional prosperity and security. Similarly to Lieutenant General Burr, he highlighted the important role of people, whether through capacity building, joint exercises or humanitarian and disaster relief assistance. He particularly emphasised his belief that diversity

- geo-politically and culturally - represented a strength but also a challenge; reinforcing the need for strategic partnerships to build mutual understanding of challenges and responses, building resilience, and importantly, maintaining a 'rules-based order'.

He highlighted a number of Australia's initiatives that support international engagement, including increased Defence capabilities for crisis response, training for international military students in Australia, increased participation of the Australian Defence Force in military exercises with partner nations, and the location of ADF personnel overseas for international engagement purposes. Referencing Lieutenant General Burr's Commander's Statement, he pointed to the Australian Army's important role in responding to the region's challenge as an *Army in Motion*.

During question time, Minister Pyne reinforced the message of collaboration. He cited our strong people-to-people relationships in Indonesia and the role of Defence Industry as examples of successful engagements. He noted that Defence Industry was able to develop a type of engagement that military-to-military relationships could not. He stressed that while not without challenges, multi-lateral fora played an important role in regional stability, prosperity and security. Minister Pyne concluded by noting it is important to establish relationships before developing solutions.

Presentations

The focus of the three presentations in Session 1 were aptly summarised by Lieutenant General Mahesh Senanyake, Commander of the Sri Lanka Army in his address as follows:

- Defining the term Indo-Pacific,
- Describing the dynamics of the region, and
- Identifying shared challenges and opportunities.

Within this context the key theme of partnerships was at the forefront of challenges and opportunities identified during the session.

Geo-politics in the Indo-Pacific and Regional Challenges

Minister Pyne and Lieutenant General Senanyake emphasised the Indo-Pacific's geopolitical, cultural and ideological diversity. Lieutenant General Senanyake noted that the Indo-Pacific is strategically important despite debate about its composition and definition. He suggested that the emergence of the term represents the coalescence of a range of geopolitical, strategic and economic developments in the region. Mr Michael Shoebridge suggested that the concept of an Indo-Pacific Region is a 'way of thinking' that is useful in today's climate.

Lieutenant General Senanyake suggested that despite the lack of homogeneity and defined boundaries, the outcome of rapidly accelerating economic and security connections is a 'single strategic system'. Mr Shoebridge emphasised the economic importance and interconnectedness of the region describing the Indo-Pacific as 'a system of flows and interdependencies of economy'. Regardless of the somewhat amorphous nature of the Indo-Pacific, all speakers agreed that it was strategically important and required cooperation to mitigate threats and maintain mutually beneficial economic advantages, security and prosperity.

Speakers identified a number of key collective challenges faced by the region that were reiterated by speakers throughout CALFS. Lieutenant General Senanyake indicated that from Sri Lanka's experience there are seven key challenges. He suggested that natural disasters represented the greatest threat – pointing out that the region is considered the 'World's Disaster Belt'. Additional key challenges he identified, resulting from diverse drivers, included:

- drug trafficking
- arms trafficking
- sea piracy
- overfishing and illegal fishing
- territorial disputes
- terrorism (the focus of Session 2).

Mr Shoebridge and Mr Hamilton also detailed key challenges and strategic drivers which, from the Australian perspective, represent challenges to the 'rules-based' global order. These are both geographic and non-geographic and include:

- a rising, though not uniform, population and a higher standard of living
- a trend towards an aging population that is not uniform

- increased urbanisation
- a changing climate resulting in natural disasters and reduced access to arable land which had the potential to influence the mass movement of people
- an explosion in the collection and creation of information
- technological change-generating disruption in domains such as cyberspace and outer space
- a shift in the world's economic centre of gravity to Asia
- the increased pace of military modernisation with potential improvements for inter-operability but which also presented challenges
- major power competition, especially between the U.S. and China.

Mr Shoebridge suggested that nations are now able to project power much further than their historical territorial claims, citing the South China Sea as an example of resultant tension. Lieutenant General Senanyake suggested that the region has become a locus for great power competition and posited that China's *One Belt, One Road* initiative on one hand was being met by a cooperative alliance between the United States, Australian, Japan and India. Mr Hamilton reinforced the importance of Australia's strong relationship with the U.S. in this context of change.

Reinforcing the need to address challenges as an interconnected region, Lieutenant General Senanyake echoed Lieutenant General Burr's sentiment that 'no nation is an island' and promoted the value of trusted relationships. Similarly Mr Shoebridge pointed to trusted partnerships and encouraged the region to be 'clear-eyed and honest' when differences occur. Mr Hamilton further reiterated the importance of trust, and transparency in partnerships – indicating that Australia's regular release of White Papers form part Australia's transparent strategic messaging to the region. Lieutenant General Senanyake and Mr Hamilton mirrored the value placed on regional fora by Minister Pyne, citing a number of successful multilateral events such as the Association of South East Asian Nations (ASEAN) and the Asia-Pacific Economic Cooperation (APEC), which he presented as further opportunities for cementing regional cooperation.

Importance of Armed Forces

In highlighting the importance of armed land forces Lieutenant General Senanyake described his nation's struggle with terrorism and stated 'peace of the sea depends on the stability, peace and prosperity of the land'. He noted the importance of land forces' regardless of the type of threat (traditional/non-traditional or asymmetric/symmetric) and stressed regional inter-connectedness requires cooperation and partnership to mitigate threats. Similarly, Mr Shoebridge highlighted the importance of cooperative armed land forces, stating 'control over sea routes can be exercised from land, by joint forces'.

While on the one hand noting the mostly maritime nature of the Indo-Pacific, Mr Hamilton suggested that the ongoing strategic geo-political changes in the region pose challenges that 'will have to be at the core of planning for future land forces'. In particular he suggested that key considerations for armed forces related to increased agility, mobility, lethality, protection and situational awareness. Importantly, he pointed to Defence Industry as a core component of these plans. The role of industry and the need for strong partnerships was similarly identified by Minister Pyne.

Endnotes

- 1. Reference to a speech made by Professor Rory Medcalf, Australian National University, June 2018.
- Chief of Army, 13 July 2018, Australia's Army An Army in Motion, Australian Army, sourced from https://army.govcms.gov.au/our-work/from-the-chief-of-army/australiasarmy-an-army-in-motion on 19 October 2018
- Chief of Army, 02 August 2018, Accelerated Warfare, Australian Army, sourced from https://army.govcms.gov.au/our-work/from-the-chief-of-army/accelerated-warfare on 19 October 2018
- 4. A full transcript of this speech can be found at https://www.minister.defence.gov.au/ minister/christopher-pyne/speeches/speech-chief-armys-land-forces-seminar
- 5. 2016 Defence White Paper, Australian Government at: http://www.defence.gov.au/ whitepaper/Docs/2016-Defence-White-Paper.pdf
- 6. 2017 Foreign Policy White Paper, Australian Government at: https://www.fpwhitepaper. gov.au/foreign-policy-white-paper



Figure 9. Australian Defence Force Service Chiefs attending the Chief of Army's Land Forces Seminar 2018. Left to right: Chief of Navy, Vice Admiral Michael Noonan, AO, RAN; Chief of Army, Lieutenant General Rick Burr, AO, DSC, MVO; and Chief of Air Force, Air Marshal Leo Davies, AO, CSC. (Photo: DoD.)

Chief of Army's Opening Address

The Application of Land Power in the Indo-Pacific

Lieutenant General Rick Burr, AO, DSC, MVO, Chief of Army

I acknowledge the traditional custodians of the land on which we are meeting this afternoon, the Kaurna people, and pay my respects to their elders, past and present.

I acknowledge and welcome:

the Minister for Defence, the Honourable Christopher Pyne, the Chief of Navy, Vice Admiral Michael Noonan, the Chief of Air Force, Air Vice-Marshal Leo Davies, and the Chief of Joint Capabilities, Air Vice-Marshal Warren McDonald,

Distinguished Guests, Colleagues, Conference Delegates, Ladies and Gentlemen.

'Welcome to the Adelaide Convention Centre and the first session of the Chief of Army's Land Forces Seminar 2018—our biggest and, I anticipate, our best yet!

'This audience is an impressive group—leaders, thinkers and action-officers for change.

'It is an honour to host you here in Adelaide and I thank you for your presence and participation. As a native South Australian, it is always a

pleasure to be able to showcase one of the most beautiful cities in the world.

'A city that also accommodates some of the most significant Defence initiatives on behalf of the Commonwealth, including:

- the future submarine program
- the Woomera rocket testing range in the north of the state
- the strategic north-south heavy rail link between Adelaide and Darwin.

The seminar theme for this year is 'The Application of Land Power in the Indo-Pacific'.

'It is a vast and complex space. It might be contemplated as an interconnected strategic system, one increasingly defined by a changing geo-political order and an operating spectrum of cooperation, competition and conflict.

'This was noted by Professor Rory Medcalf of the Australian National University in June of this year:

...the powerhouse economies of East Asia are intimately linked with the wider Indo-Pacific region...in an increasingly connected world, no nation is an island, indeed, no island is an island, this especially applies in the areas of defence and security, trade and investment, as well as aid and development.

'My aim for this seminar is to build momentum around a conversation about the future of our Army and other land forces more broadly. A conversation that seeks to transform our physical, intellectual and moral capacity for armed conflict in an era of technological disruption and profound change within the Indo-Pacific region.

'As a reflection of national sovereignty, an Army leverages its own national history, culture and political ethos to generate forces capable of securing their nation's interests. Armies will have to adapt to meet the challenges of coming decades. Strategic rebalancing, global complexity and constant change will demand transformation as a necessity, rather than a choice.

'This seminar will allow us to focus on the adaptions and transformation we all must consider in order to out-pace any future potential adversary. For the Australian Army, these changes cannot compromise our ability to manage our present commitments to operations and capability management. As an absolute rule, the Army must maintain its war-fighting capabilities, increase its utility across the full spectrum of conflict and manage our resources responsibly.

'I remarked upon assuming command of the Army, and many times today already, that we are an *Army in Motion*.

'At any given moment our people are operating across multiple environments: whether it be while engaged in combat in support of our interests around the globe; providing humanitarian support as part of the response to a natural disaster; supporting major event security in support of a state government or providing local fire and flood relief to rural and regional areas throughout Australia. This ongoing commitment must continue to make a difference and will always remain an important priority.

'We must also create space for our own transformation and we must invest and find room for the innovations that will comprehensively enable our future. We must understand technological opportunities 'early' and adopt them rapidly when appropriate to do so. Recognising the new horizons of signature management, robotics, autonomous systems, and humanmachine teaming, we must also draw on our moral foundations in the profession of arms to see these technologies deliver not just decisive, but lawful and ethical land power.

'In sustaining the force, we will also need to aspire to apply new technologies as they become available. These may include, amongst others, advanced human performance, additive manufacturing and distributed power cell management.

'The Australian Army must be an effective member of the Joint Force and valued by our international military partners and our allies. Being openly committed to these partnerships builds trust. Transparency is important in terms of how Army builds relationships inside and outside the Australian Defence Force, to include partners in Defence Industry, other government agencies, academia and other key interest groups.

'I want to emphasise the centrality of people in terms of capability management and transformation. How we empower our people to embrace new technology in the years ahead will be a driver of change. We must ensure that we absolutely prioritise the development of our workforce in order to allow every single individual who wears our various uniforms to fully realise their potential, particularly as leaders and innovators. We must allow our people to be the very best professional soldiers, teaming them with emergent technologies as part of Army's embrace of future possibilities.

'The Australian Army's recently released Futures Statement, *Accelerated Warfare*, is designed to stimulate our thinking as an integral part of a Joint Force in a rapidly changing region. It provides a framework to meaningfully consider what that might mean for our Army and how we contribute to the Joint Force and Australia's national security. Within this accelerating environment, Australia's Army operates on the land, from the land and onto the land, across all domains including cyber, space, maritime and air.

'This concept provides a start point for thinking, it is not an answer. It promotes a 'contest of ideas'.

'This seminar will help us on that journey, and I look forward to engaging with you about the many questions that will emerge. I welcome discussion and debate, so please share your perspectives with us and help develop the understanding that will be vital in addressing the challenges we all face.

'These are shared problems and we need to build understanding and shared endeavours. In this context, I believe we have a focused and relevant seminar that embraces these pervasive and persistent challenges.

'This first session '*The Indo-Pacific: The Region of Global Connection*' is expressed in a tangible manner by the presence of all the international delegates so ably represented here in this room this afternoon, willing to share perspectives, generate understanding and to build momentum.

'Tomorrow morning's session will address 'Land Power and Countering Violent Extremism'. Like so many nations here, Australia is working right now with like-minded multinational partners towards the common goal of defeating violent extremism. These are truly whole-of-nation efforts.

'Wednesday afternoon's session will examine 'Generating Land Power Through Partnering'. Partnerships—joint, bilateral or multilateral—are an enduring aspiration for land forces. We can do so much more when we work together, each organisation brings its unique strengths and abilities to hand. This session seeks to get into the substantive issue of achieving real and consequential partnerships within the Indo-Pacific. 'Our final session on Thursday morning will address '*The Character of Future Indo-Pacific Land Forces*'. Our environment is changing—implicit in that is a requirement for land forces to change in response. I suspect the speakers will challenge some of our current ideas about the future of the forces we are responsible for.

'Together, these sessions deliver a comprehensive examination of our seminar theme: '*The Application of Land Power in the Indo-Pacific*'. I look forward to the sessions deepening our understanding of these issues as we share our perspectives, and to then inform, in practical and purposeful ways, the refining of our strategy and concepts for embracing this new environment.

'So to conclude, open channels of communication will remain vital. I encourage you to continue to promote discussion, share ideas, and encourage innovation in order to maximise this opportunity. I look forward to hearing your thoughts. In particular, I ask for your support in what is an exciting and vital period for our Army—a time in which we will continue to generate the essential land power our nation's security requires and transform ourselves in order to be ready for the future.

'I again thank you for your attendance, and encourage all to engage, contribute, and generate momentum from this outstanding event.

'It is now my great honour to introduce our keynote speaker. The Minister for Defence, another passionate South Australian, the Honourable Christopher Pyne. Minister, thank you very much again for your interest in our Army, for your support for our Defence force, and what you do for our nation. It is a great privilege to invite you to the lectern to address this group.'



Figure 10. Soldiers of the Sri Lanka Army. The number of troops in uniform according to the Sri Lanka Army Report 2016 is 113 507 in the Regular Army and 63 631 in the Volunteer Army (ie Reserves) (Image: Sri Lanka Army website)

The Indo-Pacific: The Region of Global Connection

Lieutenant General Mahesh Senanyake, RWP, RSP, VSV, USP, USACGSC

Commander of the Sri Lanka Army

'Good afternoon to the distinguished gathering!

'First and foremost, let me thank the Chief of the Australian Army and the organizing committee of the Chief of Army Land Forces Seminar 2018 for inviting me to deliver the keynote address on '*The Indo-Pacific: The Region of Global Connection*' in which I distinctly consider this as a privilege bestowed upon me as the first ever Sri Lankan Army Chief to deliver a speech in this forum, especially among these well accomplished senior military leaders and defence scholars across the world. This seminar is always a major event for many prospective military leaders and I believe this year it feels bigger and even more relevant than ever.

'Let me also express my sincere gratitude for the excellent hospitality extended towards me since the day I arrived in Adelaide.

'Ladies and Gentlemen, the buzzword of this seminar is 'Indo-Pacific'. The term Indo-Pacific has been in the minds of many policy makers and defence experts for decades due to the inherent importance of the region. The increased interpretation of the term 'Indo-Pacific' over the geographically more limited 'Asia-Pacific' has extended its importance and interest into many connotations. I believe nobody here needs to be reminded of the farreaching strategic importance of the modified term of Indo-Pacific region. Having this in mind let me share my views under three pertinent questions:

- What constitutes the term Indo-Pacific?
- What are the dynamic interests of the Indo-Pacific today?
- What are the shared challenges and opportunities in the region?

What Constitutes the Term Indo-Pacific?

'Ladies and Gentlemen, what constitutes the term Indo-Pacific is a question that has many answers. It entails unprecedented economic, security and diplomatic interpretations based on the wider national interests of the many global and regional players. The Indo-Pacific has now become a much contested topic in the current geo-strategic equations. [In] retrospect, the idea of Indo-Pacific has been there for ages in different terms. However, the geographic interest and geo-political imaginations have dictated and remained persistent at all ages.

'Traditionally, the Indian Ocean region and the Asia-Pacific region were treated as two separate entities which span over the two regions of the Indian Ocean and the Pacific Ocean. Now, there is an increasing tendency to consider these two areas as a single entity. The term 'Indo-Pacific' has recently gained wider official acceptance among many countries due to obvious fact of the US President's foreign policy interpretation and subsequent diplomatic engagements. During his Asia tour in November 2017, the US President, Donald Trump, often used the term Indo-Pacific, and the US National Security Strategy (NSS) has also referred to the Indo-Pacific construct. Further, even here in Australia, the 2016 Defence White Paper has used the 'Indo-Pacific' terminology. This term has gained wide currency in Japan, India, and in several South East Asian countries. Thus, the confluence of two seas, as implied by the term 'Indo-Pacific', has led to a greater degree of connectivity among many countries.

'As per the Australian Journal of International Affairs, the Indo-Pacific means recognizing that the accelerating economic and security connections between the Western Pacific and the Indian Ocean regions are creating a single strategic system. This strategic system can be understood as a set of geopolitical power relationships among nations where major changes in one part of the system affects what happens in the other parts.

'As you know, the region is the geographical connotation of the area which covers the eastern coast of Africa through the Indian Ocean and the Western Pacific Ocean. The waters of the Indo-Pacific region represent the largest ocean and the third largest ocean in the world. It is also home to 60% of the world's population. Connection of these two oceans has not only emerged as geo-strategically and geo-economically important but also important in the fields of defence and security.

'The coastline of the Indian Ocean has a total length of 66 526 kilometres. Further, the Indo-Pacific sea region and littorals are marked by a multiplicity of cultures, ethnicities, religions, economic models, megacities and governance structures. Sea is the common link which binds the subsystem within the Indo-Pacific.

What are the Dynamic Interests of the 'Indo-Pacific' Today?

'Ladies and Gentlemen, let me now come to the question of the dynamic interest of the Indo-Pacific today. As we are all well aware, moving from 'Asia-Pacific' into 'Indo-Pacific' has rekindled the geo-strategic and geoeconomic interest among many nations across the world. The importance of the Indo-Pacific term stems from ancient kingdoms to modern-day ambitious seafaring nations. This changing use of geographic terms has made many nations revisit their competing and conflicting interests.

'The Indo-Pacific region can be considered as the center of gravity of many converging interests. These converging interests transcend from economic, geopolitical and security connections between [the] Western Pacific and Indian Ocean regions by making a well-connected theatre of interest. The region is also heavily militarized, which includes seven of the ten largest armies, and five of the world's declared nuclear nations are also located in the Indo-Pacific region. Importantly, the maritime powers alike, the United States, China, Japan, India, South Korea and Australia, are also located in the region. The region is also home for three of the largest world economies and is also home for 12 member states of the G20 nations.

'Further, the region is also home for approximately four billion people who live under different socio-economic conditions in 36 countries, which includes the most populous nation and the largest democratic nation. The region is also being highly urbanized and consists of nine megacities out of 10 mega-urban regions. Thus, the region has become a good marketplace in terms of consumers and investments. The majority of the region's population boom will continue to occupy major cities, exacerbating demographic flow. Further, technical innovation in the cyber and digital domains is driving towards faster connectivity, bringing the region closer. The region is also identified as having the highest number of internet users and thereby making it a digitally connected Indo-Pacific.

'The Indo-Pacific region is also claimed as the 'engine of global growth', as the world's most important trade routes lie on the waters of the Indian Ocean. As per the records, almost half of the world's total annual seaborne trade volumes pass through the Indian Ocean. Especially goods manufactured in East Asia–and destined for Europe–pass through the Strait of Malacca, across the Indian Ocean, and enter the Suez Canal. Oil supplies bound for China, India, Japan, South Korea and South West Asia move similarly. It should be noted that 50% of the world's container traffic and 70% of the world's crude oil products transit through the Indian Ocean.

'The Strait of Malacca, which links the Indian and Pacific Oceans, is the shortest sea route between the Middle East and growing Asian markets; notably China, Japan, South Korea, and the Pacific Rim countries. Thus, several of the world's top container ports, including Port Kelang in Malaysia, Singapore and Colombo ports are located in the Indian Ocean.

'Further, 40% of the world's offshore natural gas reserves are in the Indian Ocean littoral states and 55% of known offshore world oil reserves are in the Indian Ocean. It should also be noted that the continental shelves cover about 4.2% of the total area of the Indian Ocean and contains an abundance of mineral and natural resources.

'The region is rich in fish and the Indian Ocean possesses some of the world's largest fishing grounds, providing approximately 15% of the total world's fish catch. According to the United Nations Food and Agriculture Organization (FAO), catches taken from the marine capture fisheries of the Indian Ocean and western Pacific have increased from less than 20 million metric tons in 1970 to 46 million tons in 2012 - over 57% of the world catch.

The existing and yet to be discovered aquatic resources will be a major factor in meeting future demand of food and natural resources. As you are aware, fisheries contribute to most of the regional economies, especially, in the small island states.

'Distinguished ladies and gentlemen, the region also has some countries that are governed through different political ideologies. Countries that are faced with conflicts/wars of different interests, such as ethnic, religious, social and political could also be found in the region. The development of trade and commerce and increased economic prosperity of regional players have made those countries potential powers that can influence the region and its security and/or political destiny. At large, the economic prosperity, technology and strategic competition has made the Indo-Pacific a region that can change the future of the world.

'The Indo-Pacific region is also a witness to a multitude of regional organizations, multilateral structures, and bilateral and multilateral arrangements. The Association of South East Asian Nations known as ASEAN, the ASEAN Regional Forum known as ARF, the Asia Pacific Economic Cooperation known as APEC, the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation known as BIMSTEC, and the South Asia Association of Regional Cooperation known as SAARC, are some of them.

'This is also a region where we witness a great power competition. The Chinese President Xi Jinping has proposed the 'One Belt, One Road' (OBOR) initiative with the ambition of creating an interconnected and integrated Eurasian continent by way of linking 65 Asian, European and African countries. On the other hand, the United States, Australia, Japan, and India are cooperating with each other to face the challenges posed by China.

What are the Shared Challenges and Opportunities in the Region?

'Ladies and gentlemen, let me also share with you some shared challenges and opportunities available to harness stability, peace, prosperity and inclusive growth by way of mutual collaboration. As I deliberated earlier, the Indo-Pacific area remains the 'engine of global growth' and what matters here will directly affect global peace, security and development. Due to the inherent diversity of the region, it encompasses fragility and uncertainty in many areas. It evokes multiple strategic challenges in strategic, political and economic domains. Much of the challenges remain as non-traditional security threats. However, nuclear deterrence and provocations among major powers have added much volatility into the challenges. Let me now take up a few challenges very briefly.

Natural Disasters

'Ladies and gentlemen, natural disasters can be considered as the main challenge as the Indo-Pacific region is deeply vulnerable to natural disasters such as floods, droughts, cyclones, earthquakes, tidal surges, landslides and tsunamis. Nearly 50% of the world's natural disasters occur in the region sometimes called the 'World's Hazard Belt'. What happens here affects nearly half of the world.

'The 2004 Indian Ocean earthquake and tsunami–which is considered as one of the world's most disastrous natural events–happened in the Indian Ocean which claimed about 200 000 lives.

'Moreover, the Thailand flood in 2011 with estimated damages of US \$40 billion, 2014 India flood with estimated damages of US \$16 billion, and Nepal earthquake in 2015 with estimated damages of US \$5.7 billion, can be highlighted as some of the high magnitude disasters. According to United Nations' figures, the region accounts for 57% of the global death toll from natural disasters since 1970 and assets worth \$1.3 trillion have been lost between 1970 and 2016 [to the same causes].

'Further, in 2016, 4 987 people died in the region due to disasters, the majority in floods (3 250) which hit Bangladesh, China, North Korea, India, Nepal, Pakistan and Sri Lanka. Storms accounted for 880 deaths and extreme temperature, 336 deaths.

'In addition, significant climatic changes in the region, such as global warming, sea-levels rising, droughts and heat waves have also become critical climatic conditions which creates many negative socioeconomic impacts. Sea-level rise has threatened the long-term sustainability of coastal communities and valuable ecosystems, and the loss of millions of hectares of arable land.

'The year 2015 has been reported as the hottest year, which saw several intense heat waves striking India and Pakistan between May and June that resulted in 2 248 and 1 229 deaths, respectively.

Drug Trafficking

'I would like to emphasise that drug trafficking is another key issue prevailing in the region and it was found that an increase of illicit drug production, trafficking and transit routes are in the region. Some of the countries in the region produce opium and heroin. Cannabis production was found throughout most of the countries in the region. Drug trafficking and transit routes of Asia and the Pacific were proliferating and dynamic. Asia is being targeted by drug traffickers because of its economic growth and large youth population.

'The Pacific is mainly known as a trans-shipment point for drugs entering other countries in the region. As per United Nations Office of Drug and Crime (UNODC), a \$90 billion illegal economy in Asia comes from drugs. The Pacific has also become ripe for drug trafficking and transit because most of the countries do not have capacity to patrol their boundaries or territories. The impact on drug trafficking is a great impact on the national security and human security dimensions. Many countries are now fighting to their full potential to get away from this threat. However, due to the well-connected nature of the trade, many nations require collective efforts to eradicate these threats before they become a detrimental threat to the well-being of the societies.

Arms Trafficking

'Coming on to arms trafficking. Ladies and Gentlemen, illegal firearms trafficking is another issue faced by the region. The impacts of firearms trafficking in the region are wide-ranging. This has affected not only regional security and law enforcement, but also impacted in the areas of human security, education, economic development, and public health. Illicit arms, their parts and components, and ammunition have caused a breakdown of law and order in some countries and represent a great challenge to sustainable development in some parts of the region. Sri Lanka, my country, suffered for three decades as Sri Lankan terrorists known as LTTE (Liberation Tigers of Tamil Eelam) received weapons through weapon smugglers and extensively using traffickers. Needless to say that drug trafficking and illegal firearms have, or share, close linkages to terrorism, insurgencies and piracy activities, directly or indirectly.

Sea Piracy

'Sea piracy has also become an increasingly prominent issue in the region. Anarchy on land created sea piracy, particularly in the areas of the Horn of Africa and South East Asia. Pirate attacks are not random and do not happen by chance. Pirates use the latest technology to target highly valuable ships in highly trafficked waters. The waters surrounding the Suez Canal and the Horn of Africa are travelled by many ships and are frequently attacked by the Somali pirates. According to the annual State of Maritime Piracy report released by One Earth Future's (OEF) Oceans Beyond Piracy program, there were 54 sea piracy incidents in 2017 around [the] Gulf of Aden compared to 27 in 2016.

'The attacks by pirates in the waters of South East Asia stretching from the westernmost corner of Malaysia to the tip of Indonesia's Bintan Island, the Malacca and Singapore have also been increasing year by year. According to figures from the International Maritime Bureau of the International Chamber of Commerce, there were 42 recorded attacks in 2009. By 2013, it had climbed to 125.

Overfishing and Illegal Fishing

'Illegal unreported and unregulated fishing which is known as IUU fishing and also can be considered as another issue of the Indo-Pacific region, as this has caused rapid depletion of fish stock owing to a combination of overfishing and illegal fishing. As an example, 94% of yellow-fin tuna have been overfished, and the hilsa catch also declined by 90% from 2000 to 2015 around the Bay of Bengal sub-region.

'The practice of IUU fishing has negatively impacted on inter-state relations where some of the countries had to deploy their coastal guard and naval assets to prevent such practices.

Conflicts/Disputes

'Distinguished Ladies and Gentlemen, the region also has long-running territorial disputes. The conflicts in the region can be classified according to the central issue that causes the conflict: the sources of incompatibility. The seven primary sources of incompatibility which encompass the range of internal conflicts in the Indo-Pacific region are: colonial, ethnic, coup, ethno-national, political, religious, and territorial. When ethnic and religious conflicts are concerned, India, Pakistan, Myanmar, Indonesia, Philippines and Bangladesh experience different degrees of crisis based on various ethnicities and religions.

'The Rohingya crisis which emerged in Myanmar in 2015, is one of the prominent crises in the Indo-Pacific region. As per the records of United Nations Office for the Coordination of Humanitarian Affairs (OCHA) by 24 May 2018, there are an estimated 905,000 refugees in Cox's Bazar, Bangladesh and this crisis has become the fastest growing refugee crisis in the world. South China territorial claims, issue of free navigation and the conflict in Indonesia is also prominent in the region.

Issue of Terrorism

'Since we are going to discuss the issue of terrorism in connection with violent extremism in the next session, I am not going to discuss it here in great detail. Let me just mention that the presence of transnational terrorist networks in the Indo-Pacific region is one of the most destabilizing factors we are facing today. This is one of the negative aspects of global connectivity. Terrorists are misusing all the avenues of connectivity, social media and other forms of technology to disrupt the world order. We should be determined to face this threat resolutely and we have achieved great success in this regard.

'Ladies and Gentlemen, in terms of opportunities and prospects, the Indo-Pacific region remains the most potential region for collaboration and mutual inclusiveness. No nation would be able to resolve future threats alone due to [their] inherent complexity and trans-national connectivity. This requires collective responses in order to harness enduring stability, peace and prosperity in the region. Exploring common grounds through consultation, engagement, and building collaborative partnerships in diplomatic, economic and military domains are vital to convert challenges into opportunities. I believe that together we can take the Indo-Pacific region to a new height.

Sri Lanka: Strategic Location in the Indo-Pacific Region

'With that in mind, Ladies and Gentlemen, let me very briefly appraise you on the Sri Lankan perspective on the Indo-Pacific region. Sri Lanka is located at the heart of the Indian Ocean and at the midpoint of the main shipping lane that connects the East to the West. The island is only 10 nautical miles off the world's busiest shipping lane that connects the West to China and South East Asia. As many of you are well aware, we are a nation that suffered from brutal terrorism over three decades. However, the Sri Lankan armed forces defeated the LTTE terrorism completely in Sri Lanka. I am very proud to announce that Sri Lanka has become a role model to the world and it is actually a great achievement for peace-loving nations. Since 2009 we have not experienced a single shot of fire or incident due to unprecedented commitment of the armed forces of Sri Lanka. Unimaginable post-conflict efforts and realistic reconciliation mechanisms implemented by the government ensures that all citizens of the country live with peace and dignity.

'As of now, in light of the regional and global developments, the government of Sri Lanka has embarked on a number of efforts to leverage Sri Lanka's strategic location for a win-win situation to make Sri Lanka a hub of the Indian Ocean. We are always committed to ensure secure sea lines of communication to foster peace, prosperity and development in the region.

Role of the Land Force in Achieving Sustainable Peace - Sri Lanka Experience

'Since the end of the conflict, the Sri Lanka Army has worked in the full spectrum of post-conflict military activities such as de-mining, resettlement of IDPs (Internally Displaced Persons), socio-economic and infrastructure development for IDPs and the Tamil community in the former conflict areas. Our commitment and expertise in these areas is visible through strong civilmilitary relationship, winning the hearts and minds of the people.

'Through our experiences, the Sri Lanka Army has introduced an engagement and assistance policy to convince the people that [the] military is the best partner for sustainable peace and prosperity. It is observed that 80% of the population in the conflicted area is with the military forces today. A successful rehabilitation programme which rehabilitated over 12 000 exmilitants and their reintegration to society has become a model for others to follow. This endeavour is to prevent the re-emerging of radical/extreme movements.

'As the Commander of the Sri Lanka Army, I take this opportunity to make an open invitation for all senior military officers to study the Sri Lankan counter-terrorism fighting strategies and our post-conflict development initiatives. I am sure those realistic strategies will surely enhance knowledge, skill and understanding of your respective militaries. The Sri Lanka Army very sincerely wishes to share our experiences and best practices through mutual engagement with your armies. We would be more than happy to host individuals of your armies to take part in our annual military exercises, training courses and defence seminars.

Conclusion

'Ladies and Gentlemen, in conclusion, it is a well-known factor that the peace of the sea depends on the stability, peace and prosperity of the land. Even though there are many blues around the Indo-Pacific, people live on the land and many situations arise on the land itself. Therefore, land forces inevitably remain the main effort of many situations. Therefore, land forces in the region need to be prepared to address diversified threats in a joint manner and developing more collaborative partnerships with militaries around us. May it be a traditional threat or non-traditional, symmetric or asymmetric, land forces should be prepared to deal with them on land effectively.

'Today in the world, countries are no longer in isolation: what matters in a country will affect the region; and what matters in the region will surely affect global peace and security. Therefore, cooperation and partnership are key to mitigate them and to ensure peace, stability and propriety in our region.

'Distinguished Ladies and Gentlemen, finally, I would like to thank the Chief of the Australian Army and the organizing committee of the Chief of Army Land Force Seminar 2018 for organizing this prestigious forum and [having] the foresight to include elements on the Indo-Pacific's regional global connection.

'The Sri Lanka Army is looking forward to continuing this partnership in the future. Together, let's make the Indo-Pacific a region of peace and prosperity.

'Thank you very much.'

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Figure 11. Exercise Bersama Shield conducted in the South China Sea and in Malaysia and Singapore. Top: With number 2 engine shut down and propellor feathered, a RAAF AP-3C Orion overflies another Orion from the RNZAF over the South China Sea. Middle: HMAS Perth leads Singaporean Navy ship RSS Stalwart and Royal Malaysia Navy Ship KD Kasturi. Bottom: An Australian Army soldier from Rifle Company Butterworth covers six o'clock while Malaysian and Singaporean soldiers conduct room clearances in an urban combat component of the exercise in Malaysia. (Images: DoD)

The Indo-Pacific: Opportunities, Risks and Interdependencies

Mr Michael Shoebridge

Director of Defence and Strategy , Australian Strategic Policy Institute

'Thanks for the opportunity to talk to you this afternoon. I'm Michael Shoebridge, Director of Defence and Strategy at the Australian Strategic Policy Institute.

'What I'm going to cover in 30 minutes is first the idea of the Indo-Pacific, then some key global challenges relevant to the national security communities in each of our regional nations. And lastly I'll say a little about how these challenges might be approached in the Indo-Pacific in ways I hope make sense to the assembled Chiefs of Army and subject matter experts assembled here.

'The views I'll give today are mine, not an 'ASPI line', as ASPI's approach is to allow our different people to hold different views.

'Before I get into the presentation, I thought I'd make observations about the relevance of land forces to a region whose map is dominated by sea.

'A simple capability observation is that control over large parts of the sea and trade routes can be exerted from land as part of an integrated air, sea, land, cyber and space force.

'In our region, there's also the historical fact that land forces have dominated

a number of Indo-Pacific states' militaries, because of these states' focus on internal security and nation building.

'First, what is the Indo-Pacific? What is being connected? Why does it matter?

'The Indo-Pacific is a term that provides a way of thinking about our region that seems useful in understanding events and trends. It is starting to replace the term Asia-Pacific, mainly because the connections across the broader Indo-Pacific are more obvious than they were even as short a time as a decade ago.

'The Indo-Pacific concept started to be used formally in Australia at the time of the *2013 Defence White Paper*, after being raised in the think-tank world—notably by Rory Medcalf, then at the Lowy Institute, and now head of Australia's National Security College. It was a contested term then, much more than now, as people had invested a lot of intellectual effort and careers into the idea of the Asia-Pacific.

'In the US in particular, the Asia-Pacific made particular sense in the Pentagon because there was a nice clean boundary between PACOM (US Pacific Command) and CENTCOM (US Central Command), and India was not within PACOM's area of responsibility. The bigger background there, of course, are the obvious physical and economic facts—like California with an economy the size of a G-20 economy being on the Pacific coast. This ensures that any big US strategic concept will have 'Pacific' in it.

'In China, the idea of the Asia-Pacific continues to be appealing, maybe because from China's perspective it is what China sees looking out from its location on the Asian landmass.

'In Australia though, starting in the early 2010s and accelerating in recent years, the Indo-Pacific concept makes sense. In the most pragmatic way, this is shown by a single image—a map that appeared in the *2013 Defence White Paper* and has been used in other documents since—including the Government's *2017 Foreign Policy White Paper*.

'While as a rule I don't use Powerpoint in presentations, today I've made an exception to be able to show you this map—because I think that it conveys some big ideas very clearly and so can be a supporting prop for my remarks.

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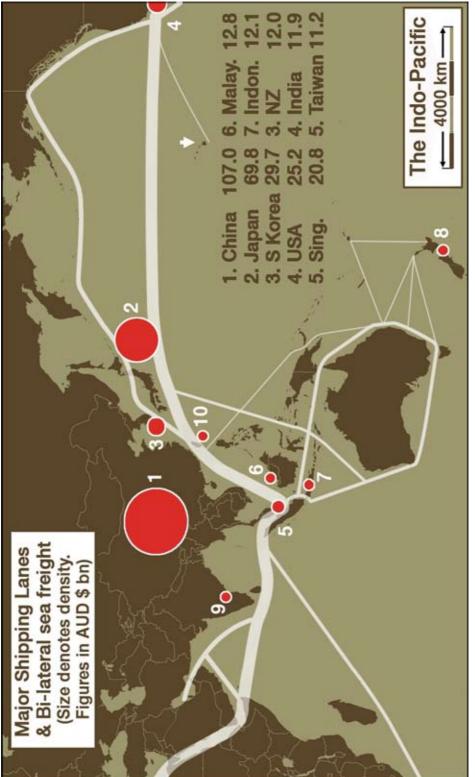


Figure 12. Major shipping lanes in the Indo-Pacific (Image [derivative]: Major Conway Bown)

'Turning to it now, you can see the biggest feature on it is the set of lines and tracks shading from yellow to orange to bright red. They are not 'sea lanes' as you usually see them, but the actual tracks of thousands of ships mapped and plotted onto the map. The density of the ship traffic is lightest when it is light yellow and most dense when it is bright red.

'As you can see, the bright red line is deepest coming out of the Middle East, around the base of India and Sri Lanka, up through the Malacca Straits into North Asia. This is like an umbilical cord connecting Asia into Europe through the Pacific and Indian oceans. There are intense red bands within North Asia and between North Asian and South East Asian states.

'Looking across the Pacific, you can see a bright red track at the top of the Pacific across to the US, but even more noticeable is the wide band of yellow covering the Pacific between Asia and the US.

'What I think we can draw from this set of patterns is that these shipping traffic densities are a proxy for connections and interdependencies. They show the Indo-Pacific as a system of flows and interdependencies, mainly from an economic perspective.

'The patterns show the deep interdependencies within Asia (North and South East), but also across the top of the Indian Ocean and between the US and the Asian landmass.

'This is globalisation in action, with all the opportunities, risks and interdependencies that it brings.

'But there's another perspective here also. Unlike the Asia-Pacific, where the focus is on North Asia, this Indo-Pacific concept puts another part of the region in a central position—South East Asia. South East Asia turns out to be a set of nations which have intense connections with all other parts of the Indo-Pacific and within South East Asia itself.

'But South East Asia is also located so centrally that it sits across a small set of bottle necks around the most intense trade flows (the Malacca Straits being an obvious example).

'I'll end this section with a quote from the *2017 Foreign Policy White Paper*, which defines the 'Indo-Pacific' as the region ranging from the eastern Indian Ocean to the Pacific Ocean connected by South East Asia, including

India, North Asia and the United States. So, the Indo-Pacific is not the entirety of the Indian and Pacific Ocean littorals, but is bounded and defined by the trade flow connections.

'Now to move on to some national security trends that affect all of us in the Indo-Pacific and that we will need to deal with together in coming decades. I've selected eight that I'll scamper through quickly.

'While I do so, I'd like you to keep the 'strategic geography' of the Indo-Pacific in mind.

Global Population Growth.

Global population growth is driving a lot of change, particularly when combined with rising standards of living across Asia (the world has over 7.6 billion people now in 2018, [growing] from 1.5 billion to 6.1 billion over the 20th Century).

'Last year, the UN reported that the current world population of 7.6 billion was expected to reach 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion in 2100. Demand for food, services, manufactured goods from this larger, richer world population is straining food production systems, depleting ocean reserves, causing pollution and environmental damage to global ecosystems.

'Population debates are happening in many parts of the world—Japan, Singapore and several European countries being examples.

Global Demographics.

Global demographics are changing different societies and economies in particular ways. This divergence will increase in coming decades. The broad features are an ageing North Asia and Europe, a young Africa and Middle East, and a mix of ageing with growing and young populations in South East Asia, the US and Australia.

Growing Mass Urbanisation.

With an increasing number of megacities routinely located in coastal regions, Growing mass urbanisation will create the conditions for large scale natural and human disaster recovery demands. Many of the world's biggest cities are getting bigger still. The number of megacities—urban areas with better than ten million people—increased to 37 in 2017. Most of the world's mega cities are in the Indo-Pacific.

Climate Change.

On top of the demands of the growing global human population, climate change is changing the patterns and extent of arable land. It is also causing a rise in extreme weather events that can cause large-scale natural disasters. Not new news for anyone living in or looking at the South Pacific.

Mass People Movements.

Mass people movements internationally, local conflicts and internal security tensions are all likely symptoms from the combination of these global trends.

'These five challenges are regional ones, but they are also internal challenges for each nation, from the smallest Pacific or Indian Ocean island state to major strategic and economic powers like China, Japan, India and the United States.

'Some states will necessarily need to devote considerable time and effort to managing their internal challenges—for example, the challenges China faces from its rapidly ageing population and the environmental consequences of its rapid economic growth, or the Mekong states' challenges while benefitting from hydro-power but managing the human, security and ecosystem effects of that development.

The Information Explosion.

Humans can store and access more data more quickly than ever before. Humans are also creating and collecting more data than ever before. We are '...at the very beginning of the age of big data. Consider that 90% of the data that's now out there about us has been collected in just the last two years. Last year alone, more personal data was harvested than in the previous 5 000 years of human history.'*

Technological Change.

Technologies are undercutting and empowering different parts of economies and societies. Data analysis is disrupting more fields of endeavour, whether [they be]:

- financial systems, through high speed trading or crypto currencies,
- taxi drivers, through Uber and Ola,
- booksellers, through Amazon and Apple,

^{*} Taken from Forbes online: https://www.forbes.com/sites/courtstroud/2018/04/27/ what-you-need-to-know-about-big-data-stripped-of-all-thegobbledygook/#a7c14e81a757

- traditional stores, through Alibaba, Amazon and Tencent,
- global communications, through next generation technologies,
- supermarkets, through Amazon,
- advertising [agencies], through Google, Facebook, Alibaba and Baidu,
- media organisations, through online journalism and social media content creation, and
- government revenue systems, through the hard-to-attribute profit and revenue flows of online commerce.

'This change has just started. Medicine, government and warfare are all likely to be transformed by this data-driven technological change. The speed of change is obviously outpacing not just policy and regulation, but Government leaders' and officials' abilities to comprehend the rapidly emerging elements.

'The eighth and last big global trend we all know about, but which is still important to note, is the shifting balance of strategic and economic gravity into Asia—to North Asia, but also South East Asia, which was based both on the foundations laid after the Asian Financial Crisis and the 'peaceful rise' era of China under Deng Xiaoping.

'That 'peaceful rise' approach combined with many countries' adoption of engagement with China under the Bob Zoellick concept of China as a responsible stakeholder that would continue to liberalise and open over time.

'This drove massive foreign investment inflows to China, technology transfers and supply chain relocations into China. Raw material exports to China from Australia, Brazil, the Middle East and Africa also featured (and continue).

'It's worth remembering the economic significance of South East Asia, notably, the fact that this zone of both prosperity and potential has some 600 million people along with habits of cooperation and integration.

'India, as another example, is experiencing high year-on-year growth in its GDP, with much further potential because of its favourable demographics and resilient democracy.

'While I'm saying economic gravity has moved towards Asia, it's critical to remember that this is because of Asia's rising prosperity.

'At the same time though, the levels of prosperity in the EU, North America, Australia and the UK remain unique in human history. They remain societies of enormous capability, prosperity and innovation.

'The point here is Asia's economic rise is not being accompanied by the economic decline of 'the West'.

'The decrease in relative power is often lazily called 'decline'. If the Romans had had this kind of 'decline', we'd still be living in a world with Roman emperors and Roman legions.

'The Zoellick (Bob Zoellick was Deputy Secretary of State under George W Bush 2005-2006) 'responsible stakeholder' framework let everyone engage despite different strategic interests and values, while working to 'socialise' the Chinese Government and economy into the global order.

'There was some idea that China would want some—but limited—changes to this global order and global institutions, but it was really all about China being incorporated into that system and being changed as this occurred.

'These global trends may be old news, but their implications are still pretty far-reaching.

'Thinking of the Indo-Pacific, these trends resulted in rapid military modernisation across Asia—giving nations that have been internally focused the ability to reach out and touch each other against the backdrop of latent historical territorial and sovereignty disputes in a region with weak regional security institutions—ASEAN and all its children—the ASEAN Regional Forum (ARF), the ASEAN Defence Ministers Meeting Plus (ASEAN DMM+) et cetera.

'New news though, is the return of the state actor to international security.

'Let's remember that since September 2001, counter-terrorism has been an abiding priority for many governments and remains an enduring challenge.

'While many governments and policy thinkers were focused on counterterrorism and globalisation since 2001, some analysts and strategic thinkers were noticing a return of state-focused national security was brewing. 'Russia's sense of anger, grievance and humiliation over the loss of its empire, its status and much of its power was causing a reaction. NATO's expansion towards Russia combined with economic disaster for Russia in the 1990s—with GDP contraction of some 40%, which set the conditions for a resurgence of Russian nationalism.

'The Russian state, under Vladimir Putin, used energy sales to reinvest in 'malign silos of excellence':nuclear weapons, Russian intelligence agencies, cyber technologies (state and non-state), a re-equipped, rapidly deployable military and, of course, a hybrid style of 'lawfare', disruption and warfare.

'He did this despite his people's clear needs for national investment in healthcare (to combat alcoholism and deal with an ageing population), pensions, infrastructure and education.

'Iran proceeded to build proxy forces like Hezbollah, and later to pursue nuclear weapons technologies.

'The DPRK continued to pursue security through nuclear weapons and missiles, while calibrating aggression and negotiations to get the benefits of international food aid and avoid the worst effects of isolation.

'China's 'peaceful rise' era under Deng Xiaoping is over. And we are now seeing the Chinese state start to show how it intends to use its growing economic and military power in the world—in ways that are disturbing other states and powers.

'There is a dawning realisation that the [nature] of particular states matters really matters. The globalisation debate had obscured this. Our trade liberalisation concept seemed to imply government convergence, but this has simply not occurred.

'The most difficult new challenges our national security communities need to comprehend and deal with relate to the nature of particular states in the world. Notably, I'm talking about the authoritarian governments in Russia, China, the DPRK and Iran.

'Authoritarian states are more willing and able to use military, corporate, intelligence, economic and diplomatic tools to advance their own interests and to disrupt other governments and societies.

'There is a real challenge to other systems of government in interacting

with and relating to these governments. And many nations are still working through how this can be done so that there is cooperation in areas of mutual advantage and interests and, as importantly, there is clarity around how we will each manage areas where our national interests are quite different—in tension, or even opposed.

'This is the nature of state-to-state interaction we see in history, but many people had perhaps lost sight of this during the high point of the era of globalisation thinking.

'A major difference between China and the other authoritarian regimes is GDP. China's forecast GDP for 2018 is \$US13.1 trillion. Compare that with Russia's \$1.5 trillion, Iran's \$398 billion and North Korea's \$16 billion.

'While per capita, GDP for China is still low, the Chinese state's control means it can allocate high levels of funding to activities that are part of its longer-term plan for building influence and power. Its level of resourcing can't be approached by the other three regimes.

'You can see this in the scale of investment proposed under the Belt and Road Initiative (BRI) and in case-by-case examples in countries including those in South East Asia, the Indian Ocean and the South Pacific.

'Finance is often soft loans—which, unlike development aid, have to be paid back, which often creates considerable leverage and influence.

'The challenges in engaging the Chinese state flow from the nature of the Chinese government (notably its control over law and over the corporate world in ways that democratic governments simply do not possess), but they also come from more practical things that are open to change should there be decisions to do so.

'One big challenge flows from the Chinese state's militarisation of disputed features in the South China Sea, despite an arbitral ruling from The Hague.

'We may have different views around the tribunal (at the Permanent Court of Arbitration) and its ruling (although it is a dispute resolution mechanism state parties to UNCLOS (the United Nations Convention on the Law of the Sea) signed up to).

'But the larger issue when it comes to cooperation and trust is the gap between President Xi's words in 2015 committing not to militarise the South China Sea and the facts we see about the militarisation on the artificial structures in disputed parts of the South China Sea.

'De-escalation of the tension in the South China Sea is possible here to the benefit of the entire region. Imagine what a message of peace dismantling of the military facilities on these disputed structures would send.

'Returning to the Indo-Pacific map, and combining this with the global trends I have sketched out, this brings me to the 'so what' bit of the presentation.

'If the Indo-Pacific is a connected system of states and economies, with interdependencies across its economies as a result, and if the global trends I sketched out briefly cannot be dealt with by any one nation acting on its own, what then is the way forward?

'I think this was the big issue canvassed at the 2018 Shangri La dialogue and articulated in very common ways by a considerable number of different nations' speakers

'Any way forward needs to do two things.

'Firstly, it needs to deal with the large set of cumulative common challenges all of us in the Indo-Pacific face:

- those from population growth and the resulting resource pressures
- changing demographics
- mass urbanisation, particularly in low lying and coastal areas
- climate change and the effects on arable land and extreme weather
 events
- mass people movements resulting from these stresses
- the information explosion and technological change, and lastly
- the shift in strategic and economic weight to the Indo-Pacific.

'All these drive connectivity and cooperation.

'Secondly, we must be clear-eyed and honest in understanding and articulating areas where cooperation will be hardest.

'To pretend otherwise will undermine our efforts.

'Clear differences are appearing owing to the assertive use of economic and military power by authoritarian states. But none of us needs to take the current situation as a given. We each have agency to affect it, particularly if we work together. Seemingly intractable disputes can be resolved cooperatively—as we have seen in the recent dispute settlement between Australia and East Timor.

'One way of integrating the areas of common purpose and those with sharper differences is through the idea of a free, open and inclusive Indo-Pacific.

'This idea works with existing regional security institutions like ASEAN and its supporting events like the ARF and ADMM+ .

'Indian Prime Minister Modi devoted his speech at this year's Shangri La meeting to this vision for the Indo-Pacific. In it, he described India's common pursuit with the US of a shared vision of an open, stable, secure and prosperous Indo-Pacific region.

'He noted the many layered relationship India has with China, as the world's two most populous nations and two of the fastest growing economies.

'Japan's Prime Minister Abe also continued to set out the shared vision of a free, open and inclusive Indo-Pacific. This year, US Defense Secretary Mattis made it the centre of his speech, as did our Prime Minister.

'At its heart this vision recognises that rules and power interact—and it is in all states' interests, including major powers to restrain the use of their power to allow rules to operate.

'Such a vision involves compromise, including by great powers like China, India, the US and Japan, who might otherwise seek to dictate terms by the unilateral use of coercive power.

'This restraint is not only possible, but it is necessary if we are to understand and address the societal, environmental and security challenges of our connected region.

'I am confident that Australian leaders on both sides of politics see Australia as playing a constructive role as a regional partner in the Indo-Pacific, with deepening partnerships across this large region. 'The resources committed through the Defence White Paper ensure the capacity to do so. And activism is part of our national DNA.

'Responding to the shift in strategic and economic weight to our region is likely to drive a shift in focus in the Australian Defence Organisation back to our region, and perhaps foster even more creativity than that set out in the 2016 Defence White Paper.

'The Australian Army has deep partnerships across the South Pacific, from Fiji, PNG, to Tonga, the Solomons and other Pacific states—and has cooperated in regional security efforts like Bougainville and RAMSI (the Regional Assistance Mission to the Solomon Islands), as well as working with South Pacific partners on peacekeeping and international deployments.

'Similarly, the Army is part of broader regional engagement.

'In my view though, our region's challenges call for changes to our Defence Force's posture and presence, with land forces playing a bigger role in this, whether through cooperation on surveillance, engineering reconstruction and peacekeeping with South Pacific partners or with South East Asian partners.

'Prime Minister Morrison's first overseas visit to Indonesia underlines the priority Australia is placing on growing our strategic partnership with Indonesia. And army-to-army cooperation will, along with maritime security and surveillance, be a big part of that agenda; in part because of the prominence in Indonesia of its land force.

'At the same time, the requirements for our ADF to contribute to deterring high-end conflict remain. This is the driver of the land force modernisation program you'll no doubt hear a lot more about over the next few days.

'Armies and defence forces are at their best when they are working together to prevent and deter conflict, and when their capabilities and their professionals can be used in support of civilian needs.

'The good news is that the list of global challenges with prominence in the Indo-Pacific where armies can cooperate like this in coming decades is long. I look forward to hearing more about your deliberations.

'Thank you.'



Figure 13. Members of the Australian Army, the Chinese People's Liberation Army, US Army and US Marine Corps are welcomed to Darwin to commence Exercise Kowari, a tri-lateral exercise to foster trust and cooperation between the three nations through an outback survival exercise with the Australian Army's Regional Force Surveillance Unit, NORFORCE. (Image: DoD)

Shoring Up Regional Partnerships

Mr Tom Hamilton

Acting Deputy Secretary, Strategic Policy and Intelligence Group, Department of Defence

'Thank you everyone for having me today, I have a long list of people to acknowledge here. I am going to cut it short in case I miss anyone but I would like to acknowledge Chief of Army, Chief of Air Force, I see here. I'm not sure if Chief of Navy is still here but I should acknowledge him. In particular though, I would like to note all of our international partners who are here today. International engagement is core to the business of Defence and it's really important for us to see you all here today. I'll also note the many senior leaders in the audience, but particularly I'd like to note the many future senior leaders that are here and hopefully this seminar, this series of presentations and the panel, will be helpful to you as you develop your careers and your habits of strategic thinking.

'As Peter mentioned, my name is Tom Hamilton. I am the acting Deputy Secretary of Strategic Policy and Intelligence Group in the Australian Department of Defence. It's my privilege today to speak to you on the topic of the *Indo-Pacific: The Region of Global Connection*. This is an interesting and somewhat paradoxical question given the broader theme of the conference—namely the application of land power in the Indo-Pacific. Certainly our region is largely defined in maritime terms. Australia, as our national anthem reminds us, is 'girt by sea' and the geographic designation 'Indo-Pacific' is quintessentially maritime, directly connecting two large expanses of ocean.

'For Australia the term is, and has been for some time now, a reflection of the realities of our geography. But what does it mean for you as leading Army thinkers, leaders and strategists? Let me address this question from a broad perspective on the region first and then suggest some areas in which Defence, and land power in particular, can serve to enhance Indo-Pacific security. As our colleague from Sri Lanka [Lieutenant General Senenyake] previously remarked, the Indo-Pacific is one of the world's most diverse regions economically, politically, demographically and culturally. Its identity has been shaped by the eastward shift in economic and strategic power over recent years, an identity that is coming into even sharper relief. As Mr Shoebridge set out, maritime trade is increasingly a significant characterisation of our region. In summary, the United Nations' Conference on Trade and Development estimates that roughly 80% of global trade by value is transported by sea. Of that volume, 60% of maritime trade passes through Asia, with the South China Sea carrying an estimated one third of global shipping, and I think the chart Mr. Shoebridge put up illustrated that guite well. Much of this growth has been fuelled by the rise of China and India, but also others. Australia lies on the longitudinal crossroads of the Indo-Pacific and is significantly invested in continuing stability across the region, stability of which we cannot take for granted. The region is undergoing a profound strategic transition that offers the region profound opportunities for both economic development and also cooperation. But it also poses challenges which will have to be at the core of planning for the future of land forces.

'These ideas resonate with the six key strategic drivers of our environment which the *2016 Defence White Paper* set out. These six drivers are:

- the US-China relationship
- · challenges to the stability of the rules-based global order
- major power competition
- the enduring threat of terrorism
- state fragility and the pace of military modernisation
- the emergence of complex non-geographic threats such as cyberthreats and threats in space.

'All of these drivers have manifested to varying degrees in the Indo-Pacific region and all of them are relevant to the development and application of land forces. In this respect it's very clear that the region has benefitted enormously from the decades-long engagement by the United States. The stability that we have come to enjoy and rely so heavily on has, in no small measure, derived from the ongoing US presence in the region, and Australia strongly supports this presence continuing and expanding. Continued stability in the region is now inextricably linked to the evolving relationship between the United States—as it grows its presence—and China, and ensuring that this relationship remains constructive and productive. For Australia, our ongoing relationship with both the US and China will be crucial in different ways and the way the government approaches our defence strategy reflects these differences. In respect to the US, our alliance is based on shared values and will continue to be the central platform of our strategic planning. We have stood together in every major conflict since World War I, and we will continue to strengthen the alliance by supporting the US' role in underpinning the stability of our region and working closely with the US and coalitions of like-minded nations to address common global security challenges. The US force posture initiatives in northern Australia are a key element and example of this. The Marine Rotational Force-Darwin presents a range of opportunities for combined training and engagement with regional partners, particularly land forces, as well as providing inter-operability benefits for Australia and the United States, and ensuring that we are both postured to respond to contingencies and natural disasters in the Indo-Pacific.

'At the same time, Australia welcomes and recognizes China's continued economic growth and the opportunities that this is bringing for Australia and other countries in the Indo-Pacific. We'll continue to seek to deepen and broaden our important defence relationship with China. We engaged with China through multilateral and bilateral exercises, most notably Kawari and Pandaroo, which focus on non-traditional security challenges. Just last week, we opened Exercise Kowari, a trilateral Australia-China-United States initiative focusing on environmental survival skills, designed to encourage team-building and promote inter-cultural cooperation. Later this month, we will host our bilateral exercise with China which aims to foster relationships at the junior officer, NCO and soldier level through shared adversity and resilience-building activities.

'I mentioned a moment before economic growth in the region. With that growth has come the opportunity for military modernisation, which is occurring at a rapid rate. South East Asia has been amongst the biggest global defence spenders over the past decade. Expenditure in the region has risen by almost 10% annually since 2009 and regional nations have been acquiring new war-fighting capabilities, including new fighters, surface warships, submarines and a range of other advanced capabilities. This military modernisation in the region is strengthening regional resilience, increasing the capacity of regional powers and opening up new opportunities to improve interoperability. This obviously presents new potential ventures for cooperation with more capable partners but it also risks heightening tensions and the potential for miscalculations. Transparency around capability and intent will be crucial for minimising the risk of miscalculation and possible conflict. This is why we endeavour to articulate Australia's long-term strategic outlook and planned capability acquisition in forums such as this and through government statements such as White Papers. Indeed, this is why successive publication of Defence White Papers at regular intervals is an essential part of our strategic messaging. It improves domestic and regional understanding of our Defence posture and capabilities as well as the policies that underpin them.

'The last such statement in 2016 is especially attentive to the tightening connections between Australian national interests, the Indo-Pacific region's security, and the rules-based global order. Indeed, this underpins the rationale for what we have set out as three equally weighted Strategic Defence Objectives (SDOs) which underpin our security planning.

'Firstly, deter, deny and defeat attacks on, or threats to, Australia and its national interests and northern approaches.

'Secondly, to make effective military contributions to support the security of maritime South East Asia and support the governments of Papua New Guinea, Timor-Leste and of Pacific Island countries to build and strengthen their security.

'And thirdly, to contribute military capabilities to coalition operations that support Australia's interest in a rules-based global order.

'In response to the rapidly changing strategic landscape and these three Strategic Defence Objectives, we require land power to be more agile and potent than it ever has been before. This must include greater mobility, lethality, protection and situational awareness to ensure land power can deploy quickly to where it is needed, apply force effectively, and achieve diverse missions and return home safely.

'Australia's responding to this demand by investing in new advanced capabilities such as protected vehicles, strategic lift to enable the deployment of our forces, including into highly urbanised and littoral environments, so they can conduct a broad range of tasks, from leading humanitarian assistance to making contribution[s] to high-end conflicts. We're investing in building longer range firepower, enhanced intelligence, surveillance and reconnaissance capabilities to improve the reach and protection of our forces. We're investing in our Special Forces capabilities that contribute to whole-of-government efforts to counter terrorism with leading-edge equipment that can be refreshed as new technology or threats emerge.

'Importantly, these investments all rely on a relationship with industry to continue to evolve and respond to the growing array of threats; to offer our armed forces the capabilities to meet the demands of our environment. That's why it's critical we're in the process of building a more robust, resilient and internationally competitive industrial base that better meets our Defence capability requirements. Just this year our Defence Industrial Capability Plan was released. This is a foundational document that provides a baseline of our industry today and a roadmap for where we need to get to. This plan and other policies such as the export strategy also recognise that a greater emphasis on industry, as a critical input to capability, can contribute to Australia's—and also our international bilateral relationships'—defence goals in the Indo-Pacific.

'Greater defence industry cooperation with partners and allies such as the US, will help enhance the interoperability of our forces. And a stronger Australian defence industry—with an eye to the global market—will also help find new avenues for cooperation with partners in the region, helping to build closer links economically and militarily, particularly in our neighbouring regions. Our Defence Industry Policy has a strong emphasis on innovation with the Next-Generation Technologies Fund and Defence Innovation Hub providing a single innovation development pipeline. This innovation is vital to ensuring that the ADF maintains its capability edge. Given the pace of technological change that I referred to it is absolutely critical that our industry, with our support, continues to evolve and adapt and meets the capability needs of the Australian Defence Force.

'This is particularly important as efforts in non-traditional forums and nontraditional theatres will see us work together with partners to combat new and emerging threats, such as in the cyber and space domains, as well as from hybrid warfare. There is an increasing range of options at the lower end of the conflict spectrum which form a grey zone between traditional notions of war and peace. These options may not necessarily trigger conventional military responses but may nonetheless pose great strategic risk. We need to better understand these risks and to develop better, more effective responses. However, Defence's ability to contribute to building a stable and secure Indo-Pacific region is not limited to these capabilities.

'The White Paper in 2016, for the first time, prioritised international engagement as a core function of Defence, and for good reason. The stability and security of the Indo-Pacific depends more than ever on close partnerships that support international order and rules-based systems. Land power can help develop and provide value add-ons in this international engagement construct. The Army of the future must seek to actively engage and shape our region, rather than just respond to the actions of malevolent forces. Army must continue to be proactive in rethinking our contribution to joint war fighting, philosophy, strategy and concepts so that we as a Defence organisation can anticipate and deal with challenges in cooperation with partners before they evolve into conflicts. It's for that reason that Defence has increased international engagement, particularly with the countries of the South Pacific and South East Asia, to support our collective capacity to address common threats and security challenges. We're doing this through increasing ADF deployments into the region, supporting increased capacity-building efforts, and strengthening the security architecture of the region. In doing so, we'll continue to further embed people-to-people links between land forces in the region and [the] habits of cooperation at all levels.

'Exercises such as Jabiru, co-hosted by Australia and Thailand in May 2018, exemplify the interoperability and confidence-building objectives of well-designed international engagement. This exercise involved over 100 participants from military, policy and government organisations from

over 20 nations in the Indo-Pacific. It's the longest continuously running peace operations-related exercise in the region, with 2018 marking its 20th anniversary. It serves to improve understanding of strategic and operational planning for participation in complex and multi-dimensional UN peacekeeping operations, including lectures and presentations across a wide range of peacekeeping topics: international humanitarian law, rules of engagement, protection of civilians, and women, peace and security. While our involvement in this exercise is greater than just land forces, it's a key enabler for regional land force participation in peacekeeping operations and is a very good example of Australia's joint leadership with South East Asian partners contributing to regional peace and security, and a spirit of cooperation.

'I mentioned before military modernisation in the region and how this is changing the strategic landscape. Developing effective doctrines that address the challenges of leading and deploying more capable military forces, in particular land forces, will be crucial for addressing some of the challenges in the region. Even more important will be instilling traditions of transparency and information sharing to reduce risks and strengthen mutual understanding. This is why Australia so strongly supports the Association of South East Asian Nations and other multilateral organisations in the Indo-Pacific. By strengthening these broader multilateral architectures, we underscore the rules-based order that the international system has been built on and the habits of cooperation with regional partners, habits that will always stand to benefit all of us in a crisis.

'Cooperation through strengthened regional architectures is essential. It helps normalise and build expectations of transparency and ensures that strategic competition does not turn into conflict. In this context, I should note that mini-lateral groupings are also proving to be useful forums for facilitating countries coming together to tackle emerging issues. I mentioned, in this context, in February this year the former Defence Minister hosted her counterparts from many countries in the region in Perth for a sub-regional meeting to address the ongoing challenge of terrorism and how we can work to address it. This forum, which Indonesia will host next year, draws together longstanding assistance that Army has provided into the region in relation to counter-terrorism. We conduct annual counter-terrorism exercises with most of our South East Asian partners and have provided, and will continue to provide, training at bilateral levels. But we're also prepared to take action in support of the challenges faced by those partners, such as the support we provided to the Philippines in relation to the siege in Marawi.

'The Army in Motion and Accelerated Warfare concepts, as recently articulated by the Chief of the Army, are reflections, I think, of the Army recognising these challenges in the Indo-Pacific region, and realising that land power and land forces need to be transformed so that they can continue to have a positive and enduring effect and contribute to a stable Indo-Pacific region.

'In conclusion, let me say this: now, more than at any other time, an ability to combine capabilities, operate in cross-domain environments and anticipate a more diverse range of challenges and threats, will determine our success in securing Australia's national interests. How we must do so, at the same time, is to be guided by innovation and creativity, and by agility, given the nature and pace of change in our region. As competition continues to increase we need to shore up our partnerships to develop and widen shared interests and interdependence. We need to do so on the basis of clear rules-based systems, ensuring that we have levels of hard power that we can rely on and that permit us to safeguard and enforce these same systems. In that regard Army is, and will continue to be, a critical part of the Australian Defence Force's capabilities.

'Thank you very much.'



Figure 14. A member of 1st Battalion, Royal Australian Regiment demonstrates room clearance drills to members of the Royal Thai Army during Exercise Chapel Gold 2018 in Thailand. Chapel Gold is an Australian-Thai exercise where jungle training skills and counter-insurgency techniques are honed. (Image: DoD)



Figure 15. A platoon commander from the Royal Thai Army briefs the Officer Commanding Alpha Company, 1st Battalion, Royal Australian Regiment during the jungle warfare / counter insurgency exercise, Exercise Chapel Gold 2018. (Image: DoD)

Session Two

Land Power and Countering Violent Extremism

Synthesis

The foundation for this session was laid by speakers in Session 1, with violent extremism identified as a regional threat to varying degrees by most speakers. The role of technology and information was articulated as a key concern in the context of countering violent extremism, while the vital role of people and partnerships are also prominent themes in this session. Presenters included Major General Adam Findlay, AO, Commander Special Operations Command, Australian Army; Lieutenant General Rolando Joselito Bautista, AFP, Commanding General Philippines Army; Ms Katja Theodorakis, Programme Manager for Foreign/Security Policy and Counter-Terrorism at the Konrad-Adenauer-Foundation; and Mr Duncan Lewis, AO, DSC, CSC, Director-General, Australian Security and Intelligence Organisation.

Violent Extremism

Presenters were clear that they considered the term 'violent extremism' (VE) covered a wide range of violent, non-state activity. In an historical context, the term has been expanded beyond 'terrorism', which has tended to be associated with activities perpetrated by Islamic terrorist organisations such as Daesh. The term 'terrorism' was particularly applied in this way after the September 11 attacks on the World Trade Centre buildings in New York in 2001, following which the then US president, George W Bush, declared a 'War on Terrorism'. Mr Lewis clearly highlighted that violent extremism is

not the sole preserve of Islamic organisations such as Daesh, indicating that threats include right wing supremacists and left wing extremists. There is no clear definition of VE.

From the Australian perspective, VE is defined by the Australian Department of Foreign Affairs and Trade (DFAT) as:

"...a willingness to use unlawful violence or support the use of violence by others to promote a political, ideological or religious goal"."

A key focus of the Australian Government in this area is to 'combat the threat posed by home-grown terrorism and to discourage Australians from travelling overseas to participate in conflicts',² with Australia's programmes in this area managed by the Department of Home Affairs.

More broadly, there is no international definition of VE, with DFAT noting violent extremism 'is a complex phenomenon that differs substantially across, and within, countries'.³ As such, the impacts, interpretations and responses to violent extremism are diverse. Key themes emerging from this session are explored below.

Countering Violent Extremism through Partnerships

Major General Findlay noted in his speech that Australia has had operational experience in countering violent extremism since 2001 and emphasised that this experience highlighted the important role of relationships. This echoes the Chief of Army's reflections on the power of partnerships and the emphasis on international engagement in the *2016 Defence White Paper*.⁴ The types of relationships called for cover a broad spectrum including domestic partnering between government agencies as well as bilateral and multilateral international partnerships. Major General Findlay observed that technology-led global interconnectedness meant that local threats could become global, and global, local. As such, he stressed that 'no one agency/ force/department owns the response to violent extremism'. Mr Lewis observed that our approach to VE needs to be cross-agency, cross-service, cross boundaries and cross-languages.

Major General Findlay also highlighted the value of soft cooperation and indicated that Australia was engaging multilaterally on VE through agreements such as the ASEAN-AU Memorandum of Understanding on Cooperation to Counter International Terrorism. The value of multilateral forums regionally was a key point made by speakers in Session 1.

In the Philippines, Lieutenant General Rolando Joselito Bautista expanded the interpretation of partnerships beyond governments to include Army collaboration with civilian entities in the domestic fight against Islamic State in the Levant (ISIL) infiltration, an approach that led to the liberation of Marawi. Lieutenant General Bautista echoed Major General Findlay's emphasis on the importance of partnerships and stressed that key components of international partnerships could include intensifying bilateral and multilateral exercises and increasing information sharing. He noted that foreign intelligence and technical support were important in the battle for Marawi. The development of a collective international strategy to eradicate extremist ideals formed part of Lieutenant General Bautista's 'Call to Action' against violent extremism.

Ideology and cultural awareness

Following Lieutenant General Bautista's talk and the identification of 'ideals' as a key component of countermeasures to VE, Ms Katja Theodorakis examined the nature of ideology in VE and identified the role of narratives in countering extremist ideology. Ms Theodorakis cautioned against adopting an 'us versus them' or 'good versus evil' binary construction of the enemy, noting that while binaries are effectively employed by violent extremists, responses or countermeasures are likely to require a nuanced understanding of extremist cultures. She reiterated Mr Lewis's caution against identifying Islamist organisations as the sole source of VE threats, also pointing to the potential for political rather than religious ideology to fuel extremist activities, such as a far-right ideology.

Regardless of the genesis of VE, Ms Theodorakis noted that common characteristics to the effectiveness of messaging are a strong sense of self-understanding and the adoption of cultural narratives. Additionally, she noted that VE groups tend to advocate from an ethical core that has moral and emotional appeal. For example, Islamic extremists have used poetry to cast a romantic and emotional attribution to Islam with the messaging addressing notions of justice and injustice in order to promote the idea of legitimacy and 'just terror'. An important feature of storytelling is that it allows people to relate their own experience to the experiences of others, providing an avenue for people to identify shared cultural values or morals while simultaneously conveying different experiences leading to different perspectives.⁵ In the information age, the effective use of social media provides a new mode of storytelling with which people can engage, both individually and as a group.

Speakers identified that while social media has been used effectively by violent extremists, this form of communication is not just the province of such groups and that land forces can also use the medium to similar effect. By virtue of being the force closest to communities, Army has the capacity to undertake direct dialogue with them to further explore, potentially influence, and even co-create narratives.

Ms Theodorakis' assertion about the role of land forces echoed Major General Findlay, who suggested that a key strategy for Army is to understand people's mindsets. Both Major General Findlay and Ms Theodorakis noted that experience has shown lethal force can have a negative effect when countering VE. It can often reinforce extremists' narratives around 'just terror' thus falling into an 'ethical trap', as well as inspiring retaliatory attacks and fuelling recruitment.

Major General Findlay also suggested that rather than concentrate on purely military activities, Army could place more emphasis on assisting civilian actors who may be better placed to counter the effects of extremists. These civilian actors would hold positions of influence such as teachers, medical workers, aid organisations and business owners. The effectiveness of these non-military influencers would be predicated upon, and derived from, many factors, including proximity to the target audience, inherent trust and the ability to induce 'soft' cooperation by the local population.

Lieutenant General Bautista's experience in Marawi supported this approach, indicating that a key lesson learned from the conflict was the use of a two-pronged strategy of hard and soft power. Soft power was crucial to earning the trust of civilians in garnering support for military actions and legitimising the use of force. The Philippine Army strategically engaged with community organisations and key community influencers to build trust and to 'contain the enemy psychologically'. A specific narrative of a 'servant soldier' committed to protecting the people was cultivated and was coupled with showing respect for cultural and religious heritage.

Accelerated Warfare

Accelerated Warfare is described in the Chief of Army's Futures Statement (FS) as being inclusive of the geopolitical context, changing threat, disruptive technologies and domain integration, resulting in an accelerated environment. It further describes both the operating environment and a description of 'how we respond'.⁶

Part of *Accelerated Warfare* includes the tools that can assist with outpacing and outmanoeuvring the enemy, and is particularly important in countering VE.

Information and Technology Dominance

Information, and the pace with which it can be provided, can influence the operating environment and contribute to *Accelerated Warfare*. Lieutenant General Bautista provided examples of how technology was used to provide and gather information to assist the Philippine Army in communicating with communities in the fight for Marawi. Unmanned Aerial Systems, for example, were used to deliver mobile phones to civilians trapped amongst the fighting, allowing for the relay of information leading to their rescue.

Lieutenant General Bautista, in his 'Call to Action', called for optimised use of social media as part of international strategies to counter VE. Ms Theodorakis also noted the use of social media in creating a networked global insurgency and likened the importance of dominating narratives to having kinetic superiority. Mr Lewis introduced the idea of 'accelerated anxiety', referring to people's awareness—through access to information through the internet and media-of things that have no relevance to their own lives. He noted that violent extremists exploited this through the effective use of technology. He observed that another concern with the use of social media and the internet by violent extremists is the radicalisation of youth in their homes. Concerns about online radicalisation were expressed by Major General Findlay, who pointed to the ASEAN-AU MoU on counter terrorism, one component of which includes undertaking regional dialogue and workshops on countering online radicalisation.⁸ In this context, the interoperability between government agencies is an objective of the government.

Major General Findlay noted the need for land forces to adapt and evolve in the new accelerated environment. He stressed that operational responses are insufficient and called for greater tactical responses. He particularly stressed that there are limits to the use of lethal force and that land forces 'can't kill their way to victory' in countering VE. This sentiment was echoed by Mr Lewis, who opined that armies are not the solution to VE. He observed that while not capable of solving the problem by itself, Army provided capabilities that can assist in countering VE, such as Special Forces, intelligence, topographical/spatial survey capabilities and logistic capabilities.

The Defence White Paper ⁷ recognises the importance of technology in addressing modern threats, indicating Army needs to 'invest in modern space and cyber- capabilities and the infrastructure, information and communications systems that support defence capability'. The importance of information and technology dominance was echoed by Lieutenant General Bautista, who called not only for the optimised use of social media and diverse media platforms, but also the strengthening of cyber-security capabilities. Enhanced information sharing and intelligence within the international community is a way to counteract VE.

Endnotes

- 1. Council of Australian Governments, 2015, Australia's Counter-Terrorism Strategy, p. 7
- Source: https://www.homeaffairs.gov.au/about/national-security/countering-violentextremism, accessed 12 September 2018.
- Development Approach to Countering Violent Extremism, Australian Government. URL: https://dfat.gov.au/about-us/publications/Documents/development-approachescountering-violent-extremism.pdf
- 4. Department of Defence, 2016, *Defence White Paper 2016*, p. 21 at: http://www. defence.gov.au/whitepaper/Docs/2016-Defence-White-Paper.pdf
- Black, L.W., 2008. Deliberation, Storytelling, and Dialogic Moments. Communication Theory, 18(1), pp.93–116. Available at: http://doi.wiley.com/10.1111/j.1468-2885.2007.00315.x
- Lieutenant General Rick Burr, Accelerated Warfare, Futures Statement for an Army in Motion, 8 August 2016, Accessible at: https://www.army.gov.au/our-work/from-thechief-of-army/accelerated-warfare
- 7. Department of Defence, 2016, *Defence White Paper 2016*, at: http://www.defence. gov.au/whitepaper/Docs/2016-Defence-White-Paper.pdf
- Combating terrorism and violent extremism, Sunday, March 17, 2018, ASEAN Special Summit. Source: https://aseanaustralia.pmc.gov.au/news/combating-terrorism-and violent-extremism accessed 14 September 2018.



Figure 16. Major General Findlay, AM, Special Operations Commander - Australia addressing members of the Special Air Service Regiment. (Image: DoD)

Special Forces, Counter Terrorism and Partnership

Major General Adam Findlay, AM

Special Operations Commander - Australia

Introduction

'General Burr, Chiefs of Army and Service representatives from around the world, members of the diplomatic community, Ladies and Gentlemen... It's a privilege to stand before you this morning and continue the valuable conversation that we began yesterday.

'Terrorism and violent extremism are threats at the forefront of my responsibilities as Special Operations Commander, Australia, so I am glad to be involved in this morning's discussion. It's an honour to share the stage with three eminent practitioners and thought-leaders who also share deep concerns about the enduring global extremist threat.

'To General Bautista, Commanding-General of the Philippine Army—it is a special honour to have you here with us. Many of us here closely watched the successful combat operations which you led superbly against terrorist groups last year in Marawi. We look forward to hearing some of your insights as the commander of that operation.

'Plus, it's great to share the stage with a Scout Ranger!

'To Katja Theodorakis, thank you for agreeing to engage with us today.

I hope you can challenge and inspire new thinking in us 'old soldiers'! Militaries can only benefit from closer and deeper understanding of academic and policy community views.

'And to Duncan Lewis, Director-General of Security of the Australian Security Intelligence Organisation. ASIO is Australia's lead intelligence agency responsible for countering terrorism, violent extremism, espionage and foreign interference. In another life, Major General Lewis was the first two-star Special Operations Commander, Australia, and an SASR officer. Duncan, thanks for being here and we all look forward to your strategic perspectives.

'First, I will be drawing from Australia's operational experiences since 2001. I will offer that *relationships* are the most important capability for military forces in counterterrorism operations. This observation, won through battlefield experience, absolutely underscores General Burr's strong advocacy yesterday about the power of partnerships within the Indo-Pacific.

'Second, I will share some personal thoughts on the limits of military force and how a fully integrated team is much more effective in preventing and fighting against terrorism.

'Lastly, extending the topic slightly, I will offer some brief, personal views on emerging hybrid and grey-zone trends.

Value of Networks, Partnerships & Cooperation

'Australia has made, and continues to make, military contributions to global efforts to fight terrorism since late 2001. Fighting alongside many of you, Australia has made many shared sacrifices defending our nations against the scourge of terrorism and violent extremism. As you woke up this morning, the Australian Army, including Special Forces, is supporting the Iraqi counterterrorism service fight against Daesh in Iraq. Our soldiers are also helping train Afghan police and army commandos to build security in Afghanistan as part of the NATO-led Resolute Support Mission. In this part of the world, the Australian Army is supporting and learning many lessons from the Philippines and General Bautista's army.

'However, despite all of our best efforts and many successes, it is regrettable that terrorism remains a common and enduring threat to many of our nations.

'From this region, like other parts of the world, Australian and many South East Asian nationals, have gone to fight *with* Daesh in Syria and Iraq. The Syrian and Iraqi battlefields have given foreign terrorist fighters significant combat experience, sophisticated skills to build advanced explosives, and further entrenched their belief in a misguided ideology. Some of these hardened foreign fighters have survived and will return home. Events in Marawi, the disrupted airliner plot in Sydney last year, and the recent Surabaya attacks in Indonesia all clearly suggest this. The returning foreign fighter threat is not exclusive to this region; Europe, South Asia and North America all face similar risks. It is a global phenomenon.

'I'm sure Duncan can talk more authoritatively about the current threats we face.

'So in the face of a resurgent terrorist threat globally why are relationships more important than combat power?

'Because no one agency, department or force 'owns' the counterterrorism response. No one agency, department or force has all the answers. The interconnected realities of our world—like social media and ease of air travel—have allowed global threats to become local, and local threats to become global. Terror plots, even home-grown ones, will likely have touch points in several countries crossing legal, policy, cultural and linguistic boundaries.

'And therein lies the challenge and complexity for all of us as anticipators and responders. We must be highly adaptive—seamlessly connecting across national borders, and across police, intelligence and military capabilities. To have the best chance at disrupting and preventing attacks, a coordinated team approach is needed; sharing understanding and earning trust through cooperation.

'We in the military have learnt to embrace police and intelligence agencies as the leading authorities for counterterrorism. While counterterrorism is a key part of the Special Operations Command's (SOCOMD) mission, our role is mainly through the provision of counterterrorism support to police and intelligence agencies. Should a serious terrorist plot emerge in Australia, the military provides capabilities to assist and augment the police based on our expertise in responding against complex threats. Overseas, in cooperation with our allies and friends, the ADF helps our intelligence agencies gain access to conflict zones where Australians are involved in terrorist activity. Through this approach, we focus on combining our respective strengths. We complement each other, we do not compete against each other.

'But strong relationships are needed internationally as well. No matter how good our current linkages are, we must all constantly evolve and do better to prevail against the ever-changing threat. The signs for international collaboration are positive.

'The new Sub-Regional Defence Ministers Meeting on Counter Terrorism, involving South East Asian nations, attests to this. To Lieutenant General Sulairman: its great news that Indonesia has agreed to host the second meeting in 2019.

'At the military level, the annual South East Asia Special Operations Forces (SOF) Commanders conference was held for the third time, and kindly hosted by the Philippines this year. This forum is growing in value and is acting to establish practical ways to enhance multilateral regional SOF cooperation, complementing the many well-established bilateral SOF links in the region.

'The ninth ADMM+ (ASEAN Defence Ministers Meeting Plus) Experts Working Group on Counter Terrorism was recently held in Thailand. Thailand and China deserve praise for their service as the current co-chairs.

'These fora help to encourage transparency and collaborative dialogue on military counterterrorism matters.

'Australia and ASEAN signed a comprehensive memorandum of understanding on counterterrorism matters earlier this year. And the United States, particularly through US Special Operations Command, has long been a leader in developing and encouraging new ways for multilateral intelligence sharing for counterterrorism across military, police and intelligence agencies in the region and across the globe.

'These are just a few examples of some of the important collaborative initiatives underway within this region. These growing relationships are the currency of success.

Conflict is No Cure, Prevention is Better than Response

'Now, let us look more broadly beyond the use of armed forces.

'We are an esteemed audience of senior army commanders gathered here this week.

'At times, we have led our soldiers in war and combat; at others, we have spent years training for battles that fortunately have not ensued. Many of us, sadly, have lost soldiers both in combat and in training for war. For as capable and powerful as our armies are, we have learnt there are limits to the use of lethal force—no matter how discriminating we seek to be in its application. As armies, we must always be ready to fight and protect our people; to deny safe haven and to prevent ungoverned space emerging where terrorist groups can virulently grow.

'But armies, including Special Forces, cannot by themselves counter terrorism and violent extremism.

'While sometimes absolutely necessary and just—like in Marawi, like in Mosul—kinetic actions are in and of themselves merely a military tactic, not a strategy. We can't kill our way to victory when the enemy manifests itself most powerfully in the minds of vulnerable people who don't have fair social and economic opportunities. As we have often experienced, an over-reliance on kinetic action can often result in the opposite outcomes intended: inspiring retaliatory attacks and fuelling recruitment.

'We in the military have a complementary role to play, but not in ways popularly imagined. Where there has been conflict, Army can assist in quickly restoring order and creating safe conditions for civil society to rebuild and giving prominence to civil authority. Where there is order wellestablished, Army can assist by working hard to foster strong relationships with local communities and interest groups.

'Radicalisation is a problem we must fight together as a community, within our civil societies, before extremist ideology turns to violence. The frontline in the fight against extremist ideology can't be manned by a Special Forces operator or Army soldier at a checkpoint. School teachers, doctors, nurses, aid and development workers, sports coaches, small business owners, police officers—these are the frontline people who can make a real difference in preventing radicalisation in the long-run.

'General Burr described yesterday how one of the best things we can do as land forces is [to be] working together to prevent conflict. This is especially true when it comes to countering violent extremism.

Future challenges

'Finally, I want to turn briefly to some new challenges that we see emerging in our world.

'We all know the world today is changing in ways faster than we fully understand. Besides terrorism, other trends—like grey-zone, hybrid warfare and power competition—are evident. Grey-zone, hybrid warfare and competition trends have prompted a revolution in our thinking.

'Technology alone will not be the answer. Countering hybrid approaches requires imagination, innovation and disruptive thinking. A new SOF operational art to orchestrate special effects is needed. We will need flatter command structures. We will need to be inherently joint, multi-national and inter-agency in nature, together as one mission team. We will need a more diverse SOF team. SOF will need women to serve in greater numbers.

'We will still need the SAS and Commando assaulters... but we will also increasingly need the intelligence analyst, the scientist, the computer programmer and so many more specialists.

'Above all, as I said earlier, being fully effective as a special force will be about maximising the leverage of relationships. SOF cooperation amongst friends needs to become even closer and increasingly integrated. Trust is a capability. And trust can't be generated in the instant when the unexpected occurs. As Admiral McRaven so rightly said in 2012, 'you can't surge trust'.

'With uncertainty increasing around the world, the unexpected may not be far away.

'I deeply value the relationships Australian SOCOMD shares with many of your Special Forces and wider military services... and undertake to do all we can to ensure our relationships remain focussed on the most complex challenges relevant to SOF mission-sets and capabilities into the future.

Conclusion

'In conclusion, thank you for your generosity in allowing me to share these thoughts with you this morning.

'I look forward to a very open and engaging discussion with you shortly.

'In the meantime, I invite you to please warmly welcome Lieutenant General Rolando Bautista—Commanding-General Philippine Army.'

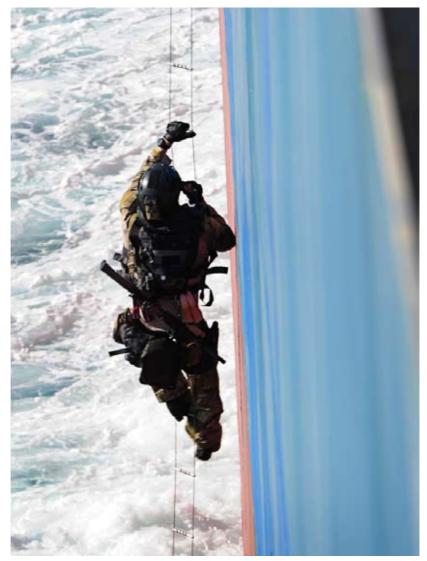


Figure 17. An Australian Special Air Service trooper uses a caving ladder to board a bulk carrier during a maritime counterterrorist exercise off the Western Australia coast. (Image: DoD)

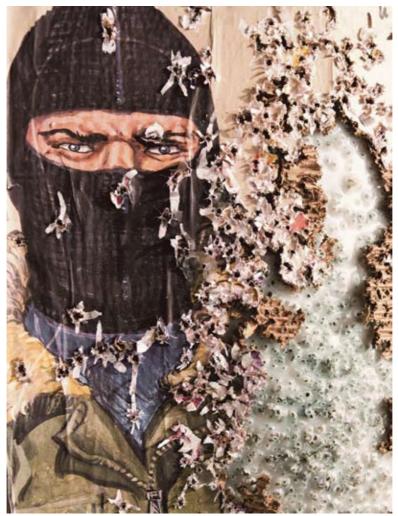


Figure 18. A still from the book **Targets** by Herlinde Koelbl which Ms Theodorakis uses to highlight her arguments about how a perception of the 'enemy' will be subjective. (Image: Targets - Herlinde Koelble - Published by Prestel)

Us as the Enemy: Jihadism and the Strategic Narrative of Anti-Westernism

Katja Kristina Theodorakis

PhD Research Scholar at the Australian National University / Programme Manager for Foreign/Security Policy and Counterterrorism, Konrad-Adenauer Foundation's Regional Programme Australia and Pacific

In today's hyper-connected Information Age, the ultimate battle space is over our beliefs, narratives, and ways of viewing the world...¹

'At the beginning of the 21st century, we are looking back on nearly a century of wars in various shapes and sizes—hot and cold, from two world wars and large inter-state wars to civil wars, small wars and insurgencies. As the nature of warfare has changed, so has the type of enemy, as well as the visions that give rise to, and sustain, conflicts. This is fittingly captured in a photo exhibition titled *Targets*, for which the German artist Herlinde Koelbl travelled around the world taking photographs of military practicing targets. Across Europe, the US as well as the Middle East, Africa, China, Russia, Turkey and Israel, the enemy is represented quite differently, reflecting not only variations in socio-economic status but also highlighting how the enemy is imagined differently by each country and over time.

'In the US for example, Koelbl found that earlier Cold War figures of "Ivan

with a red star on his helmet" had been replaced by a replica Middle Eastern town, complete with golden-domed mosques, market stalls, vendors and shoppers. In this way, those targets tell the story of the ever-evolving dynamics of warfare—in particular the changing face of the enemy, how that is imagined and represented.²

'In order to fully grasp the current threat landscape and anticipate future violence and instability, it is imperative to understand the key forces shaping contemporary conflicts, including what motivates our opponents. As former FBI Special Agent Ali Soufan admonishes in his book *Anatomy of Terror*:

... after 15 years of the war on terrorism, we still do not know our enemy in a deeper sense... being able to see the world through their eyes....not to create sympathy for them... but to [obtain] a deeper understanding of their worldview, their motivations and how to best combat the destructive reality they represent.³

'This paper will therefore focus on two elements that—based on my research on the appeal of anti-Westernism and jihadi ideology—constitute an important driver of today's political violence: extremist identity dynamics; and the targeted use of narratives to gain legitimacy. In particular, it will highlight how jihadists adhere to a worldview and version of history where the West is constructed as a morally corrupt enemy—against whom jihadis position themselves as ethical actors bringing about a more just world. This means stepping outside of the conventional frames through which we view violent extremist ideology and jihadi terrorism in order to facilitate a deeper grasp of their rationale. In particular, we should try to avoid reductionist assessments based on stereotypes of the East, the so-called Orient, as the West's inferior, underdeveloped "other". As Patrick Porter noted in his book *Military Orientalism: Eastern War Through Western Eyes*:

Westerners have made accurate insights into others' warfare, and they have also made distorted judgments about enemies, judgments which reflect the Western self-image refracted through Orientalism.⁴

Exploring why their message continues to resonate even when you kill their leaders and destroy their caliphate is crucial to being able to do something

about it, beyond reactive and ill-informed band-aid approaches.

'Military theorists and security scholars have grappled with the question of whether we live in a post-Clausewitz era of "new wars", where traditional geopolitical and ideological considerations are made obsolete by identity politics as the main drivers of war.⁵ Similarly, the concept of "hybrid wars" is supposed to capture the new form of warfare that, alongside conventional operations, includes terrorism, insurgency, criminality and extensive psychological/information operations.⁶ Regardless of whether one fully subscribes to new paradigms and simplified labels like "new wars" and "information wars" as adequate classifications, it can be ascertained that in today's wars, control of populations, legitimacy and the political decision-making process are more important than seizing and holding territory in the conventional sense.⁷

'And this is where understanding violent extremist ideology comes in as a crucial part of being prepared for the future. The early 21st century has been marked by a rise in violent extremist radicalization—both Islamist as well as far-right extremism.⁸ As such, these two ideologies are based on the same sociological dynamics and in fact feed off each other, with a fear of Islamist-inspired terror attacks spiking the appeal of far-right extremism.

'Especially during times of global political insecurity, extremist groups appeal through their promises of certainty via a clearly defined identity *vis-à-vis* existential adversary. In fact, all the big "-isms"—ideological programs for a universal political order like Soviet communism, fascism, jihadism and even liberalism—are premised on the existence of an enemy; an "us-versus-them" identity-dynamic that sustains them.

'There are various definitions of extremist politics, but a key element should be this in-group/out-group mentality, which is at the core of what constitutes violent extremism.⁹ Depending on the type of extremism, this enemy is either a racial traitor or a moral/religious one.

'Since 9/11, significantly more media attention has been given to Islamist extremism than right-wing extremism, to the point that, in mainstream discourse, terrorism is almost exclusively equated with jihadism. With the attraction of a fully functional caliphate in the Middle East faded, the numbers of jihadi sympathizers and violent Islamist extremists in Australia and other Western nations are now decreasing. At the same time, farright extremist ideologies are gaining traction, yet right-wing violence is often not classified as terrorism in the media.¹⁰ It is therefore crucial to acknowledge that focusing on Islamist violent extremism alone would distort an assessment of the contemporary terrorism threat landscape.

'This bias notwithstanding, in this paper I will just address jihadism. This is because, as a transnational revolutionary movement it still constitutes an ongoing serious security threat, and will in all likelihood remain a significant driver of political violence-in the Asia-Pacific region as well as globally. A recent report by the UN Analytical Support and Sanctions Monitoring Team estimated that there could be between 20 000 to 30 000 Islamic State (IS) fighters left in the Middle East. Playing a long game, the Islamic State has shown it can exist in different forms in different places, moving to more clandestine modes of operation if necessary.¹² Their current pattern has been to establish themselves in ungoverned spaces through exploiting local tensions and grievances with a mix of revolutionary warfare, insurgent and gangster tactics.¹³ Likewise, being driven by the same long-term goals—just operating in a slightly less brutal way—al Qaeda currently has over twenty local franchises internationally. It brands itself as a resurging moderate extremist movement, a salafi-jihadi-vanguard representing a measured alternative to IS' brutalized version of jihad.14

'In this era of increased connectivity, finding ways to counter such networked global insurgencies is therefore a shared vulnerability and common challenge for all partners across the region and one important step is to make sense of jihadi's cultural narratives—their self-understanding and construction of 'us as an enemy'—as well as how they are strategically employing these narratives as part of the dynamics of modern war.

'Common conceptualizations of jihadism usually focus on its seemingly totalitarian, hyper-violent tenets and its fundamentalist religious character, which stand in direct opposition to the values and ethics we hold dear in our societies: pluralism, peace, tolerance, justice and the rule of law. So obviously when we are confronted by images of planes being flown into the World Trade Center's twin towers, terror attacks in the streets of Europe or the Islamic State's horrific beheadings, executions and slavery, all we see is inhumane violence threatening our security and very order. But this is a rather one-dimensional assessment.

'For example, renowned terrorism scholar Thomas Hegghammer speaks out

against such reductionist understandings by drawing attention to the wider culture surrounding military identities, highlighting the need to pay attention to the way insurgents express meaning through their non-militant practices, such as poetry or dream interpretation.¹⁵

'Widening our perspective in this way is paramount to getting the full picture. An often overlooked but crucial element of jihadi ideology is its warrior ethos: Islamist extremism—alongside its violence—also contains the vision of a better world through spiritual and political transformation. As a whole, jihadism can be seen as a global insurgent movement with an enduring politico-religious resistance identity and utopian ambitions to set history right.¹⁶ As such, its reason for existence is to fight until it has overthrown the perceived "Godless", morally corrupt, Western order. It is, despite its fundamentalist character, a deeply modern movement, a revolutionary "political religion" with a transcendental, spiritual and "ethical" core.¹⁷

Individual motivations vary, of course, and there are different typologies of jihadi actors and foreign fighters. But as a general characteristic, violent Islamist extremists think they are the heroes on the world stage, that they are the noble warriors and we are the villains; the enemy to be killed.

'Accordingly, the caliphate is seen by adherents as a reverse account of the present: justice instead of injustice, equality instead of inequality, Muslims as strong and powerful instead of oppressed and victimized. And precisely because justice and equality are generally desirable ideals, they have an empowering, almost altruistic appeal. So, in a reversal of Orientalist constructions of the Middle East—what is called Occidentalism—the West is seen as the anti-human; the morally corrupt enemy of civilization.¹⁸

'The following poem by a foreign fighter in Syria is testament to this deeplyheld vision of a better world. This example, as many others, depicts a world in which the West is the oppressor and those Muslims answering the call to violent jihad are revolutionary freedom fighters; the defenders of the weak. This means that the violence is revolutionary and symbolic. In other words, it represents the cornerstone of a new, better order; jihad mobilizes through an emotional mix of history, religion and politics.

In the Name of Allah, The Most Beneficiant [sic], The Most Merciful.

Why are we the terrorists, extremists, bad guys when we came to answer the call of the oppressed?

Our brothers were being slaughtered, and our sisters forcefully undressed.

Red lines were made, but written only in the sand.

But how can one try and clean, while using a dirty hand.

It has been made clear, that Muslim blood is cheap, But if the blood was black, you would see the leaders weep.

So when the world ignored the Muslims being killed, The soldiers of Allah came, and the blessed lands of Sham they filled.

We do not want power, but wish to put power where it belongs, No laws made by man, as our Creator has stated the rights & wrongs.

The world has seen how democracy has not given justice the way it claimed it does, the way it is supposed to be, the voice of the people, but actually the leaders still do what they want...¹⁹

'The Arab journalist Abdel Bari Atwan, who interviewed Osama Bin Laden and authored several books on al Qaeda and the Islamic State, described this perspective as follows:

"IS, like al-Qaeda, is perceived by many Muslims as fighting the 'crusaders' who seek to invade and exploit the resources of Muslim lands. And while the West decries IS violence, its rough justice and its subjugation of women, many in the Muslim world are profoundly conscious of the hypocrisy involved here: the death of hundreds of thousands of Iraqi, Afghan, Yemeni and Pakistani citizens in US bombardments and drone strikes; the torture and abuse of Muslim prisoners in US detention facilities like Abu Ghraib... the gang rape and murder of fourteen-year-old Abeer Qassim by five US soldiers, of whom one...when charged, explained his conduct by saying 'I didn't think of Iraqis as human'".²⁰

'One may not agree with Atwan's full-frontal critique; it can be argued that he presents an almost polemic view of the root causes of Islamist extremism, which he reduces to inevitable blowback from self-interested Western foreign policy and indifference to the concerns of the Muslim world. However, his perspective is worth highlighting since it reflects a widespread perception in the Muslim world, shared by many who are by no means extremists and would abhor violence in the name of sacred resistance to the West. In this way, the bandwagon of Islamist extremism becomes an easily accessible vehicle for opposing the so-called "illiberal" aspects of liberalism and the perceived hypocrisy of the West in rhetorically upholding democracy and freedom while bringing suffering to the Muslim world. It holds the foreign policies of the West responsible for much human suffering, especially in the war theaters of the Middle East, places like Gaza, Iraq and Syria, and also for the Islamophobia and discrimination of Muslims in Western societies.

'The fact that in the Islamic State's and al Qaeda's oversimplified, polarized version of history, [where] we are the real bad guys, shows that there is a sort of a moral logic behind it: their equivalent of "just war theory". This also includes a culture of "ethical" violence; they have their own code of honor, militant principles and accessories to go with it. It doesn't mean war crimes and the most abject atrocities don't happen, but that it is sanctioned and justified in the name of a "better world".

'This narrative of the West as enemy is then further perpetuated through setting an 'ethical trap'. The strategic objective of jihadist groups like al Qaeda or IS is, despite their terrorist tactics and indiscriminate brutality, to gain recognition from potential followers as a credible, ethical actor in global politics. And for this reason, they try and leverage these sentiments, the perceived "say-do gaps" in our narrative:

'Their activities, such as suicide bombings, public executions, and other "terrorist" deeds reinforce their status as unethical actors. Subsequently, though, such groups start making use of a different and more reliable source of power. They find this in the reactions of other global actors to their unethical deeds. This happens when great powers are provoked by Al Qaeda and ISIS (Islamic State in Iraq and Syria – i.e. ISIL or IS) to respond in particularly brutal ways, which themselves flout the ethical basis of the global practices... human rights, state sovereignty, the laws of armed conflict, and international law more generally. By doing these things the international actors fall into an ethical trap... These maverick groups are then able to use strategic communications to present themselves as substantially less bad than the major international actors. Indeed, this opens the way for them to recruit people widely to their cause on the grounds that they are legitimate actors, far less ethically suspect than the superpower and its allies. This ethical trapping soon becomes the major source of power for such groups, far outstripping the power directly exercised through terror...²¹

'For example, by widely publicizing hauntingly graphic images of 'collateral damage' from Western drone strikes, jihadi groups seek to expose the hypocrisy of the West, the alleged inhumanity inherent in the liberal order. In turn they position themselves as the legitimate moral agents of a more just world order.

'Legitimacy, which is crucial to power in world politics, is formed on the basis of how a certain actor and its deeds in the international system are perceived.²² Issues of credibility, perceptions and public opinion are hence central to modern conflict—a shift reflected in the move towards people-centred approaches aimed at winning the support of the local population.

'Dominating the narrative space is therefore the cognitive version of kinetic superiority in the conventional battlespace, and the two are interlinked and mutually enforcing:

The 'Battle of the Narrative' is marked by the efforts of competing nations, coalitions, entities or ideologies to frame the conflict in a manner that influences key audiences to foster support for their actions and political objectives at all levels.

...

Shaping the virtual battlefield and subsequently affecting the physical battlefield and thereby diverse audiences' and actors' decisionmaking processes is therefore of the outmost [sic] importance in modern conflicts...²³

'Taking place across multiple levels and operating environments, including the cognitive and information domain, today's conflicts have therefore an important component: as much as war is about political will, it is also about imposing meaning on people through the technological ability to do so. As highlighted by David Kilcullen in *Out of the Mountains*, non-state actors like rebel and insurgent groups are becoming increasingly empowered by technology, enabling them to disseminate their political narratives strategically to a wider audience in so-called virtual theatres.²⁴

'This of course includes moral, legal and psychological/emotional dimensions, with a narrative defined as a system of stories that invokes archetypes, myths and symbols. This way it reflects a society's values— religious and cultural—and thereby creates shared meanings, identities and a framework through which to understand events and the world around us.²⁵

'This can, for example, also be seen in the Taliban's use of narratives, increasingly through social media as well, to win the support of local populations and mobilize new recruits—all of which contributes, alongside their use of violence and coercion, to their staying power in the face of Western military superiority.²⁶

'Finding evidence of our alleged 'heartlessness' and indifference to their suffering is what drives such violent extremist groups and their polarized identity constructions. Until we fully grasp these mechanisms and try to translate these insights into better policy and strategy, we are inherently on the back foot in countering their extremist ideology.

'As a consequence, the narrative of jihadism—of "us as the enemy"—will, in my estimation, sadly endure for some time simply because the story of a better world resonates on a deeper emotional and—ironically—moral level.

'Extremism will remain as long as we exclusively focus on eliminating extremists or telling a better story; counter-narrative is not a holy grail. As a result of the dynamics and character of contemporary conflict, land power also serves as part of a wider strategic narrative that can either work for, or against us. The ethical traps laid by extremists who seek to exploit our "saydo gaps" must be avoided at all costs.

'To effectively counter violent extremism, there needs to be a focus on stripping extremist narratives of their perceived moral power and appeal so that these groups ultimately lose their legitimacy on the world stage. And making their violence pointless can only be achieved through coherent action and concerted efforts amongst partners and across domains.'

Endnotes

- 1. Jeff Gisea (2017), "Hacking Hearts and Minds: How Mimetic Warfare is Transforming Cyber War", *Open Publications*, Volume 1, Number 6, Spring 2017.
- Sean O'Heagan (2014), "Caught in the Crosshairs: The Woman Who Photographs Shooting Ranges", *The Guardian*, June 18, 2014: https://www.theguardian.com/ artanddesign/2014/jun/18/herlinde-koelbl-targets-photography-war
- 3. Ali Soufan (2017), Anatomy of Terror: From the Death of Bin Laden to the Rise of the Islamic State. New York: W.W.Norton & Company, Inc.
- 4. Patrick Porter (2009), *Military Orientalism: Eastern War Through Western Eyes*. London: Hurst and Company, p. 23.
- Mary Kaldor (2013), "In Defence of New Wars", Stability: International Journal of Security and Development, Vol. 2, No. 1, https://www.stabilityjournal.org/ articles/10.5334/sta.at/
- 6. Lawrence Freedman (2017), The Future of War: A History, New York: Public Affairs
- Emile Simpson (2013), War from the Ground Up Twenty-First Century Combat as Politics. New York: Oxford University Press; Thomas Elkjer Nissen (2015), #TheWeapenizationOfSocialMedia - @Characteristics_of_Contemporary_Conflicts. Copenhagen: Royal Danish Defence College, pp. 222-229.
- Violent extremism is of course not confined to these two ideologies but can be rooted in many different worldviews, as was highlighted by the recent execution of members of the Aum Shinrikyo Sect who were responsible for the 1995 sarin gas attack on the Tokyo subway.
- 9. JM Berger (2017), "Extremist Constructions of Identity: How Escalating Demands for Legitmacy Shape In-and Out-group", ICCT Research Paper, April 2017
- Kavita Bedford (2017), " The Evolving Threat of Violent Extremism", *The Point Magazine*, November 2017, http://www.thepointmagazine.com.au/post.php?s=2017-11-29-the-evolving-threat-of-violent-extremism; David Wroe (2018), "ASIO Seeing Fewer Young Australian Jihadists", *The Sydney Morning Herald*, August 2 2018, https://www.smh.com.au/politics/federal/asio-seeing-fewer-young-australian-jihadists-20180802-p4zv4h.html
- 11. http://www.soufangroup.com/intelbrief-the-challenging-math-of-islamic-state-fighters
- 12. Craig Whiteside (2016), "The Islamic State and the Return of Revolutionary Warfare", Small Wars and Insurgencies, Vol. 27, No. 5, pp. 743-776. Haroro Ingram & Craig Whiteside (2017), "In Search of the Virtual Caliphate: Convenient Fallacy, Dangerous Distraction", War on the Rocks, https://warontherocks.com/2017/09/in-search-of-thevirtual-caliphate-convenient-fallacy-dangerous-distraction/
- 13. At the same time, it has to be noted that such assessments of their future trajectory do not mean that the Islamic State is a menace reaching into all corners of the globe. This would be overestimating their capacity as many so-called affiliates are inherently

nationalist insurgencies and separatist movements with their own local causes. To conflate a wide variety of Muslim rebellions of diverse ethnicities into one coherent global foe can unwillingly inflate the threat perception and thereby play into IS' propaganda aims. But despite this note of caution, global jihadism in its various forms is still a contemporary reality. So-called 'glocal dynamics' – indicating an enmeshment of a global jihadi ideology with local causes- characterizes many violent Islamist movements in the Asia-Pacific. See for example Isaac Kfir (2018), "Terrorism in the Indo-Pacific: Glocalism Comes of Age", *ASPI Special Report*, May 2018, https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2018-05/SR%20119%20Terrorism%20in%20 the%20Indo-Pacific.pdf?pjvDAkq9HFIV13KNpGJND3V1gsG2xpCi

- 14. Bruce Hoffman (2018), "The Resurgence of Al Qaeda", *Lowy Interpreter*, 13 March 2018, https://www.lowyinstitute.org/the-interpreter/resurgence-al-qaeda
- 15. Thomas Hegghammer (ed.) (2017), *Jihadi Culture: The Art and Social Practices of Militant Islamists*, Cambridge: Cambridge University Press.
- 16. Farhad Khroskhokavar (2016), *Inside Jihadism: Understanding Jihadi Movements Worldwide*. London and New York: Routledge
- 17. John Gray (2017), Al Qaeda and What it Means to Be Modern, Updated Edition. London: Faber and Faber.
- 18. Gabriele Marranci (2015), Wars of Terror. London, New York: Bloomsbury Academic
- 19. Originally sourced from the fighter's previously blog, material now removed from the internet.
- Abdel Bari Atwan (2015), "When it Comes to 'Islamic State', the West just Doesn't Get It", Open Democracy, 9 July 2015, https://www.opendemocracy.net/north-africa-westasia/abdel-bari-atwan/when-it-comes-to-%E2%80%98islamic-state%E2%80%99west-just-doesn%E2%80%99t-get-it
- Mervyn Frost & Nicholas Michelsen (2017), "Strategic Communications in International Relations: Practical Traps and Ethical Puzzles", *Journal of Defence Strategic Communications*, Volume 2, Spring 2017. NATO Strategic Communications Centre of Excellence.
- 22. Bary Buzan (2009), *Peoples, States and Fear An Agenda for International Security Studies in the Post-Cold-War Era*, 2nd Edition. Colchester, UK: ECPR Press.
- Thomas Elkjer Nissen (2013), " The Ever Changing Narrative of Conflict How the Role of War Narratives Changes from Mobilizing for the Battle of Perceptions to Influencing History", pp. 73-83 in *Democracy Managers* (Ed. by Carsten Jensen). Royal Danish Defence College.
- David Kilcullen (2013), Out of the Mountains The Coming Age of the Urban Guerilla. Oxford: Oxford University Press.
- Alex P Schmid (2014), "Al-Qaeda's 'Single Narrative' and Attempts at Counter-Narratives: The State of Knowledge", ICCT Research Paper, January 2014.
- 26. Thomas Johnson (2017), *Taliban Narratives: The Use and Power of Stories in the Afghanistan Conflict*. Oxford: Oxford University Press.



Figure 19. Chief of Army, Lieutenant General Rick Burr AO, DSC, MVO, (right) with Chief of New Zealand Army, Major General John Boswell, DSD, test the New Zealand Army's new MARS-L (Modular Assault Rifle System - Light) weapon. New Zealand maintains close military ties with Australia and the two nations have been allies for over a hundred years fighting side-by-side in almost every conflct since the beginning of the 20th century. (Image: DoD)

Session Three

Generating Land Power through Partnering

Synthesis

Speakers in this session focussed on the role of partnering in developing regional security and stability. There were two main types of partnering referred to by speakers, including international partnerships and internal partnerships across whole-of-government. In the context of international partnering, respect for national sovereignty was identified as a core element of successful partnerships, while understanding and respect for culture were common to both types of partnerships. Partnerships and cultural awareness were also identified in Session 2 as key elements to developing partnerships for countering violent extremism. Partnering across multiple dimensions is identified by Chief of Army in his Commander's Statement *Australia's Army: An Army in Motion.**

Within this session, partnerships were framed within a few different operational contexts, namely interoperability during conflict and training, and coordination during peacekeeping activities and Humanitarian Assistance and Disaster Relief (HADR) assistance. Partnering was not limited to the institutional level, with Brigadier General Toropo, Commander of the Papua New Guinea Defence Force and Mr Dunbier of the Australian Civil Military Centre highlighting the important role of personal relationships in fostering institutional partnerships. This echoed Chief of Army's focus in

^{*} Australia's Army – An Army in Motion, 13 July 2018 https://www.army.ov.au/our-work/fromthe-chief-of-army/australias-army-an-army-in-motion

his Commander's Statement about the importance of people to Army. In addition to respect for sovereignty and culture, other key elements to partnering identified by all speakers included the importance of trust, transparency and time.

From the Australian perspective, Major General Greg Bilton, Deputy Chief Joint Operations, noted that partnering is supported by the Defence and Foreign Policy White Papers which guide international engagement. Both Major General Bilton and Mr Sadleir of the Department of Foreign Affairs and Trade noted Australia's focus on partnering with 'like-minded' and 'rules-based' partners to provide regional security, stability and prosperity in the face of transnational and global security challenges—such as limited government, ethnic and religious conflict, and insecure borders. Mr Sadleir noted activities that complemented Defence Force efforts to achieving security, including free trade and support for Pacific nations such as Papua New Guinea and Timor Leste. Such assistance includes peacekeeping and HADR activities.

Brigadier General Toropo provided a view on partnerships from the perspective of a small Pacific nation. He noted that smaller partners often tend to have disproportionately larger stakes in the outcome of partnering and reinforced the importance of cultural understanding and an awareness of the context within which nations are operating. In the case of PNG, this included the small size of the defence force relative to those of larger nations and the difficulty posed by terrain and less well developed infrastructure. Capacity building and enhancement were identified as important roles of partnering, particularly in HADR assistance. In the context of HADR the notion of 'soft' cooperation with non-government organisations, raised in Session 2, was echoed by Mr Sadleir.

Major General Bilton echoed Brigadier General Toropo's sentiments around sensitivity to other nations' contexts, indicating that partners should be consulted up front prior to undertaking partnering activities. He also noted that partnering is best nourished and normalised over the long-term rather than in response to a crisis—a sentiment put forward by Minister Pyne in Session 1 and reinforced by Brigadier General Toropo and Mr Sadleir, who identified current, ongoing and long-term partnerships with a range of countries.

Respect for culture was also applied to partnering within national borders.

Across agency, whole-of-government partnerships were seen as just as important to promoting stability and security as international partnerships. Mr Sadleir noted the benefits of partnering between diplomats and the defence forces, while Major General Bilton and Mr Dunbier noted culture applies at multiple levels, including departmental, national and professional. Mr Dunbier provided a personal example of the cultural differences between police and the military, particularly in the way each force responds to issues. From a different perspective, Brigadier General Toropo noted that PNG faced internal cultural issues related to regional and ethnic rivalries. Major General Bilton and Mr Dunbier both noted that internal partnerships required departments to learn to sometimes lead, and sometimes support. This sentiment was similar to comments at an international level made by Lieutenant General Bautista from Session 2, referencing the Philippines leading the conflict in Marawi with other nations in supporting roles.

An overlapping link with Session 2 was the importance of partnering to countering space and cyber-security issues also raised by General Bautista in a call for action to promote collaboration in this area. Major General Bilton highlighted the importance of partnering in these areas, particularly in the context of borderless conflict. Mr Sadleir pointed to a plan for Australia's engagement on partnering for cyber issues through a planned Australian Pacific Security College for regional security. Likewise, it was also emphasised in Session 2, and reinforced in Session 3, that partnering was vital to countering violent extremism through enhanced information sharing domestically between agencies and internationally.



Figure 20. Major General Greg Bilton, AM, CSC, here as commander of Joint Task Force 637 tasked with disaster relief after the devastating Bundaberg Floods of 2013. Major General Bilton discussed the importance of harnessing the capabilities and capacities of partner nations to achieve joint aims. (Image: DoD)

Generating Land Power Through Partnering

Major General Greg Bilton, AM, CSC

Deputy Chief Joint Operations

Lieutenant General Rick Burr, our host, Land Force Commanders from across the globe, fellow panellists, distinguished guests, Ladies and Gentlemen, good afternoon. It is my privilege to provide the opening address introducing Session 3 on Generating Land Power Through Partnering. I will set the scene for presentations that will be delivered by my fellow panellists.

No doubt you have already observed that the panel of which I am a part includes Brigadier General Toropo, the leader of the military of our close neighbour Papua New Guinea, and representatives of other Australian Government departments and agencies, including Richard Sadleir from the Department of Foreign Affairs and Trade, and Assistant Commissioner Glenn Dunbier from the Australian Civil Military Centre. In the Australian Department of Defence we are not only focusing on building better partnerships with our international partners but we are also focussed on better integrating our efforts across the whole-of-government. Greater opportunities also exist for us to coordinate, or in some cases integrate, our efforts with those like-minded allies and partners who may also be conducting partnering activities in a third country. These endeavours to enhance and strengthen partnerships are essential if we are going to properly address the full spectrum of contemporary security challenges. Strong partnerships across government and with our international partners will enable us to underwrite regional security, stability and prosperity together.

Effective partnering builds trust, interoperability and understanding establishing the foundation for better information sharing. Many of the security challenges we confront are transnational and global. Threat elements look to operate from areas with limited governance: or where friction exits between different ethnic or religious groups; or under the cloak of criminal activity; or around borders or boundaries that are porous or insecure. If we are to confront and eradicate these threats, we need to better share information that enables actions to be taken to reduce the places and areas where these threat elements can operate. As part of our partnering efforts we need to build mechanisms for more effective information sharing.

The Australian Army has accrued many years of experience in partnering with a broad range of international partners in multiple locations across the globe. As I speak, the Army is conducting partnering activities on operations in Iraq, Afghanistan, Egypt and South Sudan and on exercises and international engagement activities across the Indo-Pacific Region. From this deep well of experience we have learned that successful partnering requires us to be respectful of sovereignty, respectful of culture and alive to the needs, wants and desires of our partner. A genuine and successful partnership requires nothing less. In an international rules-based order, where the nation-state is central, respect for sovereignty is critical. Respecting culture is key to ensuring any planned partnering activities are nuanced accordingly and, while seemingly obvious, taking account of the partner's requirements is essential.

In the context of generating land power through partnering the Australian Army's most successful partnering efforts have been characterised by these principles. The approach has been based on up-front consultation with our partners to ascertain what they would like to achieve and why, balanced against our capacity to deliver. On the basis of this advice, the partnering options are developed to achieve the desired outcome. Once an agreed way ahead is determined, the partnering activities are conducted. Evolving our partnering efforts is also critical to ensure they remain relevant and useful. Matching our partnering efforts to the contemporary security threats and challenges ensures our partnering efforts are enduring. Simply conducting the same exercise with the same objectives year-on-year does not meet the requirement and will quickly render our efforts irrelevant.

The Australian Defence Force's most contemporary example is our current work with the Armed Forces of the Philippines. As a consequence of the siege in Marwari, Mindanao, the Governments of the Philippines and Australia agreed to work together to build enhanced capability to counter the ISIS (Islamic State in Iraq and Syria) threat. The Australian Army was able to offer the contemporary experience of conducting operations in Iraq and Afghanistan fighting ISIS and the Taliban. Our understanding of the conduct of urban operations and the tactics, techniques and procedures used by ISIS in this environment has framed the training we have conducted with the Armed Forces of the Philippines. A comprehensive program of training activities was developed and have been running now for more than 12 months. The delivery of this training has been dynamic and flexible with changes being made to training programs at the request of the Philippines or as we find new areas of focus through working together. Over these first 12 months the training was used to train Filipino units with an emphasis on the conduct of urban operations applying the effects of the joint force. The next 12 months will focus on 'train-the-trainer' activities and evolving the training. We have been particularly grateful for the wonderful hospitality of our Filipino partners. We have learned much from them and built enduring relationships between military professionals. Notably the Defence activity in the Philippines is well integrated with the activities of other Australian Government agencies, particularly the Department of Foreign Affairs and Trade.

In times of crisis, the Australian Defence Force has been effective in integrating with whole-of-government efforts. Two good examples of Australian whole-of-government responses are the responses in East Timor and the Regional Assistance Mission Solomon Islands. While both responses involved partnering, Defence initially led the effort in East Timor, and played a supporting role in the Solomon Islands. The Solomon Islands example is notable as Defence supported a Department of Foreign Affairs and Trade and Australian Federal Police-led mission. Our challenge in Australia is to better integrate our whole-of-government efforts as part of normal business rather than just in times of crisis. Harnessing the full capacity of partnering efforts through effective whole-of-government integration makes us better partners. It will also ensure we optimise the use of resources across government.

The Australian Army has considerable experience in conducting partnering operations within coalitions. In both Iraq and Afghanistan, we have integrated our efforts with Coalition partners to deliver support to the Iraqi Security Forces and the Afghanistan National Defense and Security Forces. These efforts have been well-coordinated with respective nations making contributions that fully harness the respective capabilities and capacities of participating nations. Again, outside of bespoke operations, there are great opportunities for like-minded nations to coordinate or integrate partnering efforts to achieve a cohesive multilateral approach for the host nation where our respective national interests align. Normalising this approach rather than waiting for a crisis will garner optimised outcomes for the host nation. Some effort is being applied to achieve better multilateral approaches, but this work is in its infancy and needs our attention and drive to bring it to fruition.

The Australian Army, as part of the Australian Defence Force and on behalf of the Australian Government, continues to develop and maintain our relationships with allies and partners by acting transparently and through continual investment, taking either bilateral or multilateral approaches as appropriate. These relationships with partners underpin the Army's operational effectiveness by building trust, developing interoperability and enhancing the understanding of Army personnel of regions, countries and cultures.

The Australian Army pursues a comprehensive and robust international engagement program principally informed by our Defence and Foreign Affairs White Papers. The Army program incorporates exercises, individual training, Army-to-Army exchanges, collaboration with foreign defence industries, overseas science and technology organisations as well as think tanks and senior officer engagements. This work is nested within Australian Defence Force and Department of Defence international engagement programs. There is a particular emphasis on building trust with focus placed on exercises with international allies and partners and senior officer relationships. These special relationships and shared understandings prove vital in the circumstances where armed conflict is likely or unavoidable, or when both partners need to draw on their respective trust of one another to help solve collective security problems as they arise. The Australian Army has increased the scope and commitment of its international engagement in accordance with the objectives set out in the Defence *International Engagement Plan*. Army focuses on its core relationships, particularly in the realm of close combat, but will increasingly also seek to expand its exposure and influence beyond the land domain to include space and cyber, particularly in the areas of electronic warfare and cyber operations. This is framed in the context of the integrated joint force. Army will look for opportunities to collaborate with major partners and allies particularly in their science and technology research lines of enquiry.

The Australian Army is enhancing language proficiency, cultural selfawareness, and physical robustness to ensure that we can operate and thrive in foreign environments. A particular emphasis in this regard will be on the development of peer-to-peer relationships amongst our junior soldiers and officers, as well as the nurturing of senior relationships through army-toarmy engagements. Our regional security, stability and prosperity key focus will be on the South West Pacific and South East Asia regions. Australia's long-standing relationship with the United States and other 'five eyes' partners will be maintained as a critical and enduring priority.

The Australian Army has expended considerable effort on our partnering work over many years and this work will continue. We know that we can go to the next level if we normalise whole-of-government integration, normalise multilateral partnering through better levels of coordination and, where appropriate, integration of our collective efforts and improvements in information sharing. The success of our efforts will be underpinned by our approach, where we respect sovereignty, respect and understand culture and understand the needs and wants of our partners. This seminar provides us another opportunity to enhance our partnering efforts. Regional security, stability and prosperity relies on us working together and getting this right.

Thank you.



Figure 21. Major General Gilbert Toropo, DMS, CBE (right), Commander of the Papua New Guinea Defence Force pauses with Major General Paul McLachlan, AO, CSC during the Asia Pacific Economic Cooperation conference to commemorate Remembrance Day 2018 at ceremonies in Port Morseby. The ADF, upon request of the PNG Government, provided a Joint Task Force to support and assist the PNGDF with their mission to proivde security for the conference. Major General Toropo addressed CALFS 18 and discussed how smaller nations view partnering and how the PNGDF generates its land power through partnering with the Australian Defence Force, its largest bi-lateral partner. (Image: DoD)

Trust and Respect in Regional Partnerships

Brigadier General Gilbert Toropo, DMS, CBE

Commander of the Papua New Guinea Defence Force

Introduction

'Lieutenant General Rick Burr, fellow Defence and Land Commanders in the Indo-Pacific Region, Distinguished Guests, Ladies and Gentlemen, good afternoon.

'It's both an honour and pleasure to attend CALFS18 and be invited to deliver the key note address on '*Generating Land Power Through Partner-ing*'. This through the eyes of a Commander of a small South West Pacific security force.

'I thank Lieutenant General Rick Burr for the invitation to present this afternoon.

'As you all know Papua New Guinea and Australia share a long and deep relationship, no better evidenced through our shared military history and close security cooperation, embodied in the land domain in particular.

'Papua New Guinea, along with all countries represented here at CALFS18, has a shared interest in a secure and prosperous region, be that the near region of the South Pacific, or more widely in the Indo-Pacific region.

'Given Papua New Guinea's location as a 'gateway' between the two regions we take our role seriously, contributing within means where we can.

'Important in our ability to do this is productive international engagement. A secure and prosperous region depends on trust and partnership between countries. No nation can achieve its security objectives by itself. And alone, we risk working at cross-purposes or duplicating our efforts. By working together, where our interests align, we maximise our effectiveness.

'I propose to break my address this afternoon into three parts.

'I will first outline how we, and perhaps other small country forces see partnering. In this respect, I'm very pleased to note there is a side event—Pacific History Workshop and Seminar—running over the next two days where regional partner perspectives are being sought on what makes a successful partnering operation.

'I will then describe the Papua New Guinea context—an understanding of each other's national context is essential, I believe, for effective partnership.

'And finally, I will describe how we generate land power through effective partnering, using our partner experience with Australia, our largest bi-lateral partner.

Effective Partnering - a Definition

'In my view, effective partnering is synonymous with effective international engagement. It is a given that sovereign interests are important and need to be respected. The challenge, as mentioned, is to find where partners' interests align, while at the same time respecting sovereign interests. I am realistic in this, it is not always easy.

'Perhaps the best explanation of effective partnering I can give is to share a story told me by my Deputy Chief of Staff, a Kiwi, who on hearing he was posted to my headquarters discussed his upcoming posting with the then Chief of Staff, now Commander of the Republic of Fiji Military Forces, Rear Admiral Viliame Naupoto: someone whom he had known and respected for over 35 years. Naupoto's advice was, 'make sure you are in the waka (canoe)'. By this he meant, "if you are on the journey, and your partner feels you are with them, you can be trusted: your impact will be more valued and much greater than someone who may be on 'the shore shouting directions'." This, I think, is true. 'While small Pacific states are inevitably the smaller partner, we invariably have a disproportionately large stake in the outcome. As such, for all our partners (and I hesitate to use the term traditional and non-traditional any more), to be trusted and valued as security partners we encourage you to join us in the journey, respecting our aspirations, through both good times and bad.

'We all have a shared interest in the security and prosperity of the Pacific, however we all bring different things to the table, be it in security operations or during HADR (Humanitarian Assistance and Disaster Relief) events. In the PNG context major partners such as Australia, the US and NZ provide significant enablers, whether C2 capabilities, strategic lift, or disaster response capabilities such as multi-role vessels.

'Small disciplined forces, for our part, bring both commitment and capability to the table, both of which are 'force multipliers' in addressing threats to regional stability. Commitment in terms of being from a small Pacific Island state, which assists mission legitimacy, and through cultural understanding better enables tactical and operational success.

'Interoperability is enhanced through familiarity and long-standing personal relationships. In other words, successful partnerships are not built overnight. They are built through time, trust, an adherence to common doctrine, individual and collective training opportunities and engagement.

'When all parties recognise the contributions of others, and this occurs under the auspices of a regional body such as the Pacific Island Forum, then the chances of mission success are greatly enhanced: RAMSI (the Regional Assistance Mission to the Solomon Islands) in 2003 was a good example of this where the Solomon Islands, through the Biketawa Accord, sought assistance from the forum in addressing a deteriorating, internal security situation.

Papua New Guinea - the Context

'While all countries might share a common interest in a secure and prosperous region, we all have different start points, and are at different points on the journey... or the development path. Take geography and demographics for example. Papua New Guinea comprises half of one of the world's largest islands, and a series of archipelagos. We have a rugged, mountainous hinterland, and have yet to connect all regions though a national road system.

'We sit, as mentioned, at the natural juncture between Australia and the

South Pacific on one hand, and East Asia and the Indian Ocean on the other. Many of the world's major trade routes pass through our waters, or at least close to our borders. It is therefore inevitable that we occupy an important position in the strategic thinking of our immediate neighbours, and also in the thinking of larger trading nations further afield, who rely upon the safe passage of goods and resources through our region.

'Demographic factors are also important. PNG is an ethnically-diverse country: indeed, of the world's approximately 2000 languages, 800—or 40% are spoken in PNG. As a result, it is common for our people to identify more closely with their local region and wantoks (or fellow tribesmen) than the country and its people as a whole. This has been shown to be both a blessing and a curse for PNG. While we rejoice in that ethnic diversity, unfortunately it has sometimes led to provincial rivalries that has made nationbuilding difficult. That is an issue that only we can address through the timehonoured Melanesian process of understanding through engagement.

'Our challenges are unique, so when we talk about partnering and 'generating land power' it is more often likely to be in response to an HADR event or 'force projection' in support of a civil emergency in our rugged and challenging hinterland, as opposed to a regionally-based security initiative such as RAMSI.

'These challenges are highlighted in our government's mandated core tasks, which include: sovereignty protection (including the integrity of our land border); civil emergency and HADR assistance; nation building, either directly through such means as the development of national infrastructure, i.e. road-building by our engineers, or indirectly through supporting whole of government programmes to improve services for our isolated communities; and international obligations including United Nations peacekeeping operations.

'Achieving these strategic tasks to the level required requires a range of capabilities beyond what we currently have, including growing the force from 2500 in 2013 to 10 000 in 2030.

'We currently sit at approximately 4 000 personnel.

Papua New Guinea Defence Force (PNGDF) Structure – Current and Future

'To give a perspective on this, the PNGDF's current structure, which has been in place since independence from Australia in 1975, is essentially a

brigade-level which would serve as part of a larger formation. The increase in size to 10 000 personnel by 2030 however, will require major structural reform, involving a transition from a brigade to a divisional setting, and from functional to environmental command. Initial planning is for the PNGDF to reach optimal mass for transition by 2025 with a separate army, navy and air force, as component parts of a unified defence force—by 2030.

'A range of new capabilities, from a strategic-level headquarters that is closely linked to other government agencies, with ICT (Information and Communication Technologies) 'force wide' that can effect secure strategic, operational and tactical communications, to aero-medical deployment and evacuation are all required. I don't propose to go into the details of the specific capabilities and plans other than to say developing the capabilities and effecting structural changes requires more than simply recruiting more personnel and acquiring more modern equipment. It is transformational, involving a full regeneration of the force, and imposing a series of cultural changes, within a short period; all the while continuing to undertake the range of business-as-usual tasks, and not-so-usual tasks if you consider support for APEC Leaders' Summit (APEC 18).

'In this context the support of our defence partners is critical. Australia is by far our largest defence partner. Indeed, the Defence Cooperation Programme (DCP) is larger than all other partner programmes combined. Main effort under the DCP over the past four years has been the 'Companies of Excellence' programme which saw ADF mentoring teams embedded in training and operational units, providing mentorship to commanders at all levels. It has also seen companies trained as a whole, and then being posted as a single entity to a battalion. We have seen the full regeneration of two infantry battalions in this way, including some supporting infrastructure. This has resulted in raising individual standards at all levels.

'The support provided through the DCP across all areas has always been important to us, and remains an essential factor in our attaining our objectives.

'The support of our other bi-lateral partners, the US, NZ and China, remains equally important with each filling important functions. The US with a professional military education and development programme; China with specialist education and 'soft skinned' vehicle mobility; and NZ with professional military education and more recently, mentoring support for our leadership development programme.

'Increasingly as our partnerships grow and diversify the need for collaboration and transparency becomes more important between all parties. While this collaboration must place the smaller partner at the centre, it comes with a responsibility not to play one partner off against another, but rather to calibrate partner engagement for positive outcomes for all.

Generating Land Power through Partnering – Australia and the PNGDF Experience

'I now come to some observations of the PNGDF experience in generating land power though partnering, using our partnering experience with Australia in particular.

'Firstly, enhanced capability is built through the self-evident capacity-building programmes, such as the 'companies of excellence' already mentioned, and the myriad of individual and collective training activities we undergo together. These represent our 'annual, training battle rhythm', which we synchronize with all our partners.

'The courses and activities are complemented by 'unit-to-unit' exchanges, in the 'land space' particularly with the 3rd Brigade in Townsville. This familiarity not only builds confidence operating in a combined environment but it also generates the 'person-to-person' relationships we consider critical to an understanding of our challenges. And the benefits can accrue long after the exchange, for example Lieutenant General Tim Keating, the recently retired New Zealand Chief of Defence Force, served a three month attachment with the Pacific Islands Regiment in the early 1980s. He remained a committed and valued friend throughout his service. The same can be said of many ADF members. Colonel Dick Parker is a good example. He schooled in PNG as a youth in the late 1970s, was a young officer instructor at the Defence Academy in the mid-1990s, and more recently was the Head of the Australian Defence Staff in Papua New Guinea. Another good friend of PNG.

'Secondly, it is very clear to me, that the generation of land power is a joint and combined activity.

'I've mentioned the extreme challenge of our terrain; this is overcome with Australian sponsored 'wet lease', rotary wing helicopters that greatly assist in mobility for border patrols and other security operations. 'The same effect is achieved with the use of C-130s. As seen recently in response to the devastating earthquake in the Highlands in late February this year. Without the timely intervention of the air support from both Australia and New Zealand, the government would not have got the immediate relief supplies and our support personnel into the region.

'The joint effect is also seen in the maritime domain through the use of an Australian funded Landing Craft Heavy (LCH) which allows the shipping of stores and troops to areas that would otherwise be inaccessible or prohibitively expensive.

'These air and naval enablers have a second order benefit in training and experience as we seek to develop our own capabilities in these areas.

'While a third of our extensive partnering programme with Australia is expended on individual training, exercises and operations; rotary-wing, infrastructure and logistics support account for nearly 50% of the programme, including new accommodation and Combat Service Support team support to Force Maintenance Bases. This targeted support from our major partner, recently complemented with improved C2 through the supported introduction into service of additional HF/VHF communications, allows us to generate a significant land effect, and in so doing, achieve our core tasks to a higher level.

'It is testimony to the enhanced, combined and joint effect that can be achieved through effective partnering.

'This is also evidenced through major partner support for the APEC Leaders' Week this November. While such support is critical and greatly appreciated given our lack of high-level assets and the C2 infrastructure, perhaps the greatest enduring benefit will come from the stand-up of the JSTF (Join Security Task Force) HQ. Australian support has been significant in this: ongoing over last two - three years with the effect of bringing together all PNG security agencies. This has not been easy. It is new to us and can only be of benefit in promoting a better whole-of-government response in the future. Something that is essential if we are to continue to effectively deal with our security challenges.

'To conclude however, a cautionary note; while I have stressed that joint and combined enablers have a multiplying effect in the land space for a developing South West Pacific security force such as the PNGDF, any achievement is underwritten by the focused development of human resources. The old adage of 'crawl, walk, run' is very true in this context. We cannot move faster than the level of our society's development. This places additional importance on partner understanding, of long-standing inter-personal relationships, and, of course, trust.

'To my mind, just as it is in large alliances or coalitions, so it is in small bilateral or multilateral operations. A successful outcome is more than just the sum of the parts. It requires an understanding of the synergies and the relative priorities of each part to deliver the whole. As seen in the Papua New Guinea context, we are both seeking to transform while at the same time undertake critical business-as-usual tasks. For our partners and us, this requires an effective understanding of partnering ... some insights into which I hope I have been able to give you this afternoon.

'Thank you.'



Figure 22. Members of the PNGDF Inicdent Response Group conduct aeromedical evacuation drills with members of the Australian Army's 5th Aviation Regiment in Port Moresby as part of the combined operation providing security for the Asia-Pacific Economic Cooperation conference (APEC). The Australian Defence Force provided a Joint Task Force in support of the PNGDF in response to a request from the PNG Government. (Image: DoD)



Figure 23. A Department of Foreign Affairs and Trade member (blue shirt) with members of the Papua New Guinea Defence Force are flown into a remote Papua New Guinea village by Australian Army CH-47F Chinooks of 5th Aviation Regiment as the Australian Government provides assistance to the Government of PNG after the 7.5 magnitude earthquake in the PNG highlands in early 2018. Note the damage done to the airfield's runway and grass apron by the 'quake that prevents fixed-wing aircraft from landing. (Image: DoD)

Soldiers and Diplomats Working Together

Mr Richard Sadleir

First Assistant Secretary, International Security Division, Department of Foreign Affairs and Trade

'Well thank you, Lieutenant General Burr, Major General Bilton and distinguished guests. It's a great honour to be here.

'Let me first acknowledge the traditional custodians of the land on which we meet—the Kaurna People—and pay my respects to their elders past, present and emerging.

'It's a testament to the inclusive character, leadership and worldview of Lieutenant General Burr, Chief of the Australian Army, that he has invited me to speak to you today. After all, it was the former British Prime Minister, David Lloyd George, who said in the lead-up to the Paris Peace Conference: 'diplomats were invented simply to waste time'.

'Given today's distinguished audience I hope I will not waste your time.

'Let me turn now to a contested and complex strategic environment. As I know was discussed in your first session, powerful drivers of change are converging to create a contested and complex strategic environment. China and India have re-emerged as great powers. The post-Cold War Iull in major power rivalry has ended. The international rules-based system is under

strain. Nationalism and protectionism are on the rise. Transnational threats without borders—such as terrorism, cyber-attacks and people smuggling, just to name a few—have grown in scale, scope and impact. And while globalisation and technological change yield great opportunities for us all, they amplify security threats.

'The Indo-Pacific region is one of the key theatres where these pressures are playing out. The future balance of power in the region will depend largely on the actions of the United States, China and major powers such as Japan and India, but also key countries such as Indonesia, the Republic of Korea, Vietnam and Australia. Our alliance with the United States is central to Australia's approach to the Indo-Pacific region. It's a choice we make about how best to pursue our security interests. To support our objectives the government is broadening and deepening our alliance cooperation including through the United States force posture initiatives. The force posture initiatives build on Australia's existing defence relationship with the United States. Through these initiatives Australia and the United States gain new opportunities for combined training and improved interoperability. The initiatives also provide opportunities for engagement with regional partners and position both countries to respond better to regional crises and natural disasters.

'The first component of the initiatives is the Marine Rotational Force— Darwin, under which US Marines rotate through Northern Australia, each rotation lasting six months. The rotation this year is the largest so far with 1 587 US Marines and their equipment. The marines participate in training activities alongside Australian Defence Force counterparts. By 2020—2 500 Marines are expected to rotate annually under the program.

'Enhanced air cooperation is the second component. Activities under this element aim to strengthen bilateral collaboration and enhance interoperability through increased participation of US aircraft in a range of training activities and exercises with Australian Defence Force personnel. The on-the-ground force posture initiatives and their engagement of a wide range of regional partners answers those who doubt the United States' commitment to the Indo-Pacific in this time of strategic transition.

'The Australian Government's Foreign Policy White Paper of 2017 provides the framework that charts a clear foreign policy course for Australia in this time of strategic change. It articulates a vision for the type of region we want. A neighbourhood in which adherence to rules delivers lasting peace, where the rights of all states are respected and where open markets facilitate the free flow of trade, capital and ideas.

'Supporting this broad vision are five priorities:

'First, promoting an open inclusive and prosperous Indo-Pacific region in which the rights of all states are respected.

'Second, ensuring Australians remain safe, secure and free in the face of threats such as terrorism.

'Third, delivering more opportunities for Australian businesses by keeping markets open and trade and investment flowing throughout the region.

'Fourth, promoting and protecting the multilateral system and the international rules-based order.

'Finally, stepping up support for a more resilient Pacific and Timor-Leste.

'Importantly, these tasks complement the strategic defence interests contained in Australia's 2016 Defence White Paper: a secure, resilient Australia, with secure northern approaches and proximate lines of communication; a secure nearer region encompassing maritime South East Asia and the South Pacific; and a stable Indo-Pacific region and a rulesbased order.

'Soldiers and diplomats working together are pivotal to implementing the strategic intent set out in both of those papers. An example of this melding of soldiers and diplomats, and operationalising this philosophy, is our relationship with Singapore. Australia and Singapore have a strong and vibrant relationship reflected in our comprehensive strategic partnership. It covers all aspects of our relationship, including trade, defence, science and innovation, education, and the arts. In the defence domain, Australia and Singapore have a long history of constructive and productive engagement based on combined training and exercises, facilitation of Singaporean training in Australia, and shared membership with others of the Five Power Defence Arrangements and the ASEAN Defence Ministers Meeting Plus. In 2016, Australia and Singapore Armed Forces personnel in Australia, signing a Memorandum of Understanding to cover this. This established the Australia

Singapore Military Training Initiative under which Singapore will invest up to \$2.25 billion to upgrade Australian training areas and receive up to 18 weeks access for 14 000 Singapore Armed Forces personnel annually. Australia and Singapore have signed other MOUs (Memoranda of Understanding) used to enhance cooperation, including on personnel exchanges, intelligence and information sharing in areas of mutual interest—notably counterterrorism and defence science and technology. This army-to-army and broader defence collaboration with Singapore adds depth and trust to this important partnership for Australia.

'Civil-military collaboration with our regional partners occurs all too often in response to humanitarian crises. Disasters are increasing in frequency, scale and impact. Indeed, since 2005, natural disasters have killed more than 700 000 people globally and left nearly 23 million homeless. The impacts have been greatest in the Indo-Pacific region. Of course, humanitarian crises undermine growth, reverse hard won development gains, increase poverty and can result in long-term instability. Australia is committed to helping partner governments manage crises responses. We work closely with local governments, donors, militaries, United Nations agencies, the International Red Cross and Red Crescent Movement and non-government organisations to ensure Australia's support is practical and tailored to meet urgent needs. And while we support humanitarian efforts globally, our focus remains firmly on the Pacific region.

'Australia has a range of specialist capabilities to respond to humanitarian crises grouped under three categories.

'First: deploying Australian personnel to provide humanitarian expertise.

'Second: providing life-saving humanitarian relief supplies. And third: establishing partnerships with local and international humanitarian organizations to deliver support within our humanitarian priorities.

'The Department of Foreign Affairs and Trade is responsible for leading the Australian Government's response to international humanitarian crises. An absolutely key partner is the Australian Defence Force; its personnel, logistical expertise, air and sea lift capability, security support and global and regional international relationships are pivotal enablers.

'I'll offer three recent examples.

'First, Tropical Cyclone Gita, as you know, made landfall in Tonga on 12 February this year causing severe damage to the main island of Tongatapu—over 800 homes were destroyed and another 4 000 damaged. Over 4,500 people were evacuated and the cyclone caused \$164 million worth of damage, almost 40% of Tonga's GDP. Within 24 hours of the cyclone hitting, the first Australian C-17 plane landed on Tongatapu with humanitarian supplies. This included: food, kitchen kits, hygiene kits, shelter kits, bed nets, sleeping mats and water purification kits. Australian supplies assisted at least 100 000 people. 30 ADF personnel and civilian personnel were deployed to assist, and crisis specialists from the Department of Foreign Affairs and Trade worked alongside the government of Tonga, HMAF (His Majesty's Armed Forces—Tonga) and international partners to coordinate recovery efforts. A \$10.5 million package of assistance supports Tonga's longer-term recovery and reconstruction efforts. We are focused on helping the Tongan government coordinate the recovery effort, rebuild schools, water supply and sewage and reinvigorate the private sector.

'Moving to Papua New Guinea.

'Against the backdrop of that excellent presentation we have just heard, in February this year a 7.5 magnitude earthquake struck the PNG highlands, affecting about 270 000 people. The remoteness of the affected community has made relief efforts challenging; many of the communities were accessible only by helicopter. The Australian Defence Force played a significant role working with the PNG Defence Force and the local authorities in their response activities. A C-130 transport plane, three Chinook helicopters and 110 Australian Defence Force personnel were deployed, helping transport medical and humanitarian supplies to warehouses in the Southern and Western Highlands and working with humanitarian specialists from the Department of Foreign Affairs and Trade to distribute tents, bed nets, community tents, tarpaulins, sleeping mats, blankets, solar lights and water containers to affected areas. In total, Australia provided a \$5 million assistance package to support the PNG government's own relief efforts.

'Another example, on 23 July the Xepian-Xe Nam Noy Dam in southern Laos collapsed following sustained monsoon rains. On 25 July, the Lao Government requested international assistance. According to the Lao foreign minister it was the biggest natural disaster in the country's history, affecting about 16 000 people. The disaster may have also dislodged unexploded ordnance from the Vietnam War era, potentially depositing it in areas previously declared free and safe. The Foreign Affairs and Defence Departments worked closely to airlift blankets, bed nets, sleeping mats, tarpaulins, tents and solar lights. The flights also transported supplies for the Red Cross and ASEAN Coordinating Centre for Humanitarian Assistance, helping to support our partners and regional response mechanisms. In total, a \$3 million package of ongoing assistance is helping to ensure affected people have access to safe water, hygiene and shelter. Part of this package will address the unexploded ordnance issue.

'In each case, Australia's response has been timely, consultative and thorough, helping to underscore our partnerships with Tonga and Papua New Guinea and building on our long and constructive diplomatic relationships with the Lao PDR (People's Democratic Republic).

'Turning to building capacity at home and abroad. Humanitarian assistance and disaster relief is just one area where foreign ministries and militaries work together closely. Capacity building at home and abroad is another.

'For example, the Department of Foreign Affairs and Trade engages with the Australian Defence Force on a wide range of exercises to enhance our mutual learning and exposure to the roles, functions, structure, culture and processes of our respective organisations and our operating environments. This increases the ability of foreign ministry staff to engage with the ADF and, where appropriate, shape and influence military planning and the development of operational plans. It also enhances the military's understanding of the political, diplomatic and humanitarian considerations relevant to the very complex operating environments in which all of your militaries operate. More broadly, through whole-of-government crisis management processes, including what we know as the Australian Government Crisis Management Framework, the structures and processes by which we respond to crises, there's an opportunity to test civil-militarypolice coordination mechanisms with government military and nongovernment partnerships partners.

'Overseas we work closely with partners to enhance national and regional capabilities.

'Australia has an abiding interest in a stable, secure and prosperous Pacific and these efforts are directed to that goal.

'Another example of the work in this area is Australia's work collaborating with Fiji to develop the Black Rock Peacekeeping and Humanitarian Assistance and Disaster Relief Camp into a regional hub for police and peacekeeping training, and pre-deployment preparation. The facility will deliver enhanced capability development and stronger interoperability between the Australian Defence Force and the Republic of Fiji Military Forces. It builds on our long-standing defence cooperation programme focused on humanitarian assistance and disaster relief, maritime security, peacekeeping and training. As a regional peacekeeping, training and humanitarian and disaster relief hub, Black Rock will support implementation of the new Biketawa Plus regional security declaration once it's adopted by PIF (Pacific Island Forum) leaders. Australia's support for Black Rock builds on extensive and long-standing defence and police cooperation programs in the region.

'To help countries address shared security challenges, we are deepening the security corporation in other ways.

'We announced in the Foreign Policy White Paper that Australia and other Pacific countries would collaborate to establish an Australian Pacific Security College. The college will improve regional security cooperation and strengthen the capacity of the Pacific to respond to security threats. Initially, it will not have one physical home but rather, a range of Pacific nations will host and deliver its core functions.

'These core functions include:

- accredited training for senior executives and middle managers as part of a sort of broader set of professional development opportunities
- support for national and regional policy development on transnational crime, climate change, natural disasters, pandemics and cybercrimes
- importantly, an active alumni network of Pacific security decisionmakers to help strengthen regional cooperation and connections.

'At the same time we'll step up our work with Pacific Island partners to better share and analyse information on security issues. In April this year, the Pacific Island Forum Fisheries Agency and Australia jointly hosted a workshop in Honiara. Participants considered broadening information sharing from the maritime to other security domains and agreed to advance work on aligning data standards and linking security protocols.

'Well, that's a sample of a range of very significant activities undertaken or underway.

'In conclusion, picking up where I began, not since the early years of the Cold War has the strategic environment been as complex and contested as it is today. To ensure the Indo-Pacific evolves to the benefit of all, we champion a stable rules-based order that supports the peaceful resolution of disputes; facilitates free and open trade; and enables access to the global commons. We use an integrated approach spanning the three Ds: diplomacy, development and defence. Each element is mutually reinforcing with the sum greater than the parts. I like to think of it as a form of interoperability with different contributors engaging safely and effectively in combined operations. It's a useful analogy for the way in which soldiers and diplomats work together, drawing on our comparative advantages to create a force multiplier, and standing shoulder-to-shoulder as partners for peace, security and prosperity.

'Thank you.'



Figure 24. Members of Departement of Foreign Affairs and Trade Crisis Response Team (DFAT CRT) man a casualty evacuation centre where Australian Army personnel transport evacuees to depart on Royal Australian Air Force aircraft or Royal Australian Navy vessels. This scenario is the basis for this joint DFAT/ADF exercise in northern Queensland. (Image:DoD)



Figure 25. A Police Constable from New Zealand Police speaks with an Australian Army corporal during a routine night patrol at Point Cruz, Honiara in the Solomon Islands. Soldiers of Combined Task Force 635 work with Participating Police Force officers from New Zealand and Samoa supporting the Royal Solomon Islands Police Force as part of the Regional Assistance Mission to the Solomon Islands (RAMSI), 2010. (Image: DoD)

Interagency Cooperation and the Challenge of Culture

Deputy Commissioner Glenn Dunbier (NZ Police)

Deputy Executive Director, Australian Civil-Military Centre

'Chief of Army, Lieutenant General Rick Burr; my fellow panel members Brigadier General Gilbert Toropo, Major General Greg Bilton and Mr Richard Sadleir; Distinguished Guests; Ladies and Gentlemen.

'My name is Glenn Dunbier and I am very honoured to be here speaking with you today. I would like to begin by acknowledging the traditional custodians of the land on which we meet today, and pay my respects to their elders, past, present and emerging. I would also like to pay my respects to the Aboriginal and Torres Strait Islander men and women who have contributed to the defence of Australia in times of peace and war.

'And in my native tongue —Te Reo Maori, or the Maori language —

E Nga Iwi E Nga Mana E Nga Reo Rau Rangitira Ma

'Respects to this gathering, respect to the reputation and gravitas of what

we will discuss, and may we all discuss this as equals and chiefs.

Ki te whare e tu nei – tena koe Ki te papa e waho – tena koe Ki ti tangata whenua – tena kotou

'Greetings and respect to the house in which we meet, to the land on which we meet, and to the people of this land.

Ki ti Rangitira Lieutenant General Rick Burr, Tena Koe, Ki ti Rangitira o te Ngati Tumatauenga – Brigadier John Boswell, Tena Koe ehoa Ki ti whanau eh huihui ne, tena kotou, tena kotou, tena tatou katoa. Kia Ora.

'Respectful Greetings to our host Chief of Army Lieutenant General Rick Burr, Respectful greetings to my friend from New Zealand, Chief of Army Designate, Brigadier John Boswell, and welcome to the wider Army family who are gathered here to meet and talk today.

'When the Chief of Army's office sent me the request to speak here today, along with the brief of talking to partnering across the Indo-Pacific, I thought long and hard about what I could possibly bring to this discussion, and add to this gathering. Whilst I was very honoured to be asked to speak here, I only wanted to do so if I felt I could add something of value.

'And I realised what I want to add to our discussion here today is a reflection of culture and how it shapes our partnerships: our organisational cultures, police culture, army culture, as well as national cultures. The way we see ourselves and the cultural tendencies we bring to partnerships can be both a significant advantage and multiply our strengths, but if not properly understood, can also be a barrier that keeps us from effective partnerships.

'I also noted that I was going to speak last... and just before afternoon tea. So, I've decided to not do a PowerPoint, not take the full 30 minutes allotted to me, and speak instead from a personal perspective.

'I decided to speak about personal reflections on internal organizational cultures, within and between organizations working in national security,

drawn from my police experience and recently working with the military here in Australia. Then I'm going to take a step back, and reflect on New Zealand and Australia as partners in the Indo-Pacific region, and how culture impacts our partnerships.

'Whilst I've been invited here as a Deputy Commissioner of New Zealand Police—which I am—I also wear another hat. I am halfway through a threeyear secondment here in Australia, working for a small part of Defence—the Australian Civil-Military Centre—as the Deputy Executive Director. And so, for the past 18 months I have been here in Australia working with Defence, but also with the whole-of-government partners that the Australian Civil-Military Centre mandate dictates that we do.

'This has exposed me to a whole different paradigm to what I have spent the past 33 years dealing with. And it caused me to reflect on a lot of things, take stock of what I know and what I thought I knew; what we, as Kiwis, do well and don't do well; what we, as police, do well and don't do well.

'In short, I feel I have this reasonably unique and valuable experience that career police officers, or career soldiers, or career diplomats don't often get—of being able to step away from a career in that one organization and profession and culture—and look critically at the culture I've come from, and the culture I now find myself in.

'I've decided to talk about my own personal comparative reflections I've noted in having this experience, and how I have reflected about the importance of culture in partnering. I've thought a bit about the differences between the cultures of police and the military, between Australia and New Zealand, between coming from an organisation that has statutory independence from government to dealing with a whole lot that do not, and coming from a rank based, hierarchical 'cradle to grave' organisation to one that is not that. And then linking this to the importance of culture in partnering, and in particular partnering in the South West Pacific.

'A little bit about me first—I have been a member of New Zealand Police for the past 33 years. I joined New Zealand Police 33 years ago this time next week, as a 19-year-old in 1985. Unlike the military, in Police, at least in New Zealand, there is no lateral entry at officer level—every sworn member of Police starts at Constable. Most, if not all Australian police jurisdictions are the same, and this one aspect alone, has a large bearing on a difference in culture between the military and police in my view.

'Anyway, I did most of the conventional roles within policing: response, investigations, special operations group, as well as a not insignificant period of covert policing, before moving to more leadership mid-rank roles, then onto senior executive roles. Getting to senior executive roles was a bit of a surprise to me—I do not possess any academic qualifications, having left school at 17, and am not naturally ambitious, however, I do have aspirations, particularly around leading people well—and somewhat accidentally arrived at Deputy Commissioner position. Getting there exposed me to how government works, and the necessity to understand politics but, in police at least, not to play politics.

'Having always had the aspiration to represent NZ overseas, I saw the opportunity at the Australian Civil-Military Centre as maybe my last chance before retirement, so I grabbed the opportunity. And it's been this experience—stepping away from everything I knew or thought I knew—that has opened my mind and eyes to the importance of culture, something I think we all intuitively know, but don't always get the opportunity to experience.

'The Australian Civil-Military Centre is a small agency—about 25 people housed within Defence but with a whole-of-government mission, mandate and constituency. The mission of the Centre is to support the development of national Civil-Military-Police capabilities to prevent, prepare for, and respond more effectively to conflicts and disasters overseas.

'We do this in a number of ways:lessons learnt studies, assisting agencies to train and plan together for deployments, research, and advocacy, but if I could get to the essence of what it is we try to do, it is to get each of these agencies—all of which have their own culture—to understand each other better in order to work better together. Working with other cultures, understanding them, accepting the different mandates, different missions, different methods, different language and then cooperating where able, compromising where able – is what we try and make happen.

'In my view partnerships are about utilising the best weapons in your arsenal to achieve the best result. You might want to say: the best tools in your toolbox... or in policy terms: drawing on the full suite of policy options

available to yourgovernment. By taking on partners in any undertaking, you are exponentially increasing your tools or the number of options you have available to you.

I see this every day in my work, with examples ranging from humanitarian responders and the military coordinating to respond to humanitarian and natural disasters in our region, police and military working together to provide stabilisation and security in conflict and on operations, civilians and policy professionals participating in military exercises to replicate real-life political and institutional responses and learn to deploy together.

'It's a well-recognised reality within the Australian context, that there is no version of a future Australian overseas operation which will be done by the military alone. In modern crises, we need experts and professionals to perform an ever more complex range of tasks. Civilians and police perform an ever-increasing range of functions on overseas operations. We work with experts from across government and the nation and must be ready to work with international partners.

'When you step above Australia's domestic response, and add in international partners to this mix, you not only multiply your toolkit, you also gain new dimensions, strengths, understandings and reach that cannot be achieved by Australia alone. As we see, security in our region increasingly relies on alliances and partnerships to achieve the far-reaching and sustainable outcomes we need.

'In 2015, the Secretary of the Department of Prime Minister and Cabinet here in Australia, Dr Martin Parkinson said:

"Very few countries could be said to do 'joined–up' government at all well as there is a recurring lack of coordination between the strategic, military and economic institutions across nations. While it may be hard for any country to achieve this outcome . . . history suggests that those which do, can have a disproportionate influence at key times in history."

'But to do all this we need to recognise we have different cultures departmental, national, and professional—and seek better to understand these differences, in order to partner better together. 'So, some reflections on the differences between organisational cultures, particularly military and police.

In police—at least a nationwide police organisation like New Zealand Police that has as its principle mandate, community policing within New Zealand, and with a smaller offshore Policing diplomacy mandate—our day to day business has really only your peripheral vision to offshore threats, geopolitical moves and regional politics, but the focus of your view is squarely on what's going on 'at home'. And as a member of Police for the past 33 years, the focus of my career has been largely looking onshore at threats and challenges, not so much offshore. Clearly the senior members of the Australian Defence Force would have the reverse of that focus. As would career diplomats, and foreign affairs staff.

'In police—at least a nationwide police organisation like New Zealand Police, the government's domestic policy has a lot more impact on your daily life, and therefore takes up your focus, rather than the government's foreign policy which isn't invisible, but is more in your peripheral vision.

'Clearly the senior members of the Australian Defence Force, or any defence force, would have the reverse of that focus, as would career diplomats, and foreign affairs staff. I always knew that, but I've been surprised as to the extent of this difference and the extent to which this shapes the way we operate.

'Police, generally—and I'm being very simplistic and general here—do not plan to the extent the military does. Right throughout my career, from Constable to Deputy Commissioner, I went to work every day trying to remain nimble and available to respond to anything that happened. This needs-based approach to 'planning-on-the-run' was preferred because having any sort of daily workplan, for most police, is an exercise in futility. The range and scale of jobs that you can be called to are so diverse, that rather than assumption based planning, they can only really be prepared for by making sure we have good people, providing principles to guide their response and empowering them to exercise their discretion to respond to whatever the need is. Because there is no lateral entry in New Zealand Police, every sworn member of police starts with this as their default setting, and they become quite adept at reacting and remaining available and free to respond even right through to senior levels. 'My Defence colleagues here, particularly those from Army, have this amazing grounding in, and understanding of, planning. Police either marvel at this ability, or moan about how much time you have to do it—one or the other. But there's no doubt from my experience [that] it is a principle difference in the way we are brought up, and therefore the way we lead and act and behave and what we expect.

'A colonel was relaying to me a story about a Defence-Police joint deployment he was on overseas, where something happened out in a nearby village that required a response. Someone came into the camp and said to this colonel [that] there'd been a fight or something at a nearby village. He, and the police commander quickly got their heads together and agreed the Aussies were going to have to go and do something, and both went off to rouse their own staff. At that point the colonel started a quick appreciation, quick planning process, and preparing a quick briefing, turned around to find the police guys had already jumped into their vehicles and were half way to the scene. The colonel felt the police response was dangerous and unprofessional, and I have no doubt that the police commander felt that the Army response was, well unresponsive, and that planning was a waste of time until they knew what they were facing. This little story encapsulates to me a poignant difference between military and police. And these two commanders could well go on to be the Chief of Defence or Commissioner of their respective organisations.

'Clearly there is a scale aspect to this example—Police frequently do plan operations, and the military can and do just react when required, but my point is more about our default settings being a bit different, and how this difference could either be leveraged for good, or misunderstood.

'But what both military and police do very well, out of necessity, is to give our people real life 'on-the-job' leadership roles, usually in circumstances that are time pressured, public (at least in the case of police, but also sometimes the military), and in situations where mistakes are costly and good leadership really matters. And this is something I took for granted and have learnt since I have been here in Australia dealing with a whole raft of different government and non-government agencies: not everybody has had the benefit of learning leadership so early and in circumstances where it really tests abilities. 'Not a lot of other agencies have the ability or opportunities to expose their people to these things, like we do. And I feel, as a result, we grow leadership and leaders well. This is in no way a slight on other agencies, but I have found the extent to which the mid-level people leaders in police and military have done leadership for real, have the scars on their backs and learnt from their mistakes, and have a large raft of leadership experience to fall back on is way ahead of most other agencies I have dealt with.

'We are also people of action—which makes sense given what we exist for. We select, train and reward our people for their ability to make decisions under pressure, lead and take action. However, how this can play out in the higher levels of leadership of our organisations as 'taking over' in the whole-of-government, interagency or partnering space. I can't tell you the number of times, as a senior police official having to work in the whole-ofgovernment space, I had to bite my tongue and not just step in and take charge and 'actually do something'.

'New Zealand Police staff qualify for promotion through exams, and then apply for vacant positions that may hold a higher rank. Unlike the military we don't go through the promotion board process. So, in New Zealand at least and I think in a lot of police organisations, our people are frequently submitting resumes and presenting at interviews, in order to win a position that comes with promotion.

'When interviewed, our people are required to speak to their strengths and abilities and experience in a range of competencies: leadership, judgement, communication, innovation and partnering. As a result, I have interviewed dozens and dozens — maybe hundreds—of police officers, at all different levels, and listened to them talk to, and present on, how they do partnering.

'Typically partnering in the police context is with other government departments, sometimes the military, sometimes local councils and local government, sometimes Maori or other ethnic-based organizations. However, when you dig into some of these examples, what I found quite common would be a story that essentially involved police 'taking over' in a partnership to drive it forward and get results, or having a power or money imbalance dynamic that makes the other partners meekly compliant, and taking silence and acquiescence as being a willing partnership Or it could be a story of having the primary motivation for getting into a partnership about to be about getting a 'win' for police, rather than for the wider partnership. 'The problem with this approach is that you are not necessarily getting the best result for everyone, and often your 'partner' feels hard done by in the process, and therefore they are unlikely to be your supporter in the future. I've seen this many times as something of a failure in partnering—by insisting on winning every battle with your partner, you end up losing the war of genuine influence.

'In my view this could be attributed somewhat to police being actionoriented people, who will always step forward to lead, and are used to 'getting things done', and the military is very similar in these attributes. None of these are bad traits, but these do need to be tempered when partnering, in my view.

'To me, this speaks to the importance of us—military and police—allowing others to lead in the way they have grown up with, and is also critical to effectively partnering in the Pacific, particularly in the South West Pacific.

'New Zealand's strategic environment is unequivocally the Pacific—New Zealand considers itself a Pacific nation. You only have to look at a map and reflect on New Zealand's significant maritime territory, and constitutional responsibility for the realm territories of the Cook Islands, Niue and Tokelau.

'But it's substantially more than that. New Zealand is linked to the Pacific by history, culture, politics, and demographics. One in five New Zealanders—approximately one million people—now have Maori or Pasifika heritage, and this demographic trend is growing.

'The interconnectedness between New Zealand and countries of the South West Pacific is extremely strong. This is particularly so in South Auckland where I policed. Auckland is the largest Polynesian city in the world.

'I think that, by and large, New Zealanders understand the cultural underpinnings of the region. Here in Australia, and when I have travelled to anywhere in the Pacific, I often hear the sentiment that 'Kiwis understand the Pacific'. So I have taken time to reflect on why that might be. And I think a lot of this boils down to how much Maori and Pacific culture is part of our national identity and national culture. The basis for identity within Maoridom is 'we' not 'me', as it is for a number of different cultures, including around the Pacific. And in the Maori context that involves hearing the other perspectives of *Te Tangata, Te Iwi, Te hapu* and *Te whanau*—the people,

the tribe, the sub-tribe and the family—before your own perspective is important.

'And I think most New Zealanders absorb that way of being to some extent, regardless of their DNA, given how prevalent and accepted Maoridom and Pacifica culture is within everyday Kiwi life. And one of the good things about taking on this very Kiwi aspect of culture, is we are generally deferential, and culturally understanding, unassuming, and we listen. And this plays out well in the South West Pacific... at least, that's my theory. Whatever the answer, culture plays a huge part in partnering in the Pacific.

For New Zealand, there has been a consistent notion that Pacific security is a shared responsibility. New Zealand government publications consistently emphasise the centrality of regional security issues to the nation, from the Defence White Papers and Capability Plans through to Ministry of Foreign Affairs and Trade recent 'Re-Set the Pacific' strategy.

'So, while we see regional security and upholding democratic values as a key national priority, New Zealand will also approach our Pacific neighbours with understanding, friendship, mutual benefit, and shared ambition. That is to say, we look for partnerships.

'Our Foreign Minister, Winston Peters, laid out this balance in the March 2018 speech to the Lowy Institute by saying:

"New Zealand's view is that we must be respectful of Pacific Island countries' clear wish to manage their own international relations while at the same time retaining New Zealand's traditional emphasis on human rights, the rule of law, transparency, good governance, and the promotion of democracy."

'And in going back to my earlier point about partnerships, that we must leverage every tool and use every resource in our toolbox to achieve the best outcome, then it becomes clear that New Zealand can play a vital role as partner, conduit and source of advice for better engagement in the South West Pacific.

'Lastly, I have felt so incredibly fortunate to have been able to experience Australia in general, but Australian Defence in particular, and I have been so very impressed with the character of leadership you have within the three Services within Defence here in Australia. Most of the exposure I have had to this has been within the Australia Army, and I would like you all to know that I think you are incredibly well led.

'You have leadership at all levels that demonstrate daily the Army values of Courage, Initiative, Respect and Teamwork, and I have been very fortunate to have experienced this first hand. Your senior leaders have been nothing but welcoming and available, and generous with their time, and I have come away from all of these interactions thinking that Defence—and in particular the Australian Army—has great role models leading the organisation. My career is in nobody's hands here—this is said genuinely and meaningfully. This ethical, professional and collaborative culture that is grown from your leadership will inevitably flow on down through your ranks, and will assist in making you a partner of choice for foreign militaries, other government departments, Non-Government Organisations, and others.

'No one agency—police, military whatever—will ever able to spend enough money to buy our way completely out of whatever we think the national or regional security risk is. Nor would any one regional partner be able to spend away all of the risk. Therefore, we must collaborate and cooperate and work together and leverage off the difference strengths we all have. This means partnering, and partnering means we need to understand the cultural differences in the way we operate. And a good way to start is by listening.

'So, in finishing like I began in te reo of te matua, the language of my father—Maori people frequently use proverbs when speaking to make a point, and occasionally here in Australia, when the situation seems apt—I will revert to te reo Maori and make the point using a proverb:

Naku te rourou nau te rourou ka ora ai te iwi,

which means 'With your basket (of food) and my basket, the people will live', referring to the co-operation and the combination of resources.

'And also,

He waka eke noa

'We are all in this canoe together.'

'And lastly,

Haere pai atu, ki ti whanau

My appreciation for your attention and safe journeys back to your families.

'Thank you.'



Figure 26. A sergeant of New Zealand Police works with ANZAC Joint Task Force 631 in East Timor. This member of the police contribution works in the Vulnerable Persons Unit in Suai on the island's south coast. (Image: DoD)



Figure 27. A Royal Marine from His Majesty's Armed Forces of Tonga provides cover to a soldier from 2nd Battalion, Royal Australian Regiment and a marine from the US Marine Corps as they clear a room. (Image: DoD)

Session 4 – The character of future Indo-Pacific land forces

The Character of Future Indo-Pacific Land Forces

Synthesis

This session introduced several new themes to the seminar, including consideration of the role of emerging technologies in the context of land forces; considerations of the roles for, and the decision-making processes for adoption of, emerging technologies; and the changes new technologies might mean for organisational cultures. The challenge of emerging technologies must be viewed in the light of the mix of geo-political factors that increase the complexity of conflict not only in the Indo-Pacific but globally as well. Conversely, the perseverance of the characteristics of traditional land power were highlighted in the midst of technological change. Themes that carried over from previous sessions included the value of partnerships, people and interoperability in the face of emerging geo-political change and non-state warfare.

Presentations were given by Major General Kathryn Toohey, AM, CSC, Head Land Capability in the Australian Army; Professor You Ji, Head, Department of Government and Public Administration, University of Macau; Professor Genevieve Bell, Distinguished Professor, Florence Violet McKenzie Chair and Director, Autonomy, Agency & Assurance (3A) Institute, Australian National University; and General Robert B Brown, Commanding General, United States Army Pacific Command. This session reflected both the new and persistent themes of the seminar to various degrees with two talks in particular—those of Professor Genevieve Bell and Professor You Ji—that highlighted the counterpoints between technology and traditional application of land power. The presentations within the session were relatively stand alone, however when combined, they referenced similar themes in the other sessions.

Emerging Technologies and Land Forces

Head Land Capability, Major General Toohey, introduced the session commenting on the similar approaches being taken by Australia, the US and Sweden in looking at the role of technology in enhancing land power and how it might give it further advantage. She noted that technology was perceived as an 'enabler' of Army and what Army does, rather than an end point in and of itself. She indicated that Army, though perhaps struggling to find its own narrative within a context of emerging technologies, would always retain its fundamental importance through persistent land presence and influence through being 'where people live'.

This echoed a sentiment raised in Session 2 where Lieutenant General Bautista noted the importance of soft power in winning the conflict in Marawi, while Ms Theodorakis noted the importance of armies on the ground in creating and co-creating narratives with local people to counter violent extremism. Major General Toohey also highlighted the potential advantage that could be gained through the adoption of media technology, including social media technologies, for influencing larger audiences, contesting the information domain and claiming cognitive space alongside geographic space.

Technology was acknowledged as potentially changing the character of war by General Brown and Major General Toohey. General Toohey particularly noted the potential impact of robotics and 3D manufacturing, noting both opportunities and challenges. She indicated that while robots could enhance or even replace the 'dull, dirty and dangerous tasks' typically undertaken by humans, they could also generate additional scale and mass. However, she also acknowledged that the advantage provided by technology would be short-lived. At this point, Major General Toohey noted the importance of people—specifically human intellect—in developing quality technologies. The important role of people thus continued in this session, which was otherwise ostensibly concerned with technology.

Along a similar vein, Major General Toohey indicated that emerging and changing technology will require changes to organisational culture through encouraging increased lateral thinking and challenging the current ways of working. She boldly proposed that 'there can be no sacred cows' when developing and encouraging disruption in the technology space. Major General Toohey's reflection on culture complemented presentations in the previous sessions where the importance of culture was noted in a range of contexts: organisational, departmental, national and international. The cultural aspect to land forces reflected the concepts of acceptance, trust and loyalty that were identified in other sessions—particularly Session 2 on partnerships.

Traditional Warfare

In contrast to Major General Toohey's consideration of technology and land forces, Professor You Ji focussed on how land forces are playing a predominant role in current Indo-Pacific and global rivalries—thus reinforcing Major General Toohey's commentary of the importance of land power despite the proliferation of emerging technologies.

In a similar way to presenters in Session 1, Professor You laid out the geopolitical evaluation of the Indo-Pacific concept, noting its growth from an idea to a practical policy guide exemplified by the emergence of QUAD, the Quadrilateral Security Dialogue that includes America, Australia, Japan and India. This rapprochement between the QUAD powers was also mentioned in the context of a response to increasing Chinese influence in the region during Session 1. Professor You noted that the increasingly strained relationship between China and the US is potentially creating a more dysfunctional Indo-Pacific region, challenging middle powers like Australia to develop their own political and military identities rather than adopting 'someone else's agenda'.

In contrast to previous speakers' emphases on the enduring role of land power, Professor You suggested that China is moving away from the use of land forces, seeing land-based conflict as a thing of the past. In the context of the Indo-Pacific, China is adopting a maritime-focussed military strategy and implementing a 1.5 war doctrine—representing a position of full war in the oceanic direction and 0.5 war on the continent. Professor You identified the Dong Lam (Doklam) dispute between China and India to suggest that perhaps China's move away from a land-based doctrine may be somewhat premature, given it is also a strategically continental power. In particular, he highlighted that India was able to move troops into Chinese regions without significant counter activities under a 5:1 land force split in India's favour. China's stance towards its land forces seems in contrast to the importance placed upon them by previous speakers.

The role of technology did not feature strongly in Professor You Ji's talk, with mentions restricted to the adoption of relatively common uses of satellites, logistics and tactical data systems. One emerging technology China has been developing is unmanned autonomous vehicles.

Considerations for Adopting Emerging Technologies

In contrast to Professor You's focus on land forces in the current Indo-Pacific context, Professor Genevieve Bell spoke about emerging technologies, such as artificial intelligence (AI) and robotics. She challenged the audience to question how they understood these technologies and the considerations required for their adoption, taking up the mantle of Major General Toohey's call to engage in divergent thinking.

Professor Bell outlined the development of AI, and the need to move away from an historical, hysterical conversation of AI being perceived as a 'magic bullet' to the very real considerations required to understand the logic behind adopting AI in any context. She highlighted five core aspects when considering AI:

- viewing AI as a 'constellation of technologies' that all involve data and therefore require consideration of the characteristics of the data used to shape AI
- choosing the algorithms that drive AI and the logical statements that should be used
- considering the type of machine-learning we want to take place for there are multiple levels
- asking if the aim is for the machine to sense the world around it in order to gather new data and to what extent will humans be taken out of the loop

• what are the logical propositions for why data is being collected and why are things being automated.

She also noted the underlying role of ethics—constraints and moral dimensions—that underpin the development and adoption of AI. Lieutenant General Burr specifically noted the need to apply Army's moral compass to considerations of new technology in Session 1. This raised the persistent topic of culture that was prevalent in other presentations into this session, but this time at a broader level. She noted that, historically, the previous industrial revolutions had resulted in major social and cultural change as well as new laws, threats and responsibilities. Major General Toohey's presentation alluded to these changes already taking place within Army, while Lieutenant General Burr's Future's Statement specifically called for Army to reflect internally.

Professor Bell used two emerging technologies related to Army as examples: autonomous vehicles, as mentioned by Professor You; and robotics, which was referred to by Major General Toohey. She indicated that key considerations underlying the adoption of these technologies included the questions of what 'autonomous' means—does it mean vehicles that are a fully empowered actor that may or may not have set limits? This leads to questions about who grants the autonomy and under what contexts. The challenge of culture was again raised in a similar way to that of Ms Theodorakis and Major General Toohey, who noted the importance of cultural responses to technology, whether they be robotics or communication-based.

Ms Theodorakis posed the challenge of selecting metrics for measuring good or bad Al systems as well as the more practical consideration of how to power cyber-physical systems on operations. She posed that a challenge for decision-makers is to think about what question they are trying to answer and what the pitfalls and perils might be.

The Value of Partnerships, People and linteroperability in the Face of Increasing Complexity

General Brown, Commanding General, US Army Pacific, summarised the key concepts of both this and previous sessions by boiling down the context of technological and geo-political complexity to the importance of partnerships, people and interoperability. He identified three imperatives for future land forces:

- multilateralism.
- joint integration.
- development of multi-domain capabilities.

Similar to Major General Toohey, he noted that despite emerging technologies, people who are empowered will be a key component of future land forces—in particular the role of personal relationships (also noted by Mr Dunbier) and the role of trust highlighted by Major General Toohey and other presenters—both within forces, between cultures (civilians and military) and between partner nations.

He proposed that, despite increasing complexity and the maritime aspect of the Indo-Pacific region, regime-based threats still dominate—as reflected in Professor You's presentation highlighting the conflict between China-USA and China-India.

In a reflection on the focus of Sessions 2 and 3, General Brown noted the complexity and uncertainty posed by non-state actors. He raised the concept of 'black swans'—rare, high-impact events that are not anticipated—noting these are occurring more frequently in a hyperconnected world. The counterpart to black swans are 'pink flamingos'—the inevitable surprise, high-impact events widely known but ignored due to rigid organisational and bureaucratic decision-making structures. His presentation summed up the different thematic threads of CALFS by highlighting the importance of partnerships, culture—at its various levels—and technology in an increasingly complex Indo-Pacific and global environment.



Figure 28. Two Army officers test the Sword sniper system. The Sniper Weapon and Observer Reconnaissance Devices are networked weapons targeting systems that integrate cameras, GPS rangefinders, Android mobile apps and other components which allows multiple snipers and other viewers to see what the shooter and observer are seeing so that targets can be coordinated and prosecuted. (Image: DoD)



Figure 29. Head Land Capability, Major General Kathryn Toohey, AM, CSC, oversees new technologies being acquired into Army. In her address to CALFS18 she highlighted that technology is 'not the end of what we do, but an enabler for what we do.' (Image: DoD)

The Challenges and Opportunities of Emerging Technology

Major General Kathyrn Toohey, AM, CSC

Head Land Capability

'Good morning Ladies and Gentlemen,

'I would like to acknowledge the traditional custodians of the land on which we are meeting today, the Kaurna people, and pay my respects to their elders, both past and present.

'It is my pleasure to appear first on this panel of distinguished speakers.

'Yesterday I spoke at the science and technology conference with two esteemed colleagues—my equivalent in the UK, Major General Chris Tickell, and the Swedish Chief of Army, Major General Karl Englebrektson. Despite coming from very different parts of the world, we all remarked on the similar challenges facing our three armies.

'Like the UK and Swedish armies, the Australian Army is looking to technology to provide us with an advantage that helps us to win joint land combat. However, while technology has become a focal point of our modernisation efforts, we are careful to never forget that technology is not the end of what we do, but an enabler for what we do.

'Since history began, societies and nations have used land power to achieve

strategic outcomes. Land power has generally been employed as the force for decision. And, yet against the large platform and technology focus of our respective navies and air forces, it would seem armies have some difficulty in establishing a simple narrative of their joint contribution.

'I was interested to hear the Swedish Chief of Army say that the Swedish Air Force narrative is simply 120 - 120 Gryphons. In Australia, we sometimes joke that the Royal Australian Air Force has a similarly simple narrative: 102 -102 JSFs (Joint Strike Fighters).

'This group knows land power provides something the other services cannot – persistent presence on the land. Increasingly through technology we are able to provide effects into other domains, but persistent presence on land remains our unique contribution. Ultimately, the land remains the vital ground being simply 'where the people live', and indeed where our air forces and navies are based too.

'This week it has been widely acknowledged that we are in a period of significant and rapid technological change. New devices and methods are emerging that will change how land forces fight. Regardless, persistent presence will continue to matter, and the need for soldiers to go forth amongst the people is not going away any time soon.

'New technologies offer land forces both opportunities and challenges to how presence can be achieved.

'At the top of my list is Robotics and Autonomous Systems or RAS.

'Robotics offers the potential to enhance or augment the *dull, dirty and dangerous* tasks undertaken by our people, and possibly, to replace people in these tasks altogether. Such tasks include: high risk searches, close reconnaissance, long term persistent surveillance, route clearance and counter-IED (Improvised Explosive Devices).

'Robotics may also provide a means for Army to generate scale and mass, supplementing our people to achieve an effect out of proportion with our relative size. Yet I also know that such an advantage may prove to be fleeting.

'As robotics spread, other nations will have the ability to make their own. The critical point of difference will not be the number of robots but the quality of the algorithms that control their operation. The key to creating an asymmetric robotic advantage lies in the intellectual superiority of their human designers.

'While robotics offer land forces many benefits, I do have some concerns. Can robots exert the essential presence that land forces are called on to provide? How will local populations react to a robot force in their midst? We have no information to answer these concerns, but they will need to be addressed if robotics is to fulfil its potential.

'Other new technologies also show merit. Additive or 3D manufacturing has the potential to enable the production of spare parts through to complete systems including when deployed on operations. By embracing the promise of 3D manufacturing, we may be able to deploy fewer support staff while not compromising our ability to maintain the essential presence that underpins the purpose of armies. 3D manufacturing may allow a relatively small force such as the Australian Army to offset its lack of mass by making its deployed force more efficient.

'By exploiting media technology even small groups can project their influence to a far greater audience than their size would suggest. Land forces will have to contest the information domain—indeed, we already do. That said, we need to reinterpret this contest. It is as much about claiming a cognitive space in the minds of people as it is about securing a geographic space. Land forces don't have extensive experience in contesting a cognitive presence, but it is vital that we learn how.

'To embrace the opportunities technology offers we must encourage disruption. We must not recoil from its challenge. Those who can think laterally, think differently, must be allowed to do so. We must be brutally honest as we think about new opportunities. There can be no sacred cows when thinking about the future of land warfare.

'To manage the potential and challenges of these technologies, land forces will have to address fundamental questions of how they think about and prepare for the future fight:

• As autonomous machines enter the ranks in greater numbers, how will we address the necessary changes in our organisational cultures so that cohesion is not lost? The integration of human and intelligent

machines poses challenges of trust, acceptance, and loyalty. These qualities have been instrumental to building military power since the Roman Empire and the Han Dynasty were at their peaks of influence. They remain so today.

- Will those parts of the land force that currently dominate the organisation be willing to give way to other arms that will grow in importance and utility? Will the arms corps cede status to the information warfare soldier? The history of transitions suggests that the old guard will fight to retain its position. Major General JFC Fuller, the leading theorist of armoured warfare during the inter-war period, was considered an odd fellow by his horse-riding peers and overly bookish by his superiors. His brilliance, to Britain's loss, was not accepted by those who insisted on the maintenance of the old ways.
- How will our environment influence the use of these new technologies? The Indo-Pacific Region is dominated by the maritime and littoral environment, large regions with restricted and heavily vegetated terrain and growing urbanisation. The region's complex physical environment will continue to present manoeuvre challenges for land forces.
- What is the right balance of investment in these new technologies? What should be the basis of our future force structure design: Starship troopers, big battalions or both? Or, in other words, what is the balance between the small, many and smart versus the few and the exquisite?
- We must also remember that the other side always catches up. They
 may even be ahead: ISIS (the Islamic State in Iraq and Syria) has
 consistently demonstrated the superior skill with which it exploits
 social media. Technology is never a magic bullet that provides an
 eternal advantage. Soldiers, and their societies, will eventually develop
 countermeasures or invent superior technologies of their own that
 negate ours. With increased interconnectedness comes the cyber
 threat, with the increased use of space comes the counter-space
 threat. It is a never-ending dance. How do we prepare for and,
 indeed, participate in this dance?

'I've saved what I believe to be the most critical concern for last:

- How do we prepare our workforce for the high tech future?
- How will we educate and train our people and adapt our generalist approach to workforce to a more specialist one?
- How do we assure that today's soldiers are open to the opportunities afforded by new technology?
- How do we compete or possibly collaborate with other organisations who want and need the same skilled people that we do?

'The potential of a new technology is not always obvious. The opportunity can only be realised after time, suitable thinking and extensive experimentation.

'Today, more than ever, armies need creative, divergent thinkers and technology thought leaders. As always, senior leaders need to be prepared to listen to the clever people within their ranks. Disruption and risk-taking should be welcomed, and the status quo must be called upon to justify the continuation of its position.

'Fortunately, the Australian Army has strong intellectual foundations in place. There is already a vibrant and exciting debate taking place about tactical, operational and strategic opportunities. Appropriately this debate is happening in the spaces of the information age—on blogs and digital forums.

'The Chief of Army's Accelerated Warfare is a call to think differently and disruptively. We are thinking deeply about our future use of technology with an eye to understanding its advantages as well as its vulnerabilities, and to how it can be best integrated into our existing and future force structures.

'Militaries have gone through periods of disruptive technology before. For example, the years between the two World Wars were ones of particularly intense innovation: the mechanisation of land forces, the triumph of naval aviation and the development of strategic bombing overturned the established order. I suspect we are entering a period of similar intensity in technology driven innovation.

'But even with great change there is also great continuity. Land forces

will continue to send soldiers into the mud, much as the Romans did,

although robots may march at their side. In doing so, soldiers will continue to offer government with the capability that only they can provide persistent presence on the land, and amongst the people.'



Figure 30. Major General Kathryn Toohey addresses CALFS 18. (Image: DoD)



Figure 31. An Australian soldier trials wireless systems technology (Image: DoD)



Figure. 32. Major General Wan Suocheng of the Chinese PLA welcomes Australian Army participants to Exercise Pandaroo in Kunming, China. The bi-lateral exercise was held for the first time in China in 2017. (Image: DoD)

The Nexus of Land and Sea: the Shaper of Future Indo-Pacific Land Forces with a Focus on China and India

Professor You Ji

Head of Department of Government, University of Macau

The Indo-Pacific (Indo-Pacific) idea has been around for over a decade. Professor Rory Medcalf raised it as a policy suggestion years ago but the concept remained only academic.¹ Japanese Prime Minister Abe enriched the concept with a component of democratic arch but it was more visionary than substantial as the countries placed their concerns of national interests above the ideational preferences. It was not until President Trump embraced the idea in late 2017 did the notion become a practical policy guide for the US and its allies/partners in the three continents of Asia, Oceania and North America to adjust to its new geo-strategic dynamics. As far as this paper is concerned the core of the Indo-Pacific strategy, as now frequently depicted by key defence leaders and security experts in the Indo-Pacific, is the emergence of the Quad (Quadrilateral Security Dialogue)—America, Australia, Japan and India. Based on common threat perceptions and shared interests in certain defence realms, in meeting the new challenges of the changing international order they seek new impetus to construct an informal but cohesive military mechanism, somewhat transcending the traditional bilateral alliance framework. For the purposes of this paper this creates new dimensions of defence cooperation with a nexus of land conflicts and maritime tensions in the Indo-Pacific. Therefore under the Indo-Pacific strategy neither an army nor a navy could develop in isolation in terms of military transformation and war preparation. Future land warfare may be integrated into a broader context of joint warfare that will reset the region's officer mentality, war planning and defence posturing. This paper will largely use the case study of land force application in China and India in response to the new Indo-Pacific challenges.

The Indo-Pacific strategy: Shaping a New Regional Defense Landscape

The US naming China as a peer rival in its National Security Strategy and National Defense Strategy in 2017 provides proof that explains why Washington took over the Indo-Pacific idea almost all of a sudden. Clearly this added value to the original conceptual construction and reflects the state of power transition due to Sino-American competition. China's assertive protection of its sovereignty claims and its Belt-and-Road Initiative (BRI) is reshaping the Eurasian geopolitical and geoeconomic order in due time. The concerned powers may have realized that some collective response is necessary.² Here a few questions need to be raised whose answers would enhance our understanding of the Indo-Pacific ideas and strategy.

Understanding the Nature of the Indo-Pacific Strategy

The first question is what the nature of the Indo-Pacific strategy is. Different nations in the related regions may have different views on the Indo-Pacific concept. Through long association with the initiators of the Indo-Pacific strategy, I tend to see it from a strategic and defence angle. First of all, the Indo-Pacific strategy has great military significance. The US military has associated it with its combat doctrines such as the air-sea battle, especially in terms of SLOC (sea lines of communication) warfare from the Indian Ocean to the South Pacific. Under such a guidance the US Indo-Pacific Command has extended its two traditional island-chain defence lines from the West Pacific to the Indian Ocean and pivoted US forward deployment in the Indo-Pacific regions in a more combat-oriented fashion. Australia has also gradually projected more military presence in the western Pacific and the Indian Ocean. The Australian Defence Force now conducts more joint war drills in Asia than at any time before. One telling example is that Canberra has raised its security relations with Tokyo to one of a military/defence sub-alliance.³

In response, China has executed westward military expansion. The People's Liberation Army-Navy (PLA-N) has recently adopted a new two-ocean maritime strategy, shifting its previous focus on the western Pacific only to one that has added the Indian Ocean as well.⁴ Its enlarged naval presence in the Indian Ocean would sustain a new reverse-deterrence doctrine: when China's SLOCs are under threat by a hostile Indo-Pacific blockade, the PLA-N would do likewise, mainly through submarine warfare until its carrier-based expeditionary fleets are ready for action.⁵ The BRI further requires military protection with another reverse design of the Mahanist idea of seapower: commercial ships leading the way with warships behind.

The second question is whether the Quad will be further institutionalized and form the core of a mini-NATO in the Indo-Pacific.⁶ This is currently more of a trend forecast than a concrete alliance-building by the countries concerned. Yet the trend is more discernible with an Indo-Pacific evolution driven by a transition from Washington-Canberra-Tokyo trilateralism to the Quad in addressing China's rise that weakens US superiority. A strengthened collective defence architecture in response to China is deemed necessary that is as inclusionary as possible with like-minded participants. Although New Delhi has restricted the Australian Navy's role in the Malabar Naval Exercises in the last two years, this paper anticipates that it is a matter of time that one way or another Australia will become a full participant in the exercises.

Gradually the Quad has potential to become an open-ended process of expansion with more security partners to join the club. Basically the Quad is a new type of concert of powers glued together to cope with some commonly perceived security challenges. It is attractive to other regional like-minded stakeholders in the sense that Quad members are the top economies and can provide the public good in security-building in the Indo-Pacific region. At the same time, due to dichotomous vested interests among them and other potential members, the club will organically tend to be a lot looser than a real coalition in Asia. For instance, India is not an ally of the other three and it will require a sufficiently high return before it is willing to cooperate militarily with the others in a major confrontation, or alternatively, unless it perceives external threats that are serious enough for it to join the others in such an event.

Today the Indo-Pacific strategy is still controversial; controversial in a sense that one's perception of it may be derived from where one is sitting. As a foreign policy tool Quad members entertain diversified views towards it, as testified by Indian Prime Minister Modi's keynote speech in the 2018 Shangri-La Dialogue that pointedly downgraded the coalescing effects of the Indo-Pacific endeavor.⁷ Militarily, however, the bottom lines of the Quad members do converge. Behind-door defence cooperation against the targeted rivals is underway. Even if the Quad does not evolve into a fullyfledged multilateral military alliance, its features of an informal defence bloc stimulates further defence ties and arms build-up. The frequency of joint army-navy exercises among the Quad members has been increased. This is why the Chinese regard the Indo-Pacific strategy as a new geo-strategic challenge to all, as it may destabilize the already tense security situations in the two ocean regions.⁸

The third question is how Indo-Pacific countries strike a balance between America and China. The Indo-Pacific strategy may reduce the space for middle powers to maneuver in Sino-American rivalry. Given their dichotomous economic and security needs upon the two top powers, and testified by the Australian case, a right strategy is increasingly beyond reach. The Indo-Pacific strategy is itself a strategy of external balancing against China in the area of security, or an offset strategy in a potential form of containment. The Indo-Pacific partners find it hard to choose between hedging, balancing and 'bandwagoning'. Sino-American tension has now created an off-balanced relationship for all middle powers in the region where a security guarantor and a growth facilitator are in a constant duel. They have been caught in the cross-fire. To US allies, if they can strike the right balance, it means that their best interests would be served when they can 'have their cake and eat it too'. Yet their alliance commitment and ideational preferences make this difficult to materialize. Therefore, their interaction with Beijing will always be oriented by their relations with America, their strategic culture, and defence policies which emphasize a worst-case scenario. Unless they define their best national interests in their own way, rather than to serve someone else's agenda, the off-balanced ties will continue indefinitely.9

The Land-Sea Nexus

The security challenges in the Indo-Pacific region are abundant. Asia's four flash-points are all located in this area. They are worsening because all of them, originally as sovereignty disputes, have now been structured into the geo-strategic contention of the major powers. For instance, the South China Sea dispute is no longer just a disagreement on territorial demarcation among the claimants, but more subject to Sino-American rivalry over the

shape of the world order.¹⁰ The same can be said of the Korean and Taiwan conflicts. Pakistani-Indian confrontation in Kashmir continues unabated and negatively affects Sino-Indian tensions. As a result, the management of the regional conflicts has become hijacked by global power politics, vividly shown by their emerging connection with the Quad, which may gradually render the existing regional conflicts more zero-sum and globalized. Thus the regional problems are more difficult to be contained with the relentless intervention of outside powers.

Exactly because this changing nature of the geopolitical environment is rooted in the territorial disputes in the Indo-Pacific region, the land-sea connection has become more visible and entrenched. Except for wars against terror, the region has seen no major land warfare since the end of the Cold War. As far as the PLA is concerned, direct infantry combat engagement will become a rare thing in the future. This underlines its grand naval expansion into the Indian Ocean and beyond. The dividends of the Soviet collapse are reflected by the fact that, for the first time in 300 years, China has been free from land invasion.¹¹

Yet the maritime conflicts can also be triggers of major wars on the ground, seen from the following angles.

Firstly, with a pro-independence party in Taipei, the prospects of armed confrontation are on the rise with possible US involvement. Former Defense Secretary Carter and incumbent US officials openly called to incorporate Taipei into the Indo-Pacific camp and Taiwan responds positively to the call by re-adjusting its defence posture and increasing its military budget. Were there a war in the Taiwan Strait, likely in a form of amphibious operations, it is bound to be a substantial one.

Secondly, a number of Indo-Pacific states are not only troubled by the maritime sovereignty disputes but also exposed to continental confrontation since the maritime regions are geographically connected by the shared land borders, as is the case with China and Vietnam. While their maritime disputes most likely induce naval clashes, it is plausible that when these clashes escalate, their shared borders would become venues for land warfare which would be more intensive than on the high seas. This chain reaction war scenario and planning underline the land-sea nexus in any future army build-up by all involved.¹²

Finally the SLOC safety has become a crux in linking land and sea in military terms. All East Asian nations are heavily dependent on the SLOCs in the Indian Ocean for economic growth at home. This nexus of economic security and military security highlights not only the risks for conflict in this region, but also prohibits the application of either land force or naval power as a means of solving such conflicts. This dichotomy has the effect of managing the potential for wars: on the one hand, their SLOC vulnerabilities make them cautious in the excessive utilisation of land forces for solving disputes; while on the other, if their SLOCs are cut-off, a spill-over effect in the form of land warfare can be anticipated. Most strategists now focus on the maritime challenges in evaluating the Indo-Pacific strategy but the continental challenges are no smaller and can become dominant in certain circumstances, such as in the case of the Sino-Indian border confrontation in the Doklam region in 2017. At least no maritime conflicts have so far been serious enough to cause a major naval conflict. On the other hand, while the infantry units were facing off in Doklam, the PLA-N staged a large naval drill in the Indian Ocean. Similarly the Indian Navy matched the Chinese actions, with support from America and Japan.

The Doklam Faceoff: a Practical Case of Land Power Application in the Indo-Pacific Connection

In June-August 2017 armed foot-soldiers from China and India confronted each other in the Doklam region near the Sino-Bhutanese-Indian border junction. This confrontation of 71 days moved both countries to a sub-state of war for the first time since the 1962 Sino-Indian border war and exceeding the Camp Confrontation of 22 days in 2013. To the great relief of many observers, the Indian troops returned to their territory and the Doklam border region remained quiet again. Yet the consequences will be long felt as both armies will accelerate force re-deployment and deterrence in case such a confrontation occurs again.

The Standoff Assessed from a Strategic Height

The Doklam event marked the first time that Indian soldiers extended the border tensions from the disputed Line of Actual Control (LAC) to a demarcated region.¹³ Indian and Western security interlocutors saw the Indian move in the light of stopping China's road construction in the region that could pose a threat to the strategically important but vulnerable 'Chicken's Neck Passageway' or Siliguri Corridor, [a small tract of land between Bangladesh in the south and Nepal, China and Bhutan in the north that connects eastern India with the main part of the country]. In fact the PLA's project was a section of connection road used for logistical supply to the camps near the mountain ranges, not a main road to transport heavy military equipment, with the construction having been launched a few years ago. Common sense would have one believe that this minor road work could not be an effective reason for the border crossing that disproportionally upset overall bilateral relations and which may have potentially led to a nuclear war, unless the act was the form of a tactical move to realize a strategic objective.¹⁴ Therefore, if one questions the motivation of this move, a two-layered answer can be explored from a Chinese perspective: a Sino-Indian bilateral one, and a geopolitical one.

Bilaterally there were many possible triggers for the Indian action. In the lead-up to the crisis, China and India were involved in a number of serious quarrels with some key sources of friction listed below:

- The Sino-Pakistani BRI infrastructure undertakings go through Kashmir, a major reason for Modi to reject participation of Beijing's BRI summit in May.¹⁵
- New Delhi heavily resented a Sino-Pakistani arrangement for the PLA to gain base access to the Indian Ocean.
- China repeatedly denied India's application to enter the international Nuclear Material Supply Group.
- The PLA-N has made regular forays into the Indian Ocean. This represents a new normal which annoys the Indians who carefully guard against foreign activities there.

The Indian Army's unexpected Doklam move may have indicated a burst of anger by Indian leaders who smartly took advantage of China's unfavorable relations with a number of key powers in the region and beyond. The worsening Sino-American relations have, in particular, emboldened New Delhi to believe that the crossing could be mounted without serious consequences. The rise of India has substantially changed the past pattern of the trilateral interaction, in which the US and China¹⁶ would treat India as an inconsequential player. Now its weight in the triangular arrangement has increased significantly when Sino-American rivalry reaches a new height, even if it is still a power far behind the US and China. India is strategically situated in the Indian Ocean where the critical SLOC choke points make Chinese shipping vulnerable. The Indian Navy's strengthening of base reconstruction in the Indian Ocean and the PLA-N's gradual westward moves have generated action/reaction dynamics that impact on their land border tensions. Indeed India's maritime and continental stance *vis-à-vis* China is particularly valued and grants it a pivotal position in the Quad.

A New Pattern of Coordinated Military Balancing vis-à-vis China

Geo-strategically, this 'minor land warfare' had effects far beyond the Doklam region itself. Rory Medcalf proposed that India's Doklam action could create a pattern of resistance to China's assertive approach to sovereignty issues elsewhere, especially in Asia's maritime domains.¹⁷ The underlining tone of this proposition is to use proactive military balancing against China's increased reach in the Indo-Pacific region.

More importantly, India's Doklam move could be the first test of a series of collective efforts that link the disputes of the South China Sea, East China Sea and the Taiwan Strait to challenge China's sovereignty positions. In a land-sea linkage this collectivity may have pointed to an emerging phenomenon where a dispute against China in the East is pursued with collaboration of like-minded countries in the West, and a land border conflict with China triggers a chain of matching actions in the maritime domains by its allies/ partners. This evolution of collective moves to offset the PLA's expanding range of power projection reveals how the territorial disputes have been structured into the global major power rivalry and Asian geopolitics. Here it is interesting to point out that India's Doklam action was taken shortly after Modi's visit to the United States. A conspiracy theory could be conveniently contemplated. At the time of the standoff there was a short, but intense, Sino-Vietnamese quarrel over Vietnam's exploration of oil resources in the South China Sea, forcing the Chinese defence chief to abandon a planned visit to Hanoi. The invisible intervention of extra-regional powers will become more visible under the Indo-Pacific strategy.

The Consequences of Doklam

The peaceful ending of the Doklam confrontation was anticipated all along, as no one in Beijing and New Delhi intended a war to resolve the standoff in the first place. The Indian soldiers crossed the borderline with muzzles pointing to the ground, expressing a clear message that 'we are not here for action'. However, the Chinese see the other side of the event: the Indian Army came into the Chinese territories for over two months. Although the Indians

eventually withdrew first, and the PLA soldiers stayed where they were to continue the road works until the snowy season, India's action cast humiliation on China and it got away with this. Beijing may retaliate against this intrusion in other ways on a long-term basis, for example, by providing more military assistance to Pakistan. It may deny India's bid for a UNSC permanent seat more firmly in the future and coalesce with the Indian Ocean Rim states more pro-actively.¹⁸ The PLA-N has mounted more frequent entries into the Indian Ocean and enhanced its penetration in South Asia.

On the other hand, Beijing and New Delhi are clear that it is in both countries' best interests that they are not adversaries. The Xi-Modi Wuhan Summit in May 2018 re-set the bilateral relations in a positive direction, which led Modi to stress Sino-Indian cooperation in this year's Shangri-La dialogue. It was music to the ears that he defined the Indo-Pacific advocacy as a geographical concept, not a strategy, and that it is open to all interested in joining. However, the Doklam event reminds people of the hidden fact that the Indians employ the Quad strategy and military cooperation as a practical counter-measure vis-à-vis China.

The Parallel Efforts to Enhance Land Power and Sea Power

The lingering war prospects in the Himalaya region and the new venue of Sino-Indian rivalry in the Indian Ocean underline the changes in Asia's geo-strategic landscape. These will oblige the Chinese and Indian armies to readjust their overall defence posture in both the continental and maritime regions. Both of them have long contemplated a Sino-Indian land clash in the context of a simultaneous battle in another strategic direction. For the PLA this is the east flank, namely the maritime domains. A war in the Taiwan Strait may have the Indians tempted to make a move in Himalaya, like in 1951 when India occupied Tawang as the Chinese fought in Korea. For the Indian Army it has always faced potential conflict in two regions: with China in the north-west and Pakistan in the north-east. The close military cooperation between the Chinese and Pakistani armies puts enormous pressure on the Indian Army in war planning. It was not coincidental that when the PLA and the Indian Army confronted each other in the Doklam region in July 2017, the Indian-Pakistani clashes in Kashmir briefly reached a high point.

The PLA-A's New Force Posturing

At the beginning of the 21st Century the PLA initiated a debate on how to meet the challenge of multiple and simultaneous military threats, a repeat of

history of the late Qing dynasty when officials debated whether to prioritize coastal defence against western maritime invasions or against continental threats from Russia's penetration into Xinjiang.¹⁹ Indeed China has never faced less than two major military threats around its periphery since 1949. From time to time these threats can be severe. In the contemporary debate Beijing has identified the maritime challenges as the primary potential cause for war involving China and the potential for land warfare secondary. This strategic calculus led to the adoption of a 1.5 war doctrine: a full war in the oceanic direction and a 0.5 war in the continental direction. The former is offensive- defence by nature, aiming at securing maritime interests, especially China's sovereignty claims in the East and South China Seas. The latter is defensive-defence, taking advantage of the high elevation of the Himalaya which favors defence over offence. Such a doctrine suits China's overall national defence strategy focusing on handling any naval-army warfare in the Taiwan Strait.²⁰

When this doctrine is translated into force and weapons deployment, an 'east-heavy' and 'west-light' pattern of posturing can be discerned. Until recently no single PLA Group Army (a Group Army usually consists of up to 12 brigades supported by enabling brigades – Ed.) was deployed in China's western regions, if one folds the Chinese map in the middle. In Tibet only three lightly-equipped field brigades are currently deployed and only four divisions in Xinjiang, which deals with the Central Asia region as well. And the PLA force deployment along the Sino-Indian border is 'light in the frontline and heavy in the rear', partly due to the geographic features of the mountainous ranges and partly due to the extraordinary cost of frontier defence in high elevations; it is seven times more expensive to deploy a foot-soldier in Tibet than in the inland provinces.²¹

Today the US-centric Indo-Pacific combat posture may have heightened military pressure on China's Theatre Command – West*. As the Doklam standoff testified, a scaled land war with India is not unimaginable, nor contingent on a naval clash in the east or in the Indian Ocean. Furthermore, an armed confrontation can happen not only in the LAC regions but also in undisputed areas along the shared border. This prospect of a continental war dismisses the PLA belief that no-one really wants to fight a land war with China. More strategically, it indicates that the current trend in the PLA to belittle the role of the army in future joint warfare is premature. After all,

^{*} China has recently created five domestic military districts known as Theatre Commands. Refer to the map in this section.

China is historically and strategically a continental country, even though its maritime regions now contribute more to its well-being. Logically the need to upgrade the 0.5 war scenario to a full one can be seen by its own right. Then the PLA-A has to enhance its western troops independent of the considerations of the eastern flank.

However it may take a long time for the PLA-Army (PLA-A) to realise this pivot to the west, as it can be a very expensive enterprise in both financial and human resources that impacts upon war preparation in the maritime domain. The PLA-A has begun to address the loopholes of its unbalanced troop deployment since 2017. Primarily the PLA may have realised that the 'light deployment in the frontline but heavy in the rear' disposition of its forces created a significant manpower imbalance with the Indian Army. Currently the gap is about five to one in favour of India, which may, in turn, have served as a cause for India's bold action in Doklam in 2017. Inevitably this pattern of deployment has to be readjusted, with troop enhancement and battlefield force posturing in the forward areas of Theatre Command - West. For instance, the headquarters of the 76th Group Army has been re-deployed to Xining from Baoji in the on-going army restructuring. This substantially reduces the response time and logistic support lines to border troops. The ground force in Tibet has been strengthened with more manpower in the aftermath of the Doklam standoff.

In the meantime, the PLA has re-oriented its Indo-Pacific strategy to highlight the expeditionary nature of PLA-N transformation. Not challenging India's special interests in the Indian Ocean, PLA analysts believe that India needs to be aware that areas around Gwadar, Chittagong, Hambantota and Sittwe have not been India's sphere of influence. PLA-N footprints (not footholds) would be gradually created. The PLA has a long-term goal of acquiring overseas logistical points to supply its naval expeditionary fleets to get to the Indian Ocean and the South Pacific, although there is no plan for immediate combat deployment. On the other hand, this gradual naval expansion in the Indo-Pacific region is now more closely projected with continental war scenarios in terms of budgetary distribution, troop allocation and weapons research and development programs. The Sino-Indian connection is particularly prominent in this nexus. The PLA's ultimate goal is to acquire army and naval capabilities that can be jointly applied in supporting each of the land and maritime strategic directions. Australian Army Journal Army in Motion - CALFS 2018 Volume XIV, Number 3

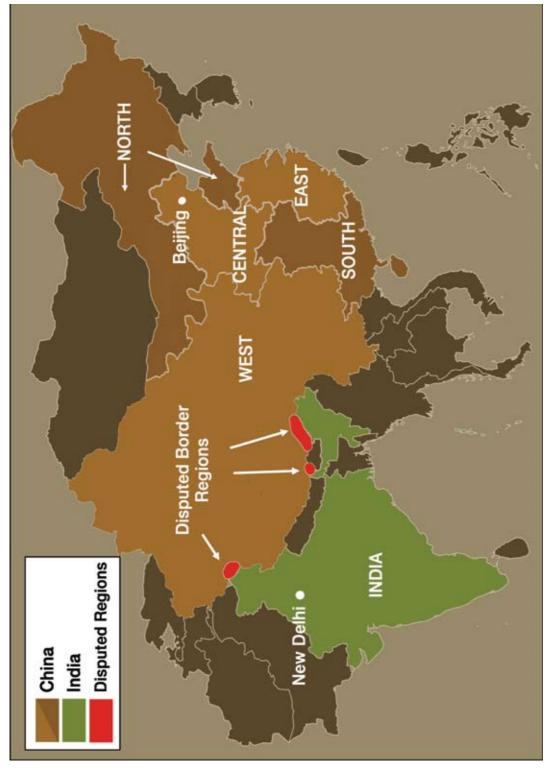


Figure 33. China and its Theatre Commands. Note the disputed border regions in TC West with the Doklam region being in the middle near Bhutan. (Image: Major Conway Bown)

The Army's Force Transformation

The PLA-A has also made great efforts to improve the weapons systems in the Tibetan/Xinjiang provinces, which are generally obsolete compared with those in other theatre commands. Land warfare on the plateau partly dictates that mountain troops are lightly-equipped. This is particularly true to both the Indian and Chinese armies located in these areas of extreme weather and geographic conditions. For the PLA-A its missions along the Sino-Indian borders are exclusively defensive by way of defending mountain passes and ranges. The current efforts to strengthen their capabilities are to equip them with better light weapons that enhance firepower and mobility.²² Among the new equipment the PLA-A troops in Tibet now receive are 32-ton wheeled tanks that can easily traverse mountainous regions; the CS/VP4 Shanmao 'Lynx' all-terrain vehicle that can tow 122mm guns to places above 4,000 metres; PCL-09 122mm truck-mounted (self-propelled) howitzers; PHL-03 300mm multiple-launch rocket systems and the Type 89 .50 calibre machine-gun with a weight of 26 kg, the lightest of its kind in the world.

However, the emphasis has been placed on creating a new integrated force in the PLA-A that is capable of fighting in complex electromagnetic conditions and with other services—such as the air force and the missile force—in conducting informatised joint operations. This requires sophisticated C4ISR (command, control, communications, computer, intelligence, surveillance and reconnaissance) command structures, tactical data-link systems within the army and with other services and an effective logistics supply network. For instance, PHL-03 300mm rocket launchers have a range of 300 km with terminal guidance with the support of the Beidou satellites. They would be deployed a relatively long distance from the front line. In tactical terms, when a conflict erupts, the PLA-A, as the defensive side, would use them to strike the enemy's second echelon in a pin-point manner and prevent reserve troops from reaching the front line as a supporting force. At the height of the Doklam confrontation, the PLA-A transferred PHL-03 units from 73rd Group Army in Fujian to Tibet to ready them for this purpose. They are actually tasked with this role in the Taiwan Strait and this transfer shows how close the two armies were to clashing. More strategically, this crystallizes the PLA-A's overall transformation: all advanced campaign units should be able to attain the capability of 'reaching all battle zones' within the national boundary and beyond, quickly and amid the enemy's strike capability. In August 2018,

units of the 77th and 83rd Group Armies conducted combat drills in Tibet.²³

The biggest challenge to the PLA-A is to achieve reliable logistical supply in the plateau regions when sizeable ground combat operations are launched. In 1962 poor logistical conditions forced the PLA-A to retreat. In this case, battlefield victory was based on unsustainable human logistics. It proved the saying that in high altitude land warfare – 'reach is half the victory'. This painful lesson has served as the starting point for the PLA-A to plan future applications of force, not only along the Sino-Indian borders, Sino-North Korean borders and across the Taiwan Strait, but also for other combat scenarios, including the PLA-A's peace-keeping operations in Africa. 'Amateurs talk about strategy but professionals talk about logistics' underscores the PLA's efforts to construct a modern logistics system through preferential investment and civil-military integration. This also explains why the PLA-A makes it a priority to build infrastructure, such as roads and airports, in the plateaus in Tibet and Xinjiang for the future application of force. Other land warfare considerations for this type of scenario include the following:

- Creating a modern force of strategic airlift, employing the PLA's C-17 -like strategic transport Y-20s for use in both future continental and maritime warfare. In peacetime this saves the cost of the forward-deployment of troops but allows, in times of conflict, the transportation of troops and equipment to the battlefield rapidly. Eventually a fleet of 300-400 Y-20s will be inducted.
- 2. Creating a large force of unmanned aviation vehicles. UAVs are the most cost-effective equipment for land warfare in areas not easily accessible to army units. The PLA-A is developing and inducting no less than a dozen types of UAVs. Simultaneously, research is being conducted on the best types of weapons to arm them and the optimum type of batteries to boost their combat suitability and sustainability in mountainous and amphibious operations.
- 3. Helicopters are also crucial for the PLA to improve logistical supply, medical support and troop transportation in future land warfare. In the plateau areas airmobility is critical for the type of operations anticipated. Currently the PLA-A is using a number of combat helicopters to assist in mountain warfare, as well as likely combat operations in the maritime domain. When China's Z-20, an equivalent to the US UH-60 Blackhawk, enters service in both transport and strike versions in a

few years, the PLA-A's battlefield efficiency will be improved.

Army Building for the Indian-Pacific War Scenarios

The Indian-Pacific strategy has broadened the visions and scope of army transformation in the Indo-Pacific region. The land and ocean nexus has never been so influential on the countries in the area. The changing Indo-Pacific security landscape will impact on most of the states in South and East Asia when outside powers intervene vigorously. However, the maritime focus in the Indo-Pacific strategy is more emphasized than the continental one, although the latter gains currency in the new land-maritime game, and it is likely that any land war among the major powers would be larger in scale in terms of human casualties and material destruction.

The Indian Efforts

The preparation for land warfare is probably more important to India than to other states in the Indo-Pacific region, when the Indian Ocean remains quiet under separate US and Indian control. This would help set the immediate and long-term objective for the Indian Army to transform itself to become a joint force.²⁴ Specifically the primary driver for this transformation is to shift India's sequence in war preparation from Pakistan-focused to China-focused. This is a strategic move involving tremendous human and resources relocation. On the land front the Indian Army will create another army corps for offensive operations in addition to its 12 divisions/brigades already deployed along the Sino-Indian border. In the meantime the Indian Army will adjust its combat posture compared to that of the PLA-A. While it maintains its front-heavy deployment, it will further enlarge the strategic depth with more troops stationed in the rear.

At the same time the Indian Army will, like the Chinese Army, strengthen the defence infrastructure in the three sections of Sino-Indian border. New airports, roads, forward logistical storages and other facilities will have priority in construction for the purpose of moving troops to the front line quickly. New weapon systems that suit mountain warfare will also be continuously introduced. The strategic objective for this force posturing is to maintain human and material superiority over the Chinese military across the border. On the other hand it is hard for the Indian Army to keep a five to one ratio in manpower superiority against the PLA-A. In terms of the quality of weapons there will gradually emerge a generational gap between the two armies in favour of China, even though the Indian Army buys first rate weapons from the international market.

The army modernization will be pursued in the context of potential Sino-Indian encounters in the Indian Ocean where the Indian Navy has strengthened its presence and capabilities. This is the defence component of the Act East policy with a focus on the Malacca Strait in times of conflict with China, most likely along the land borders. The Andaman and Nicobar Command-the first and only tri-service command with the best location for the Indo-Pacific region—is tasked with such a mission. Will India hypothetically fulfil its obligation of blockading the Chinese SLOCs in the Indian Ocean? It depends on if there is a major Sino-Indian armed clash in the Himalaya plateau, and the level of Chinese Indian Ocean expansion in the long term. Clearly the Indian Navy has specific war scenarios in countering the PLA-N's moves into the Indian Ocean region.²⁵ For instance, anti-submarine warfare ranks high in its war planning and in its joint war drills with outside powers, such as the US and Japan. This is a realistic type of war preparation. It will take a long time for the PLA's major surface combatants (aircraft carrier battle groups) to be action-ready in the Indian Ocean but submarines are relatively easy to penetrate into this potential battle area if the PLA-N acquires a sufficient number of nuclear attack submarines in due course.

Other Concerned Armies in the Indo-Pacific Theatre

Most Quad states and their partners are maritime powers. This means that they would value maritime stability as a primary goal in their key national interests. Therefore the land connection is comparably thin in their Indo-Pacific reasoning. Yet the land dimensions in their war preparations and overall force transformation are clearly important at a time of great change in the international and regional order. The army is the service with more manpower and influence in most Indo-Pacific countries and assumes more of the onus in fulfilling the military's dual missions of guarding against foreign invasion and keeping domestic stability in order.

The US Army bears the first brunt in re-shaping the Indo-Pacific military order. The renaming of the US Pacific Command as the US Indo-Pacific Command (INDOPACOM) reflects its enlarged responsibilities. [See map that accompanies General Brown's speech - Ed.] For instance, the command of INDOPACOM now covers the east coast of Africa through the Indian Ocean. The name change may also indicate its mission priorities in meeting China's long-term challenge, remarked by US Admiral Harris – the outgoing commander of Pacific Command – in the renaming ceremony. In the short term, the South China Sea would be the focus with persistent US naval entries into the 12 nautical mile zone surrounding Chinese holdings there.²⁶ Over time the Indian Ocean would be another key venue for Sino-American encounters. It is not by accident that the coverage of INDOPACOM just overlaps that of China's BRI.

Under Trump, the US' Indo-Pacific pivot will continuously accelerate with increased budget and capabilities. Here the army is a critical player in joint operations with the navy and air force in any potential application of US military power. From the Korean Peninsula to South East Asia and to the Indian Ocean the US Army is the dominant power and is behind all potential land and maritime clashes between China and its neighbours. The big question is whether this dominance will be oriented into a containment of China. This will have a profound impact on Indo-Pacific security.²⁷

Japan is under both constitutional constraints in projecting force presence overseas and under pressure to enhance its defence capabilities and allied cooperation to cope with the new international changes. Quad may be an effective offset to the threat perceived, as its collective nature helps Japan to re-position itself in the future security architecture in the Indo-Pacific region. But on the whole it is because of Japan's territorial disputes with its neighbors that the security arrangement of the Quad is being valued. Technically, building a strong amphibious force is essential against the background of its maritime disputes with China, Korea and Russia. The Japanese Army is shifting its defence gravity from the north to the south in the sea-land nexus. The Japanese ground force will increase its reach beyond the national borders in terms of peace-keeping or participation of multinational military exercises with its Indo-Pacific allies and partners.

The Australian ground force is doing similar things. Currently the Australian Army is still carrying out combat missions in a number of countries. It will continue to be part of the international war on terror and serves as the security guarantee for peace and stability in the South Pacific. Its broadened presence in Asia is one of the drivers for its transformation, including revisions in combat doctrines and force posturing. One such evolution is the army's efforts to strengthen its special-operations task force and its overseas projection of power integrated with Australia's annual Indo-Pacific Endeavour exercise. At a more strategic level, the Australian Army will plan its Indo-Pacific posture and combat actions within the land-sea nexus, in particular under the US-Australia defence cooperation, through [the] full implementation of Australia-US force posture initiatives. The US Marines rotation in Darwin will be fully implemented soon, and Canberra will seek to strengthen multilateral security partnerships with like-minded nations in the Indo-Pacific region through joint training and exercise opportunities.

The Brief Summary

What has been discussed in this paper is more or less a trend analysis, not a reality check in its empirical sense. Quad is in its embryo stage of development. There is a large question of how far it can go, as the countries embrace diversified objectives in joining it. None of the members will be willing to fight for another unless this aligns with its own national interests. If a common perception of China's rise is the foundation, Beijing will be aware of the effects in bringing them together against its own international standing and interests. It is unlikely that China will annoy all of them to the point of turning them against it in a cohesive and collective way. The improved Sino-Indian relations after the Xi-Mudi Wuhan Summit in May, and the improved Sino-Japanese relations prior to Xi's state visit to Japan, may have removed an immediate trigger for the dual bilateral relations to worsen, and thus may slow down the Quad reconstruction.

There are more challenges for the Indo-Pacific strategy to materialize. So far there have been no collective Quad plans for Indo-Pacific economic or defence cooperation. A NATO Article 5-type of organizational buildup is out of question. Even with a common threat perception of China and Russia, each nation's stake, and its resultant reaction, are quite different and will remain so for a long time to come. Budgetary constraints are enormous and have already delayed a US military pivot to Asia; slowed India's Army enhancement vis-à-vis the PLA-A; reduced the Australian Army's further commitment to engage Indo-Pacific states; and restricted Japan's military reach beyond its national borders. As far as the army sector is concerned, it will probably play a comparatively smaller role in the Indo-Pacific security-building because, after all, the region is overwhelmingly maritime. Unless land border disputes evolve into major armed confrontation between ground forces, oceanic concerns will preoccupy political and military leaders.



Figure 34. While border incursions and standoffs continue to raise tensions, Indian Army soldiers recently trained with soldiers of the PLA-A in counterterrorism techniques. (Image source: Unknown)

Endnotes

- 1. Rory Medcalf, "A Term Whose Time Has Come: The Indo-Pacific" The Diplomat, 4 December 2012, Rory Medcalf, *Pivoting the map: Australia's Indo-Pacific System*, Strategic and Defence Studies Centre, Australian National University, Canberra, 2012
- 2. See, for instance, U.S. National Security Strategy and National Defense Strategy, Washington D.C., November 2017.
- 3. Krepinevich, Andrew, *Why AirSea Battle*, Center for Strategic and Budgetary Assessment, 2010.
- 4. The Strategic Research Department 2013, *The Science of Military Strategy*, the PLA Academy of Military Science Press, p. 106.
- 5. You Ji, *China's Military Transformation: Politics and War Preparation*, Cambridge: The Polity Press, 2015.
- General Brown, Chief of the Army, U.S. Indo-Pacific Command endorsed the use of the words Mini-NATO in his speech to the Australian Army Chief Symposium, 6 September 2018.
- 7. Prime Minister Modi's keynote speech in the 2018 Shangri-La Dialogue, Singapore, 2 June 2018.
- 8. Chengxin Pan, "The 'Indo-Pacific' and geopolitical anxieties about China's rise in the Asian regional order", *Australian Journal of International Affairs*, Vol. 68, No.4, 2014
- 9. Hugh White, The China Choice Why We Should Share Power, Canberra, 2013.
- You Ji, "Sino-US "Cat-and-Mouse" Game Concerning Freedom of Navigation and Overflight", *Journal of Strategic Studies*, Vol. 39, No. 5-6, 2016.
- 11. Qiao Qingchen, "The strategic issues concerning China's air defense strategy under the informatized conditions", *Military Art Journal*, No. 3, 2003, p. 43.
- 12. Zhang Youxia, "Four changes in the campaign theory in joint land border operations in a chain-reaction war", *Military Art*, No. 2, 2002, p. 23.
- 13. Indian Times, 13 January 2018; and China News Live, Phoenix TV, 15 January 2018
- 14. Peter Hartcher, "The China-India clash that could lead to nuclear war", The Sydney Morning Herald, 25 July 2017.
- Inaya Kalim, "China Pakistan Economic Corridor A Geoeconomic Masterstroke of China", A Research Journal of South Asian Studies, Vol. 32, No. 2, 2017, pp.461-475
- Harry Harding, "The evolution of the strategic triangle: China, India and the US', in Francine Frankel and Harry Harding (eds.), *The China-India Relations: What the US Needs to Know*, Columbia University Press, 2004, p. 323.
- 17. Rory Medcalf, "Who Won?", *The Interpreter*, The Lowy Institute of International Affairs, 31 August 2017.
- Editorial "Countries in South Asia have rights to develop cooperative ties with all major powers", *The Global Times*, 17 August 2017, p. 14.
- 19. Li Yuanpeng, "A Debate on Coastal Defense or Fort Defence in Strategic Focus in the

Late Qing Dynasty", China Military Science, no. 2, 2002, p. 57.

- 20. You Ji, "Indian Ocean: a Potential New Zone for Grand Sino-Indian Check-game", in David Brewster (ed.), *China and India at Sea: Competition for Dominance in the Indian Ocean*, The Oxford University Press, 2017.
- 21. Xu Yan's comments in the TV Documentary The Sino-Indian War in 1962.
- 22. Xia Guofu "The combat methods for the GAs in cold high plateau under the conditions of a chain-reaction war", *Military Art*, No. 8, 2002, p. 53.
- 23. The National Defense Program of the Voice of China, 4 August 2018.
- 24. Vijai Singh Rana, "Enhancing Jointness in Indian Armed Forces: Case for United Commands", *Journal of Defense Studies*, Vol. 9, No. 1, 2015, pp. 33-62.
- 25. David Brewster (ed.), China and India at Sea: Competition for Dominance in the Indian Ocean, The Oxford University Press, 2017.
- 26. You Ji, "Sino-US "Cat-and-Mouse" Game Concerning Freedom of Navigation and Overflight", *Journal of Strategic Studies*, Vol. 39, No. 5-6, 2016.
- Michael Swaine, "A Counterproductive Cold War With China: Washington's "Free and Open Indo-Pacific" Strategy Will Make Asia Less Open and Less Free", *Foreign Affairs*, March 2018.
- 28. Japanese Defense White Paper 2018, Tokyo, 15 August 2017.



Figure 35. A soldier from 3rd Brigade launches a PD-100 Black Hornet Nano unmanned aerial vehicle. The Black Hornet is a simple UAS able to provide short-range reconnaissance and is virtually undetectable when flying a mere 10 metres above the enemy. (Image: DoD)

The Character of Future Indo-Pacific land forces

Professor Genevieve Bell

Distinguished Professor, Florence Violet McKenzie Chair Director, Autonomy, Agency & Assurance, Australian National University

'Well, so the good news is you were primed for divergent thinking. The bad news is I'm your divergent thinker. So listen, it is my incredible pleasure and privilege to get to be here. Unlike the previous professor I find this a slightly more daunting experience. There's no nostalgia for me being in a room full of uniforms, mostly just a bit of fear; I fear it may remind me of school and that's not always good.

'I thought I'd take this opportunity to move the conversation in a slightly different direction. So you've heard an explication of what it means to think about emerging and future technologies in the context of land warfare. You've heard an incredible explication of what that means around the region we find ourselves in. I want to move the conversation in a slightly different direction and talk explicitly about one of the pieces of technology that I think is going to be critical in this space. And I really want to auger in on this notion of artificial intelligence: how we might define it, how we should think about it, and what the consequences are.

'I realise before I do that you might need just a little bit of background on

me because I don't read as a traditional person inside this conversation. I am indeed Australian; born in Sydney, raised all over the place. I spent most of my childhood in central and northern Australia in the 1970s and 1980s. My mother is also a cultural anthropologist and I grew up on her field sites. So I grew up with indigenous people in a time when people were still closer in some ways to their country. So I grew up in a time when I didn't speak English—I spoke Warlpiri. I spent most of my time out of school and I went hunting and gathering with people every day who told me stories about their country. Oh and I got to kill things; and of course eat them, let's be clear. It was a remarkable childhood and it's one that means that whenever I get to come to events like this, the welcome to country means something very special to me. So it was lovely to see Kath [Major General Kathryn Toohey – Ed.] acknowledge that we're meeting on Kaurna country and that we are on the land of the Kaurna and the Ngarrindjeri and the Ramindjeri people.

For me as an Australian having spent 30 years abroad, one of the loveliest things about coming home is that I get to acknowledge that I'm always on a country that's been occupied for 60 000 to 100 000 thousand years and that whenever we have a conversation about the future in Australia, we are having that against the backdrop of the longest continued human settlement on the planet. And so what it means to acknowledge that we stand in that place and with those people is not just acknowledging the elders past, present and future but acknowledging both our history and our responsibility to that history. So for me getting to say that always means something special. Because—30 years in America— no offence, [to Americans in the audience – Ed.] you guys never acknowledge it, and you also have indigenous people who have those same histories, so for me getting to talk about that [it's] kind of powerful.

You can imagine though it's a really long way from being a barefooted kid who speaks an Aboriginal language to Silicon Valley. And I did it the usual way. Like all good Australians, I ran away from home. I went to America, I got myself into a decent American university. I got myself into an even better American university and I found myself in Silicon Valley in the 1990s. My doctoral work was actually a history of one of the first boarding schools for Native American kids. Some of you will know that school because it is now the Army War College in Carlisle, Pennsylvania. But between 1879 and 1918 it was the Carlisle Indian School and it took 10,000 Native American kids from 140 different nations and created an educational experiment the likes of which has never been seen since. For those of you who are Americans in the room you'll also know it because of course, Pop Warner was the football coach and Jim Warner was his star student.

'How I ended up at Intel is a mystery to almost everyone, except that it all starts with a man in a bar. No, I'm serious. I got my job at Intel because I met a man in a bar. In Palo Alto in 1998 when I'd finished my PhD and I was on the faculty at Stanford, I met a man in a bar who asked me what I did. I told him I was an anthropologist. He said: "What's that?" I said I studied people for a living. He asked: "Why?" I should have known at that point he was an engineer.

I just didn't know better. He asked me what I did with that. I said I was a professor. He said couldn't I do more and I thought: "Yes. I could stop speaking to you", which indeed I did.

'So you could imagine my surprise when he called me at my house the next day. Because we're talking 1998, before LinkedIn, before Facebook, before Twitter, before Tinder, even before Google. So we're talking before the white box on the internet, and in fact he found me the old-fashioned way: he called every anthropology department in the Bay Area and asked for a redheaded Australian. Stanford's anthropology department said: "Do you mean Genevieve? Would you like her home phone number?"

'So basically, I got my job at Intel because of bad security practices and men in bars and I've spent 20 years at Intel. It is actually my 20th anniversary this week and my job there was always to think about what is the relationship between people and the process of making new technology. So how do we not just do the work that is technically possible but how do we make technology that people care about; that solves people's problems; that addresses people's fundamental needs. And the way I've always thought you do that is that you actually have to go and spend time with people and the places they make meaning in their lives and understand what makes them tick. And so at Intel we used those kinds of insights to drive new product development. Thinking about what was technically possible was important; thinking about what would work at a human scale was equally important.

'I've been doing that job for 20 years. I came home to Australia two years ago specifically to start thinking about how all of that might apply to artificial

intelligence. Part of the reason I got interested in that space was there was a lot of talk in Silicon Valley about AI but most of that talk was hysterical in the sense that it was a form of magical thinking. You talked about the magic bullet; AI is the next magic bullet. I cannot tell you how many conversations I have been in where people tell me that "AI will solve that", and "that" was everything from decision making, to org charts that don't function, to finding the next "fill-in-the-blank", and I know some of you are smiling because you have had the consultants tell you that AI is the answer to whatever the question was you had. Problem number one with that is no one actually defines their terms. So if I say artificial intelligence, you will all nod sagely, and I'm willing to bet sitting inside every one of your heads is a different definition. Because AI at this point is a lot like innovation: we all know it; we all think it's a good thing; none of us actually want to know what it means specifically.

'So how do you define AI? Well you have to do it in a couple of different ways. First you have to remember that this is an object that has a technical and a historic context. Artificial intelligence or the notion of machines that could think like humans has been around since the beginning of computing itself. The very first computers on the planet were described as electronic brains; the very first metaphors that we use to think about how computers worked were about the notion that they would think like humans could think. That gets crystallised in 1956 at a conference in America at Dartmouth College when a collection of mathematicians and philosophers lay out the very first artificial intelligence research agenda and coined the phrase. What they say back in 1956 is the challenge will be to minutely describe human activity, break it down into its sufficiently discrete component pieces that a machine can be made to simulate it. The notion was can you render all human activity into small enough pieces that we can describe it to a machine so a machine can do it.

'In 1956, the things they thought that were most important for a machine to do was to understand human language—casual conversation not just structured conversation; [Secondly,] that the machine should be able to understand abstractions—so [understand] symbolic objects like a flag, not just recognise a picture of a cat (one of those is easy the other one is an abstraction). The third one was those machines should be able to learn over time. And the fourth one was that the machines should be able to reason, ie to be able to constitute an argument. Now in 1956 that was a pretty lofty goal, it took a very long time to get there, and I would argue we are still not altogether there. So the [term] artificial intelligence has a history.

'If you were to look at where we are now in 2018 and define artificial intelligence I would argue that it's five things plus one.

'First thing you need to know when you're talking about artificial intelligence is that it is impossible to understand as a single piece of technology; it is in fact a constellation of technologies. First thing you need to know is it involves data. You cannot have artificial intelligence without data. For those of you raised Catholic, data is artificial intelligence's original sin. You will not get to AI without data but whatever that data is will shape AI profoundly and absolutely. So part one is a data set: you need to know where that data comes from, how it was collected, what the challenges are inside of its collection. Because there will be challenges even if they're benign ones. I have colleagues in a scientific organisation in Australia who say their data [a collection of ocean images - Ed.] is biased and I asked them: "How?" They said: "Well it has a daylight and fair-weather bias", and I said: "Why's that?" "Because it was collected under water with cameras and you can't throw someone off the back of a boat when it's dark and stormy." All data has a bias and you need to know what it is, because all artificial intelligence is built on a data set.

'Second thing. All artificial intelligence contains a notion of an algorithm. Algorithms aren't that complicated; they are simply a logical statement that automates a process. It says: "If A plus B then C." All it says is a sequence of tasks—it's all about can you shortcut something by making something do it automatically? You've all used an algorithm long before computers came along if you've ever used a washing machine, or had an automatic choke in your vehicle. All of those are algorithmically based; they just automate a series of processes. But inside artificial intelligence that same data set enables the machine to automate algorithms, so certain kinds of processes can happen without a human's intervention.

'Third thing. Inside AI technologies must be a notion of how the machine will learn, otherwise known as machine learning. There are lots of different techniques for them; some are just statistical modelling; some of them are slightly more opaque and complicated.

'Fourth thing. Inside AI is the ability of the machine to sense the world around it so that it can gather new data in real time. That can be cameras. microphones, radar, GPS—any mechanism by which a piece of technology can know the world around it. Oh, and by the way, all the sensing that sits behind that.

'Fifth and final thing is some kind of logical proposition for why that data is being collected, why the learning is happening, why the world is sensing things and why things are being automated. So what is the reason behind it or the strategy or the logic? I said it was five plus one because increasingly you can't have a conversation about artificial intelligence without also talking about ethics, ie without talking about the broader context in which this is happening... what are the ethical constraints or the moral dimensions?

'You can see why people say AI because otherwise saying data, algorithms, machine learning, sensing, strategy feels like a mouthful. But here's the thing: AI is the beginning of a transformation, not the end; it is effectively the steam engine for a railway we haven't built yet.

'The World Economic Forum two years ago laid out the last 250 years of world history saying there [have] been three waves of industrialisation and we are now are entering the fourth one. We all know these earlier ones; mechanisation, electrification, computerisation. The last one is described by the World Economic Forum as cyber-physical systems but you might also think of it as the age of intelligence. Now the challenge with each one of these waves is that they not only produced technologies, they also produced significant social and cultural changes, they produced new laws, and they produced new threats and new possibilities in terms of both how you might produce military hardware but what you might do at scale, too. War changed with mass production and computers, we know it did. The notion of both the threat and the possibilities were there.

'Of course what each one of these waves also did was generate the need for a new set of skills. The first wave brought us engineering. Then the second wave brought us electrical engineering. The third wave brought us computer science. It is hard to know what will come with that fourth wave but what you should think is that cyber-physical systems is a label under which is contained an entire class of machinery driven by artificial intelligence. And here I mean AI that gets off a computer screen and starts to find itself in physical things. The first classes of those would be autonomous vehicles also robots, but also includes banal things like smart elevators and smart buildings. It is anything that combines artificial intelligent technologies and a physical object. Those physical objects have the power to move and do things [in the physical world].

'My challenge with this system is that we don't yet know who the practitioners are that are going to help us navigate that fourth wave. I don't know what we call them and I don't know where to find them.

'But I do know they have five questions they need to answer. First question is will those things actually be autonomous? That's always been the promise that they'll be autonomous and able to act without humans. But the question is what do we mean when we say autonomy in English? It's a messy word; there's a lot of semantic slippage. I say autonomy in English you think: sentient, self-aware, achieves consciousness; "Skynet" goes live and we all die. It is pretty much what happens. You get from autonomy to 'Kill Sarah Connor' very quickly.

'Do we mean that it is fully an empowered actor on its own? Does it have a set of limits? Who is defining those? Who is granting the object autonomy and under what context? And frankly those things mean things differently in different culture systems, inside different regulatory systems and even inside different notions about what it would mean to be an autonomous actor. Sitting inside the room are people who all come from systems of governance and structure and I'm willing to bet sitting inside every single one of your founding legal documents there are different notions about what it means to be an autonomous human being; what it means to be a citizen is different from country to country. What the rights and responsibilities are—same problem here.

'So let's just take autonomous vehicles as the example: do we now mean that those vehicles are operating without ever having a human in the loop? Probably not. Do they sometimes have to check in with humans and under what circumstances? Are they autonomous the way our children under the age of 18 are autonomous? Like you need to know where they are at midnight, they'll need to check in, and by the way you're not going to let them have the new car. So they're autonomous but limited. Or are they like your 20-year-old children where you worry about them completely differently? So when we say autonomy how are we actually structuring that? Because it turns out that has enormous implications for how you build it technically, how you secure it, what data flows through its networks, because if it is single-acting all by itself and it never needs to check in you're going to need to pre-load it with a very different set of software and world views than if it is checking in once a day which is, for instance, the model for Tesla. All Tesla cars check in with the mothership once a day and they get little updates. You know there are different models of autonomy but answering that question is hugely important as we think about this entire class of new technical objects.

'Second question: If an object is autonomous what is the nature of its agency, as in how much can it act without referring back to a rule set or without a human in the loop?

This is complicated because rule sets are two things usually: rule sets can be explicit—the ones we know that we write down; and then they can be tacit—the ones that we use but don't discuss.

Imagine you have a machine that may need to navigate both of those—it's a little tricky. I'm willing to bet that what our friends in the Air Force think a machine should know may be different than what our friends on the land think a machine should know, which may be different to what our friends on the water think a machine should know. And by the way, it's going to need to handoff between those forces and that's a little bit tricky.

'In Australia, in the state of Victoria, there is a very particular thing you do in a vehicle in the CBD, so in the central business district. It is called a hook turn; it probably goes against all the rules of nature. It involves taking a right-hand turn across multiple lanes of traffic in a manner that seems particularly silly. Imagine now we have an autonomous vehicle that needs to be taught to operate in Australia. We have granted autonomy and now give it Victorian rules and New South Wales rules. It will know how to do a hook turn in Melbourne but we will need to make sure it doesn't do one in Sydney or Adelaide or Wagga because that would be bad. Now imagine that car came from somewhere else. It might have come from America. It will never know how to do a hook turn because you can't teach it to do one because it's irrational. So now we have a problem of an object that believes it should do one thing and needs to do something else. Imagine how it is that we're going to determine what those rules are, who gets to set them, who gets to update them, how often they have to be updated, how they are transmitted, how they are negotiated and how they are scrutinised. Because all of those questions now sit here inside your robotic objects, in your autonomous vehicles. Whose rules? Oh and by the way in some of these instances you won't want those rules sitting inside the object you want them sitting on the network on which the object runs.

'It's easy to imagine a moment in time we need all vehicles to come off the road. In Australia that might be an emergency services request because we have a fire you need to get everyone off the road so you can put a fire truck through a crowded area. So now every vehicle can be dismantled or disengaged from an external source. Who gets to decide that? How is that deployed? How is that enacted? [These questions] are all part and parcel of what this world would look like.

'Which gets you to the third set of questions, which are about assurance, by which I mean safety, security, trust, risk liability, privacy, explicability and manageability. It's a very long list. Also ethics sits under here, too. So now imagine you have that same autonomous vehicle. How do you know it's safe? How do we determine what's safe? How are we deciding what risks we are willing to endure with that object? Who gets to decide it?

'Again, are those things innate to the object or do they sit outside of it? How are we imagining how that object will explain its actions? Because this is one of the things my colleagues in computer science won't tell you terribly often, but a whole class of machine learning activities—basically ways that you can teach a machine to learn, particularly deep learning, what is otherwise known as unsupervised learning— where you ask a computational object to roam across a set of data and find patterns. The thing about that particular learning technique is that whilst it is powerful, the computational object cannot explain how it got to the conclusion it got to.

'So it's learned a pattern in the data that it cannot tell you about and it is now acting on that pattern. Pause for a minute and think about what that would look like in a highly regulated environment or one that is subject to post action scrutiny. So do you want an object that has acted but cannot explain why it did that? I'm willing to bet we don't want that in certain sectors, yours may well be one of them. So what it means to have what is called back-traceability, or the ability of an algorithm to explain why certain actions happened, is actually technically quite tricky and at the moment may be a cause, under certain circumstances, to say of robotic objects [that] you don't want certain classes of machine learning techniques enacted. So in fact you may need to be putting limits on how these systems work because they can't explain their actions afterwards, which would create different problems.

'[The] fourth set of questions here I think that are necessary to answer in this new world are about metrics, so how we know if these are "good or bad" systems, crassly put. Over the last 250 years most new machinery has been understood by either increases in productivity or increases in efficiency. I'm not sure those are the metrics that we want to use here. Ought to it be about safety? Is it about not having humans in the last 300 meters, and not having wet socks and being in the mud? Maybe that's a different metric. Having a machine replace a human; the metric there is about human life. That's not necessarily an efficiency call.

'It's also the case again that there are a number of pieces [of computations] that sit inside artificial intelligence that are actually incredibly energy intensive. So if you are sustaining a set of technologies far from reliable and robust infrastructure there are certain kinds of techniques that you may not want to use. In mid-2018 the last statistic I read was that about 10% of the world's energy budget is now being spent on server farms. That's a big number and it's only going to get bigger. So now imagine you are attempting to negotiate a deployment of cyber-physical systems on a battlefield. How are you going to power them if they choose to use certain kinds of computational techniques that are energy intensive? Deep learning is the most energy intensive set of algorhythmic workloads that I know of. Imagine running deep learning off a truck battery or even a generator; [it's] a little hard to comtemplate. How we might build these systems with sustainable metrics in mind, and energy sensitive ones, is a whole new way of thinking about these systems and not something anyone is thinking about currently.

'And last but by no means least how is it that we imagine we're going to engage with these systems? I think that was your last question, Kath, and it's a good one. At the moment we engage with computing in a very narrow way; it's a keyboard; it's glass; sometimes it's voice; very occasionally it is gesture. We are now talking about systems that don't require humans to act. We are talking about systems that we may find ourselves inside; we may find ourselves with systems negotiating around us. How these systems will signal what they are becomes hugely important.

'I was joking earlier about teenage kids and cars; we know how to signal vehicles when we have teenage children in them. They have an L plate which says don't get behind them when they are reverse parallel parking. We all know how to read that as a sign, right? How do these systems get signal to us? How do we know what they are? How will we engage with them? How do we not bring the metaphors of the last 100 years of computing with us so that we are not putting the moral equivalent of yet another little square disk for saving? We don't even know what that means anymore, but the icon to save something on your computer is, in fact, a three [sic] by five disk. Most of us in the room are old enough to remember that; many are not.

'Imagine what these systems will be like if they had to require passwords; if you had to talk to them. All of those are not extensible so how we think about how these systems will work with one another is actually complicated. This leads me to two final points; one, if the world we're moving to is one of cyber-physical systems, where robots are just the first class; autonomous vehicles are just another piece of a broader puzzle, all of those questions are complicated. They have huge implications for how you think about everything, including really boring things. For example, how are you going to write a tender for a cyber-physical object?

'Take the Hawkei; how are you going to write the tender for the next one of those? It is going to have a strategy engine in it. On whose data has it been trained? Whose strategic intent is it enacting? Do we want to have someone else's strategic intent inside our computational object and if not how do we determine that? How are we going to train people to manage those systems? Start from the tender and work your way forward. How do we train a generation of people to work with these objects? How do we train the people who are going to repair them? How do we think about their battle needs—if that's where you want go— that have to do with power and network needs and security needs?

'These are not just opportunities they are incredible vulnerabilities and

thinking about how they are secured and built and managed isn't just as simple as saying: "They're emerging technologies, AI is the answer". What you actually have to think about is what is the question you are trying to answer and why, and what will the pitfalls and perils of all of that be?

So with that I'm going to stop and say thank you.'



Figure 36. A robotic explosive detector is tested at the Regional Explosive Ordnance Service. (Image: DoD)

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Pacific Command) signifying the importance the region plays to Australia's primary ally. It is interesting to note that it is the only command that shares borders with all the other functional commands. (Image by Major Conway Bown)

The Future of Land Forces: Trusted Teams of Professionals that Thrive in Complexity

General Robert B Brown

Commanding General, United States Army Pacific

Every generation thinks their time is the most complex in history, but it is hard to argue that it has ever been as complex as we find the global environment today, and in the Indo-Pacific region in particular. That complexity is changing the very character of warfare. When I was coming up through the ranks, the 'fog of war' was not enough information. This uncertainty was best mitigated through initiative—'do something'. Now, what is the 'fog of war'? It's having too much information—mountains of information that must be sorted and prioritized. This proliferation of information and the ability to bring real time small unit updates to increasing levels of military hierarchy has had correspondingly deleterious impacts on initiative—dis-incentivizing it for fear of being second-guessed by those watching via sophisticated communications platforms as events unfold on the ground.

This changing and complex environment compels three imperatives for future land forces: (1) multilateralism in all we do; (2) joint integration; and (3) the development of multi-domain capabilities. And despite the promises of rapidly advancing technologies such as robotics, autonomous systems, and

artificial intelligence... trusted, trained, and empowered people will be the key component of future land forces. It is no longer sufficient for our people to simply be *comfortable* in ambiguity and chaos. To win today and in the future, land forces require trusted teams of professionals that *thrive* in these difficult conditions.

A Rapidly Evolving and Complex Environment

There's an old adage that 'a lie is halfway around the world while the truth is still putting its pants on'. In a time in which the velocity and diffusion of information has increased so dramatically, the challenge of controlling or maintaining a strategic narrative has never been higher. Moreover, the speed with which information moves globally has bred a strategic impatience people expect answers and information instantly. This hyper-connected world has made it possible for a few rogue players to have dramatic impact on many, as we've seen with non-state actors in the Middle East and elsewhere.

In addition to global complexity, the Indo-Pacific is the most complex region in the world. There are more people in this region than in the rest of the world put together. By 2050 it is estimated that six out of every ten people will live in this region—a fact which speaks to tremendous opportunities, but also tremendous challenges. We are also now in an era of hyper-competition. As articulated in the *2018 National Defense Strategy*, 'inter-state strategic competition... is now the primary concern in U.S. national security'. Our senior leaders recognize that continuous geopolitical competition is now the norm in the Indo-Pacific. In previous years, American military doctrine included a 'Phase Zero' on the spectrum of conflict. Phase Zero represented the pre-conflict period when, aside from national-level shaping operations, very little was occurring. We don't use that terminology now because we are in a state of constant, hyper-competition, across all elements of national power—diplomatic, military, economic, and information.

Regime-based threats remain a significant concern in the Indo-Pacific. My professional life changed dramatically over the last couple of years as threats from North Korea significantly sharpened the focus of US military force in the region. While there has been much institutional goodness in focusing our military readiness efforts, we earnestly hope for the success of diplomatic solutions. No one wishes for conflict on the Korean Peninsula. However, our job as professionals—our sacred trust—is to be ready should diplomacy fail.

That is an imperative that will never change.

Beyond state-based threats, violent extremist organizations also contribute to regional instability. In 2017, the Philippines Government waged a fivemonth campaign to root out Islamic State militants entrenched in the city of Marawi. The crisis should serve as a wake-up call to us all, reinforcing the lesson that if we don't work together, the violent extremists will find the seams and gaps among us. A positive example of effective cooperation currently in action is the Sulu Sea Initiative—Indonesia, Malaysia, and Philippines working closely together to close a gap in the Sulu Sea exploited by violent extremists.

The most frequent and likely contributor to regional instability will remain natural disasters: earthquakes, tsunamis, typhoons, volcanic eruptions, and many other types of catastrophe. The unfortunate reality is nearly eight out of ten people who perish in natural disasters do so in the Indo-Pacific. Thus, the armies of the region will inevitably find themselves involved in disaster response, and our close cooperation and multinational interoperability is vital to the success of those efforts. The good news is that 35 out of 36 nations in the Indo-Pacific already work together to save lives in the wake of natural disaster; the only nation that does not is North Korea. One of the enduring lessons drawn from exercises and actual disasters over the years is that we cannot form the cooperative relationships *during* the crisis. The partnership must be forged *before* crisis occurs. The investment in relationships and multinational interoperability are critical and will ultimately save lives.

Additionally, because hyper-competition does not have to mean conflict, disaster response provides a common mission behind which competing states can unite. The largest annual exercise the United States does with China is the Disaster Management Exchange (DME)—now in its fourteenth iteration. Through a series of vignettes and regional disaster scenarios, the DME serves as a critical, cooperative link between the United States and the People's Republic of China.

Finally, consider what one scholar has referred to as 'black swans'. These are rare, high impact events that we don't see or anticipate coming. The 1918 Spanish Flu or the terrorist attacks of September 11, 2001 are prominent examples of un-forecasted events that resulted in significant impact—in both cases loss of life. No one saw them coming. In reality, though, 'black swans' are occurring more frequently and will continue to

do so in the hyper-connected world in which we live. Though we will still try to predict future crises, the 'black swan' will only reinforce the truism articulated by former Secretary of Defense Bob Gates: 'When it comes to predicting the nature and location of our next military engagements, since Vietnam, our record has been perfect: we have never once gotten it right.' Complementing the 'black swan', the 'pink flamingo' is the inevitable surprise—a high impact event widely known, but ignored because of rigid organizational structures and bureaucratic decision-making processes. A prominent example in the contemporary operating environment is the 'gray zone' information operations we see executed by some nation states. We know these operations are occurring, but our cognitive biases and bureaucratic structures sometimes prevent us from anticipating possible effects.

Character of Future Land Forces

With the aforementioned complexity as context, what will characterize the land forces of the future? I would offer three imperatives for land forces to successfully compete, deter, and win in future operating environments: (1) multilateralism in all we do; (2) joint integration; and (3) the development of multi-domain capabilities.

First, multilateralism enables us to gather a variety of different perspectives, which is invaluable in crafting creative solutions to the problems land forces may face. In that spirit, US Army Pacific maintains an Australian Army general officer as a deputy commanding general. This partnership—about six years old now—has proved invaluable in offering alternative solutions to many of the complex problems we face. This is not to suggest that multilateral approaches aren't frustrating, because they absolutely can be. However, I am convinced that they always lead to more optimal solutions than a unilateral approach—especially at the strategic level. Beyond merely cooperating, though, our forces must be able to operate with one another. We often focus interoperability on the systems-communications, fires, logistics, etc. The reality is that our systems will always have challenges communicating, and though we should not stop pursuing perfection, we must take a more expansive view of interoperability, to include procedures and *relationships*. Procedural interoperability 'involves standardized communication, and agreed-upon terminology, tactics, techniques, and procedures that minimize doctrinal differences'. While we will always remain frustrated by—and often focused on—systems interoperability,

procedural interoperability should not be overlooked as a way to enhance our cooperative effectiveness.

Finally, the most important dimension of interoperability is the personal relationships. When we cultivate strong relationships among partners, we are able to overcome the friction inherent in today's complex operating environment, especially at the outset of crisis.

Second, there is a level of jointness required in the future unlike anything we have ever seen before. Joint integration—as opposed to simply joint interdependence—will be imperative in future conflict. Such a relationship among services provides additional options, which will be vital in an environment where we may not have dominance in all domains. And much like multilateralism, approaching problems with a joint perspective enhances the overall effectiveness and creativity of solutions. A good example of effective joint integration is evident in the evolution of the Rim of the Pacific (RIMPAC) exercise that occurs each year in Hawaii and surrounding areas. Two years ago, we asked the U.S. Navy to turn RIMPAC from the largest maritime exercise in the world to the largest multi-domain exercise in the world. They enthusiastically agreed, and this past year we were able to integrate U.S. Army, Australian, Japanese, and Special Operations assets into an exercise that included cross-domain fires, coordination, and synchronization all networked together across a common communications platform. Though the exercise represented a number of 'firsts', it by no means will be the last because joint integration will undoubtedly remain essential in future warfare.

Finally, multi-domain operations (MDO) is the future. We have to be capable of operating across multiple domains, or we will be irrelevant. MDO is an evolutionary concept that will have revolutionary impacts. While it took over a decade to codify the AirLand Battle concept into military doctrine, we cannot afford to take that long with multi-domain operations. As a warfighting concept, MDO will present multiple dilemmas to adversaries, while preserving multiple options for decision-makers. Because excelling in a multi-domain environment requires the kind of joint and multi-national collaboration described previously, MDO will require a greater investment in the development of our people. The complexity of the environment and the velocity of action necessitates that the future force develops people that are critical and creative problem solvers empowered to exercise disciplined Australian Army Journal Army in Motion - CALFS 2018 Volume XIV, Number 3

initiative. This imperative will influence the way we matriculate, train, and retain our people. Trusted teams of professionals that thrive in ambiguity and chaos will necessarily be the cornerstone of the future force if we are to meet the challenges of a multi-domain and complex operating environment.



Figures 38 and 39. Commander US Army Pacific, General Robert Brown (centre), accompanied by US Army Pacific Deputy Commanding General - North, Australian Army officer Major General Roger Noble, speaks at the Trilateral Senior Level Seminar where US, Australian and Japanese senior leaders confer and discuss common defence issues. Right: General Brown inspects members of Australia's Federation Guard during a visit to ADF HQ in 2018. (Images: DoD)

Endnotes

- 1. United Nations, "World Population Prospects 2017." Available at https://population. un.org/wpp/. Accessed 13 October 2018.
- 2. "Introduction," 2018 National Defense Strategy. Washington D.C., 2018.
- 3. United Nations Environment Programme. "Building Resilience to Disasters and Conflicts." Available at https://www.unenvironment.org/regions/asia-and-pacific/ regional-initiatives/building-resilience-disasters-and-conflicts. Accessed 18 October 2018.
- 4. Taleb, Nassim Nicholas. *The Black Swan: The impact of the highly improbable*. Vol. 2. Random house, 2007.
- Gates, Robert M. "Address to the Corps of Cadets." Speech, West Point, NY. February 25, 2011. Accessed October 2, 2018. http://archive.defense.gov/Speeches/Speech. aspx?SpeechID=1539.
- 6. Gamble, Duane A. and Michelle M.T. Letcher. "The Three Dimensions of Interoperability for Multinational Training at the JMRC." Available at https://www.army.mil/article/173432/the_three_dimensions_of_interoperability_for_multinational_training_at_the_jmrc. Accessed 12 October 2018.
- 7. For a full discussion on AirLand Battle, see Romjue, John L., *From Active Defense to AirLand Battle: The Development of Army Doctrine*, 1973-1982. Historical Office, US Army Training and Doctrine Command, 1984.





Figure 40. Deputy Chief of Army, Major General Justin 'Jake' Ellwood receives a gift about New Caledonia from Major General Thierry Marchand, Commander French Armed Forces in New Caledonia during CALFS 18. (Image: DoD)

Closing Address

Major General Justin 'Jake' Ellwood, DSC

Deputy Chief of Army

'Distinguished guests, delegates, colleagues and friends—I think I can say friends now because I think the last couple of days we've actually made a number of really good connections at this seminar and Land Forces in general.

'So good morning.

'Today I've been given the very daunting task of summarising the outcomes and insights of CALFS. It's daunting because of the amazing speeches and contributions of all participants, but in particular our international guests such a diverse range of speakers has allowed us to view the issues of today from different angles and through a variety of lenses.

'The theme of this conference has been to understand how international partners can help build, develop and sustain land power to respond to the complex range of security challenges that shape our strategic environment and I think, in many regards actually, the theme cannot be answered per se, but it can be addressed. As the Chief of Army might say, it is an issue in motion, very much like our Army. And as I listened to the presentations throughout our seminar, there seemed to be three key threads that presented throughout. The first was that our environment contains shared threats and opportunities for the international community. The second common thread was that the diverse nature of the international community has potential to deal with the ever-changing and highly complex nature of the strategic system. However, the third thread is that we can only ever realise this potential through our mutual understanding, cooperation and coordination.

And I'll now expand on each thread.

In terms of the opportunities and threats present in the strategic environment, the changing shape of strategic boundaries is one of the most significant factors. We were given some very interesting insights into the broader implications of combining the Indian Ocean and Pacific Ocean regions into a single expanse, referred to as the Indo-Pacific region. This conflation is significant as within this single system lies massive opportunity, considering within it are nine of the world's ten mega cities and three of the top world economies along with almost boundless manpower and resources.

However, as with most things dense with opportunities, significant challenges exist, both natural and man-made. Within the Indo-Pacific there has and will continue to be significant threats of natural disaster, drugs, arms trafficking, piracy, illegal fishing, conflicts, and terrorism. Lieutenant General Mahesh Senanyake referred to the Indo-Pacific as the world's hazard belt and General Robert Brown observed that within a few years over one billion people will live in high to extreme risk areas that are vulnerable to natural disaster. No issue is insurmountable but any successful solution requires regional cooperation for the greater good.

As leaders, we all have a role to play in this. In such a vast expanse with such diversity there must also be accepted norms and laws. Without such measures the smaller nations will be at the mercy of the big. There will always be competition and competition is healthy, as Professor You Ji stated—collective partnerships can offset shared threats. However, we must also remember that unbridled competition can lead to conflict and in a region with seven of the ten largest armies in the world, conflict is in no one's interests.

The second thread—that the diverse nature of the international community provides opportunities to have the potential to deal with the ever-changing

and highly complex strategic system—was alluded to throughout the seminar. The Minister for Defence noted that through diversity there is strength—a multitude of views has a better chance of finding solutions than a single one. He pointed to the importance of partnerships that embrace engagement [and] shared resilience within a framework of a rules-based order. He talked about disruptive changes in international relations when imposed on others. Rules must be upheld, although rules can change when all agree to these changes.

Changes are indeed essential to ensure relevance to the environment—as the Chief of Army pointed out, we need to adapt to meet future challenges. Transformation is a necessity not a choice and, as we heard today in the great presentation by Professor Genevieve Bell about AI, you know we have many changes afoot.

Furthermore, General Brown stated the joint multi domain and multinational partnerships are the way of the future. They are only effective though with people that are trained, trusted and empowered. Duncan Lewis implored us to recognise that if we continue to work hard across agencies, national borders and languages then we will be able to deliver the security that our people deserve. For Australia and its partners this should manifest in our people-to-people relationships. However, again changes must be considered carefully and agreed to by all. The multinational fora is a great place to start with these considerations, in military speak I guess we would say: "on an all-informed net".

The final, and potentially most important, thread throughout CALFS was a need for mutual understanding, cooperation and coordination to deal with the changing strategic circumstances. It is an essential ingredient for an effective, collective response to challenges. As the Chief of Army mentioned in his opening address, nations can only operate at the speed of trust.

Brigadier General Gilbert Toropo provided an excellent synopsis of the behaviours needed to ensure the region, with its opportunities and challenges, maximised the former and minimises the latter. He focused on productive international engagement. He noted, when we are alone, we risk working at cross-purposes with one another, but working together we maximise our effectiveness. He talked about the need for effective partnering, which is synonymous with effective international engagement. He noted that the real challenge is finding where partner's interests align. [I will] summarise this by quoting the Commander of the Republic of Fiji military forces, who said: "make sure you're in the waka or canoe; better to be in the canoe working together than shouting directions from the shore". He also spoke about interoperability by enhanced familiarity and he stressed that partnerships cannot be built overnight.

Lieutenant General Rolando Batista reminded us that our adversaries are working together in partnerships of convenience. He was quite correct in pointing out that united we stand, united we prevail. But, as a side note, one of the slides we saw yesterday showed an ISIS member wearing a t-shirt with a very similar slogan—we must strive to be more united than our adversaries.

Major General Adam Findlay, Australia's Special Operations Commander, also highlighted the importance of trusted partnerships from us all when he urged us to form relationships which involve sharing, understanding and earning trust through cooperation. As he said, 'trust' is a capability. The theme of collective partnerships was strongly reinforced by General Brown, who stated that none of us can afford to go it alone—it doesn't make sense. Building and maintaining interoperability will be essential in the future to promote peace and security in the Indo-Pacific.

Glenn Dunbier talked about the need for mutual understanding and cooperation in a whole-of-government sense. He stressed that we must collaborate, cooperate and work together to leverage the different strengths we all have and this means partnering and partnering means we need to understand the cultural differences in the way that we operate. He reminded us that a very good way to start is by listening.

So, in conclusion, while there were a myriad of important points of view expressed during this provoking seminar, many of which [were] standalone items that are worthy of independent consideration, the three threads throughout the seminar were that our strategic environment contains shared threats and opportunities to the international community; the diverse nature of the international community has a potential to deal with the ever-changing and highly complex nature of the strategic system within which we live; and finally, we can only ever realize this potential through mutual understanding, coordination and engagement.

As an Army Officer I couldn't help but conclude with a statement made by

Lieutenant General Senanyake in the very first session. He said that peace on the sea depends upon stability, peace and prosperity on the land. It reminds us why the effective application of land power in the Indo-Pacific region is so vitally important to us all now and into the future.

So with that I will now invite the Chief of Army to make some closing comments.



Figure 41. Soldiers from 2nd Battalion, Royal Australian Regiment and US marines conduct a clearance. (Image:DoD)

The Indo-Pacific Doesn't Exist

Dinner Address by Prof Allan Gyngell

President - Australian Institute of International Affairs.

'It's a great pleasure to be here and an honour to have been invited to deliver these remarks. I suspect that I am an outlier in this room, though.

'Although I have spent a lot of my professional life happily hanging around with strategic analysts and military and defence types, my background, and what expertise I have, lies in foreign policy. If, as Von Clausewitz says, war is the continuation of politics with other means, then my interest is in the form of politics—that is, foreign policy—that has failed when war begins and must resume fully when it ends.

'I am also a historian of Australian foreign policy. Our foreign service is much younger than our Defence Force. In a full sense it only began in 1942 when, in the face of the greatest threat the country had ever known, our Parliament finally ratified British legislation called the Statute of Westminster, and established its unarguable sovereign identity in the world, with the right to sign treaties and establish embassies.

'So the world in which Australian foreign policy has existed has been that of the international order set up in 1945 and maintained by the victors of the Second World War, led by the United States. This order was universalist in its declared values, liberal in its economic objectives and globalising in its aims. But it was underpinned by the power of the United States—which accounted for around half of all global production at the end of the war. Its network of alliances in Europe and Asia provided the stable security framework which supported a period of unprecedented growth.

'But in my view this post-war order has ended. It's not changing. It's not being challenged. It's over.

'The reasons are beyond the scope of these remarks and the objectives of this seminar. But they are essentially the result of the shifting balance of global economic and military power. Consequences of the shift are seen all around us in pressures on international organisations and their reduced capacity to make and enforce international rules and norms.

'It is notable that this Chief of Army Land Forces Seminar is focused on the Indo-Pacific.

'There is, of course, no such thing as the Indo-Pacific. It doesn't exist, any more than places we have at various times called the Middle East or the Far East, or even something called Asia itself, exist.

'These labels are simply ways of describing underlying geographical realities in ways that help us understand our relationship with the world and plan for the future. They are framing devices. And they change over time. One of the signs of the arrival of a new international order is that we begin to see the world described in different ways. New categories are created.

'After the Second World War words like 'East' and 'West' gained new and deeper meanings. We distinguished Western Europe from Eastern Europe in a fresh way. We started talking about something called 'the Third World'.

'Here in Australia, the region we thought about was the Asia-Pacific. That was the essential framework which shaped our world from 1945 onwards.

'The region embraced our wartime ally, the United States; the newlyindependent countries of South-East Asia; our growing markets in Japan, South Korea and later China; and the island states of the South-West Pacific.

'The regional institutions we supported and helped build—ASEAN and its dialogue partnerships, APEC, the ASEAN Regional Forum, the Pacific Islands Forum—were all centred on the Asia-Pacific. 'Around 2009, however, prodded by academics and think tankers, Australian policymakers started referring not to the Asia-Pacific but to the Indo-Pacific. The term slowly leeched into official documents. Beginning with the Gillard Government's 2012 Australia in the Asian Century White Paper, the concept became the organising principle for the Government's declaratory policy towards its region. The language received bipartisan endorsement from the Abbott and Turnbull governments. It is now formally established in the Australian foreign policy and strategic lexicon.

'In some ways, the Indo-Pacific is a reversion to an older Australian way of looking at the world. Throughout the 19th and early 20th centuries, this westward-looking focus was how we thought about our strategic position. Our security, trade and communications all linked back to Britain through the imperial 'string of pearls' in Singapore, Colombo, Mumbai, Aden and Suez.

'There were several reasons for the concept's return in the second decade of the 21st century.

'From Australia's perspective, it makes excellent sense because it embraces the two oceans around our continent and places South-East Asia as the pivotal point between them. It focuses attention on the horizontal trade, energy and security ties that increasingly cross Eurasia and South-East Asia.

'As well as our Asia-Pacific partners, it also includes India. This reflects significant changes in India's relevance to Australia. The slow reform of its economy beginning in the 1990s opened up new opportunities for trade and economic engagement. India became one of Australia's largest sources of immigrants. And from New Delhi's perspective, the shifting geopolitical landscape generated more reasons for India to 'look East'.

'Less remarked upon, the Indo-Pacific also embraces the vital climate system, centring on the Himalayas, which drives the natural environment, the weather and the waters of South and South-East Asia.

'But in the minds of many of its proponents, the central reason for the reemergence of an Indo-Pacific framework has been China's economic and military rise. Many commentators, more explicitly than we see in in official pronouncements, see it as a way of knitting together a maritime offshore balancing coalition to the growing continental power of China. For some, it also represents a potential grouping of (more) democratic states countering an authoritarian China in a 'free and open' Indo-Pacific.

'I'll come back to China.

'Australia may have been the first country to embrace the label of the Indo-Pacific in its formal documents, but the concept has obviously proved useful to others as well. The term has now been adopted by many governments, including Japan, France, Indonesia, and the United States, with its new Indo-Pacific Command in Honolulu. Although it 'dislikes the term, China has its own Indo-Pacific strategy in the form of the Maritime Silk Road.

'So it is important to remember that we all have our own individual Indo-Pacifics. We define its extent differently; we bring separate strategic ambitions to it. India's Indo-Pacific is different from Japan's; Australia's is different from Indonesia's. That's one of the reasons it has been hard to develop effective institutional responses to it.

'Let me turn now to some of the opportunities and challenges we face.

'Because we are in Australia, I'm going to use the Australian Foreign Policy White Paper's definition of the Indo-Pacific. This begins in the 'eastern Indian Ocean' rather than reaching back across to the borders of Africa (as India's Indo-Pacific would). It then encompasses South-East Asia and East Asia, the island states of the South-West Pacific, and the United States.

'The Indo-Pacific will determine the nature of the 21st century world.

'It includes more than half the world's population, the world's three largest economies, and its busiest sea routes. It embraces the biggest countries in the world and the smallest. It is at the intersection of Chinese and Indian cultural traditions with deep Islamic and European admixtures. It straddles sea and land, islands, archipelagos, and sub-continents. If we were academics, we'd call it 'liminal'. The cyber and space domains are also more critical here than ever.

'Throughout the second half of the 20th century, the dominant regional political and security dynamic in the Indo-Pacific was the process and consequences of European (and Japanese) decolonisation. This began with the independence of India in 1947 and ended with the independence of East Timor in 1999.

'Most of the conflicts across the region during those decades had their roots

in this historically important transition.

'Australia's 20th Century military involvement in Korea, Malaysia, Vietnam, Cambodia, East Timor—even our UN observer operations in Kashmir—can all be traced to the process of decolonisation. This history is one of the reasons why sovereignty remains such an important issue in the region.

'But since the time of the Asian Financial Crisis in 1998, the central driver of regional developments has been China's economic rise, the geo-strategic consequences of that rise, and the reaction of other powers to it.

'We have just marked forty years since the beginning of the reform period in China under Deng Xiaoping. During those years of unprecedented economic growth, China graduated from poverty to become the second largest economy in the world (and the largest by purchasing power parity measurements). Official Australian estimates expect it to be the largest by any measure by the end of the 2020s.

'Deng advised the Chinese people to 'hide their capabilities and bide their time'. He and his successors turned China into a status quo power, working to everyone's benefit, within the existing international system.

'But that time has passed. Not least, it's hard to hide when you're the largest economy in the world. And even Deng only talked about 'biding time'.

'Very quickly China has developed the capacity to contest the American military primacy which has been the central feature of the East Asian strategic landscape since 1945.

'China's own interests have caused it not just to seek to counter American naval power in the waters around it, but to look westwards as well. It has been concerned about its own Muslim population in Xinjiang and the prospect of growing Islamist pressures there.

'It wants to build alternative routes for trade and communications to avoid the maritime choke points of South-East Asia. This has generated its ambitious plans to expand its network of infrastructure links across Eurasia through the Belt and Road Initiative.

'China has made it clear that it wants a place in the international system commensurate with its weight. It is no longer a status quo power.

'But neither is the other major power in the region, the United States.

'Certainly the current US administration considers that the benefits it derives from bearing some of the costs of providing global public goods are diminishing. A number of elements in the international status quo, including the open international trading system, some of the principal multi-lateral organisations such as the WTO (World Trade Organisation), and even elements of its own alliance system, are no longer seen as serving American interests, or at least providing it with an adequate return on its investments.

'The signals being sent by the United States about its future role in the Indo-Pacific are ambiguous. The language used in documents like the National Defense Strategy and statements by Defense Secretary Mattis remain familiar and robust. But some of Washington's actions, like withdrawal from the Trans-Pacific Partnership (TPP), sending mixed messages to allies in Japan and South Korea, and most recently, President Trump's decision to ditch a visit to the region for the APEC and the East Asia Summits, are not calculated to reassure. Indeed, that may be the point.

'Nevertheless, I expect the United States to continue to play a large and important role in the region. Its interests and its own view of its global role (and of itself) will demand it.

'This means, of course, that the potential for great power conflict will continue, particularly over what Professor Brendan Taylor at the ANU called in a recent book, the 'Four Flashpoints' of the Korean Peninsula, Taiwan and the east South China Seas.

'But I expect it to be a different role from the past; more calculated and reciprocal. There was some symbolism in the eulogies last week commemorating the life of Senator John McCain. I don't think we'll see his sort of full-throated faith in US liberal interventionism from American political leaders for some time.

'In fact, no single power will be able to generate the energy needed to shape and sustain a new Indo-Pacific order alone. China cannot do so, nor can the United States. Energy will have to come from a networked grid, not a single power source. That's going to place far more weight on the individual elements in the region, including Australia, to contribute order-generating energy. 'The framework and institutions of the emerging Indo-Pacific region will look nothing like those of the Asia-Pacific, built around the hub and spokes of a strong alliance system and inclusive economic forums like APEC. In order to address the Indo-Pacific's myriad economic, security, environmental and social challenges, we will need a diverse and fluid network of relationships, groups and coalitions.

'Sometimes the Indo-Pacific arrangements will be designed to cooperate, as with the East Asia Summit; sometimes to compete, as with the emerging infrastructure alternatives to the Belt and Road Initiative. Sometimes China will be central to the institution, as in the Asia Infrastructure Investment Bank. Sometimes ASEAN will be, as with the Regional Comprehensive Economic Partnership (RCEP). Sometimes the groupings will engage distrustful neighbours (as in the China-Japan-Korea Trilateral); sometimes they will bring together distant partners. Sometimes the connections binding members will be economic, sometimes normative, sometimes geographic. Only a strategic and economic ecosystem as varied as this will be able to accommodate all our different Indo-Pacifics.

'So what are the consequences for land forces? We all want clear missions in our lives, military forces understandably more than most. But the 21st century Indo-Pacific is unlikely to offer them.

'The Chief of the Army, Lieutenant General Burr, has reminded us recently that the geopolitical context, changing threats, disruptive technologies and domain integration all mean that we must prepare for an accelerating environment in the Indo-Pacific. Fast adaptation will be the key.

'My old friend Ric Smith, a former Secretary of the Defence Department and Ambassador to China and Indonesia, privately describes the government's requirements for the Australian Army as being like those of a Swiss Army knife: a blade quite capable of striking through when necessary but also giving you the capability to open a bottle or remove the stone from a horse's hoof. In other words, a resource of commendable versatility and usefulness.

'In one way or another, land forces will be required to address contingencies ranging from major power war to humanitarian assistance and disaster relief.

'The Indo-Pacific includes some of the most vulnerable areas in the world.

'Climate change has been a sensitive issue in Australian politics recently,

but the 2016 Defence White Paper was unambiguous about its importance to the security of the Indo-Pacific. Climate change, it said, will see 'higher temperatures, increased sea-level rise and will increase the frequency and intensity of extreme weather events'. There would be high expectations on Australia to be able to respond more often to instability and natural disasters as a result.

'Such challenges will not just come for the small island states. Some of the most populous areas of the world in South and South-East Asia are also vulnerable. Natural disasters, population movement, infectious diseases and resource scarcity are other consequences.

'The recent work of the Australian Army in the Philippines has reminded us of the continuing role land forces are likely to play to help counter violent extremism in the region, especially with the return of foreign fighters from the wars of the Middle East.

'One lesson to be drawn from all this is that whatever the trajectory of the geopolitical developments, the importance of the land forces of the region knowing each other, and understanding their ways of working, will be vital. The region has different military traditions but developing knowledge, understanding and experience in working together will be an important piece of stability-building in the Indo-Pacific.

'In Australia's own experience, the success of operations like the Regional Assistance Mission to the Solomon Islands and East Timor depended on long patterns of contact between our forces and often on relationships between individuals in them, cemented by decades of defence diplomacy.

'For many years now I have begun talks to students, young public servants and ADF officers by pointing out that almost all Australian governments since 1945 have at some point proclaimed in a speech or official document that Australia has never faced a more fluid, complex and uncertain environment. You can read that sort of language every five years or so.

'And, of course, the world is always changing. So you can understand that I've been reluctant to come to this conclusion, but I'm finally willing to concede that this time the claim is true.

'The Foreign Policy White Paper got it right when it said that significant forces of change are buffeting the international system 'in ways without

precedent in our modern history'.

'My point isn't that we don't know what will come next—we never do—but that the range of possibilities and consequences seems greater to me than at any point in my professional life.

'So it's vitally important that we work to get this right. All the elements of statecraft are going to have to be brought to the task. The sort of thinking this seminar encourages about the role of land forces and the potential for strengthening partnerships and unlocking collective potential in the Indo-Pacific is a really important contribution to that.'



Figure 42. Soldiers from the Army Reserve's 5th Brigade depart HMAS Canberra for an amphibious lodgment. (Image: DoD)



Figure 43. Chief of Army, Lieutenant General Rick Burr, AO, DSC, MVO (right) hosted speakers including the Minister for Defence, the Hon. Chris Pyne, MP, at the Chief of Army's Land Forces Seminar, 2019. (Image: DoD)

Speaker Biographies

The following speakers' biographies have been provided by the speakers and are listed in alphabetical order.

Lieutenant General Rolando Joselito Delizo Bautista, AFP

Commanding General Philippine Army

Lieutenant General Rolando Joselito Delizo Bautista, AFP, is the current Commanding General of the Philippine Army. His keenness for learning and enthusiastic leadership in various field and garrison units earned him the top position to lead the 85 000-strong Philippine Army.

After graduating from the Philippine Military Academy in 1985, he volunteered to undergo one of the most difficult combat preparatory courses in the Philippine Army – the Scout Ranger Course. Having satisfactorily fulfilled one of the most coveted military specialisation courses, he went on to pursue many others including the Basic Airborne Course, Counter Urban Terrorist Operations Course, Military Intelligence Officer Basic Course, Air to Ground Operation Course, Infantry Officer Basic Course, and Command and General Staff Course. He also had the opportunity to take one of the career courses, the Infantry Officer Advanced Course, in Fort Benning, Georgia, USA. He went on to undertake other military courses and earned a Master's degree in Public Administration from the National College of Business Administration that added premium to his service.

Being a Scout Ranger at heart, the then young lieutenant served with one of the Philippine Army's elite Mountain Battalions, First Scout Ranger Regiment, Special Operations Command as the Delta Company Commander from July 1987 to February 1988. His company came face-toface with communist guerrillas heavily engaging them in various encounters and arduous firefights during their counterinsurgency operations in Luzon.

After his other island assignments, he led the Joint Security Unit, Security and Escort Group, General Headquarters and Headquarters Service Command, Armed Forces of the Philippines, as its Commanding Officer. This time, he assumed responsibility over the group that effectively secured Camp Aguinaldo and he ensured that escort details to various dignitaries and guests of the AFP exude the pride and bearing required of a military usher.

One of his significant assignments was his foreign duty as military liaison officer for a year at the United Nations Transitional Administration in East Timor (UNTAET) in 1999. This integrated operation was instrumental in peacekeeping activities in East Timor during its transition to independence. Despite the language and cultural barriers in this tour of duty, he was able to assist the administration of East Timor to create structures for sustainable governance.

His first key leadership position was accorded to him on February 2005 when he became the Commanding Officer of the 73rd Infantry Battalion, which was initially attached to the 4th Infantry Division, and afterwards, to the 10th Infantry Division. He led the 73IB in supporting the peace and development efforts of both divisions in several communities in Eastern Mindanao. After several years in the 10th ID, he served as its Command Spokesman, aggressively engaging the media partners of 10ID to promote long-term stability and progress in the Agila Division's area of responsibility.

As the Chief of Unified Command Staff, Northern Luzon Command from February 2012 to October 2013, he efficiently and effectively resolved staff issues and concerns and ensured that guidance of the Commander is executed and is consistent with the AFP's strategic thrusts. A year after this Luzon assignment, he was reassigned to Mindanao as Commander of Joint Task Force GENSAN to sustain peace and development efforts in General Santos as part of the AFP's initiatives.

In July 2014, he assumed position of Commander of 104th Infantry 'Sultan' Brigade, 1st Infantry Division. In the brigade's clashes against the Abu Sayyaf Group in Basilan and Sulu, several ASG members were neutralized, including the Moroccan militant Mohammad Khattab.

His field accomplishments took him back to the National Capital region where he became the 31st commander of the Presidential Security Group being tasked with the safety and security of the President and of the First Family. Then again, his passion for operations was heeded when he was designated as the 43rd Commander of the 1st Infantry 'Tabak' Division, nearly a year later. Having been in office for a meager two months, he led the Liberation of Marawi from invading DaeshMaute terrorists thereby also earning him the position of Commander of Task Force Marawi. As the task force overseer, he warranted the synchrony of not only the joint forces of the AFP but of the PNP and Philippine Coast Guard as well.

Lieutenant General Bautista is a well-decorated combat and staff officer who has received various awards and commendations, foremost of which is the Philippine Legion of Honor. He was also awarded a Bronze Cross Medal, Distinguished Service Stars for services rendered in positions of major responsibility, Outstanding Achievement Medal, Gawad sa Kaunlaran Awards, Military Merit Medals, Military

Commendation Medals, Commendation Medal from the US Army, United Nations Service Medal and Ribbon and the Presidential Streamer Award.

Lieutenant General Bautista is married to Ms Shirley Ann P Bautista of Naic, Cavite. They are blessed with three sons and a daughter: Ralph Simon, John Michael, Gabriel Matthew, and Marie Therese.

Professor Genevieve Bell

Distinguished Professor Florence Violet McKenzie Chair, Director of the Autonomy, Agency & Assurance (3A) Institute Australian National University

Professor Bell is the Director of the 3A Institute, Florence Violet McKenzie

Chair, and a Distinguished Professor at the Australian National University (ANU) as well as a Vice President and Senior Fellow at Intel Corporation. Prof Bell is a cultural anthropologist, technologist and futurist best known for her work at the intersection of cultural practice and technology development.

Professor Bell joined the ANU's College of Engineering and Computer Science in February 2017, after having spent the past 18 years in Silicon Valley helping guide Intel's product development by developing the company's social science and design research capabilities.

Professor Bell now heads the newly established Autonomy, Agency and Assurance (3A) Institute, launched in September 2017 by the ANU in collaboration with CSIRO's Data61, in building a new applied science around the management of artificial intelligence, data, technology and their impact on humanity.

Professor Bell is the inaugural appointee to the Florence Violet McKenzie Chair at the ANU, named in honour Australia's first female electrical engineer, which promotes the inclusive use of technology in society. Prof Bell also presented the highly acclaimed ABC Boyer Lectures for 2017, in which she investigated what it means to be human, and Australian, in a digital world.

Professor Bell completed her PhD in cultural anthropology at Stanford University in 1998.

Major General Greg Bilton, AM, CSC

Deputy Chief Joint Operations

Major General Greg Bilton, AM, CSC, was born in Melbourne, Australia. After completing his secondary education at Melbourne High School he entered the Royal Military College – Duntroon in 1983 and graduated to the Royal Regiment of Australian Artillery in 1986. He completed regimental appointments as a lieutenant and captain in 1st and 4th Field Regiments, 8th/12th Medium Regiment and the School of Artillery.

Major General Bilton has held command appointments as Battery Commander 104th Field Battery, Commanding Officer 4th Field Regiment, Commander 7th Brigade and Deputy Commanding General United States Army Pacific. He served in staff appointments in the Directorate of Officer Career Management, the Directorate of Force Structure (Army) and as Director-General Development and Plans (Army). He has also been an instructor at the Australian Command and Staff College.

Major General Bilton deployed on Operation MAZURKA in 1993 on the Multinational Force and Observers (MFO) Headquarters. In 2008 he deployed on Operation SLIPPER as Deputy Chief of Staff for Security Sector Reform on Headquarters Regional Command South, Afghanistan.

Major General Bilton is a graduate of the Long Gunnery Course at the UK School of Artillery, the United States Army Command and General Staff College and the Centre for Defence and Strategic Studies, Weston Creek. He also holds a Bachelor degree in Military Studies and master's degrees in Military Art and Science and in Strategic Studies. He is also a recipient of prestigious academic honors; the Major General Hans Schlup (US) award for excellence in International Relations and the Blamey Award (Australia) for Leadership.

Major General Bilton has been awarded the Force Commander's Commendation for his work on Operation MAZURKA in the Sinai, a Conspicuous Service Cross for his force structure work at Army Headquarters, the Canadian Meritorious Service Medal for his work in Afghanistan, the United States Legion of Merit and the Japanese Defence Cooperation Medal for his work at United States Army Pacific. He was appointed a member of the Order of Australia in 2014 in recognition of his work as Director-General Development and Plans at Army Headquarters and as Commander 7th Brigade.

Major General Bilton is married to Rachael, who is a registered nurse. His eldest son Alex is a second year Officer Cadet at ADFA and his youngest son Nic is completing Year 12.

General Robert B. Brown

Commanding General United States Army Pacific

General Robert B. Brown assumed command of the United States Army's

largest Service Component command, U.S. Army Pacific (USARPAC), April 30, 2016. The command is headquartered at Fort Shafter, Hawai'i with portions of the command forward-deployed and based throughout the Indo-Asia Pacific. USARPAC's 106,000 Active, Reserve Soldiers and Department of the Army Civilians support the nation's strategic objectives and commitment to the region.

Prior to this assumption of command, General Brown most recently served as the Commanding General, U.S. Army Combined Arms Centre at Fort Leavenworth, Kansas, where he led the synchronization of education; leader development; training support & development; and the development and integration of the doctrine the U.S. Army uses to fight and win our Nation's wars.

During various times in his service, General Brown has served with units focused on the Indo-Asia Pacific region, including Commanding General, I Corps and Joint Base Lewis-McChord; Deputy Commanding General of the 25th Infantry Division including a second deployment to Operation Iraqi Freedom; Training & Exercises Director J7, United States Pacific Command (USPACOM); Executive Assistant to the Pacific Command Commander; Plans Officer, United States Army Pacific (USARPAC); and Commander of the 1st Brigade Combat Team (Stryker), 25th Infantry Division including a deployment to Operation Iraqi Freedom.

General Brown was commissioned a Second Lieutenant of Infantry from the United States Military Academy in May 1981, and has served in many leadership positions from platoon to corps, including as Platoon Leader and Company Commander in mechanized infantry units at Fort Carson, Colorado; Battalion Commander of 2-5 Cavalry, a mechanized infantry battalion at Fort Hood, Texas including a deployment to Bosnia-Herzegovina in support of OPERATION JOINT FORGE; and Commanding General of the Manoeuvre Centre of Excellence (Infantry and Armour Forces) and Fort Benning, Georgia.

General Brown has also served in numerous staff positions including: Assistant Professor of Military Science, and Deputy Director, Centre of Enhanced Performance, United States Military Academy; Plans Officer at USARPAC; Operations Officer, Executive Officer and Chief, G-3 Training in the 25th Infantry Division including a deployment in support of OPERATION UPHOLD DEMOCRACY in Haiti; Personnel Assignment Officer in Human Resources Command; Aide-de-Camp/Assistant Executive Officer to the Vice Chief of Staff, Army; Plans Officer in the Department of the Army G-3/5/7; a Program Analyst in the Dominant Manoeuvre Assessment Division, Joint Staff (J8); Executive Assistant to the U.S. Pacific Command Commander and Director, J-7 (Training and Exercises) at USPACOM; and Chief of Staff United States Army Europe (USAREUR) / Deputy Commanding General U.S. Army NATO.

His decorations include the Distinguished Service Medal (two Oak Leaf Clusters), the Defense Superior Service Medal, Legion of Merit, Bronze Star Medal (Oak Leaf Cluster), Defense Meritorious Service Medal, Meritorious Service Medal (Oak Leaf Cluster), Joint Service Commendation Medal, Army Commendation Medal (three Oak Leaf Clusters) and the Army Achievement Medal. He has earned the Combat Infantryman Badge, Expert Infantryman Badge, Parachutist Badge, Air Assault Badge, Joint Chiefs of Staff Identification Badge, and the Army Staff Identification Badge.

General Brown holds a Bachelor of Science from the United States Military Academy, a Master of Education from the University of Virginia, and a Master of Science in National Security and Strategic Studies (Distinguished Graduate) from National Defense University.

Lieutenant General Rick Burr, AO, DSC, MVO

Chief of Army

Lieutenant General Burr assumed command of the Australian Army on 2 July 2018.

He joined the Army in 1982, graduating from the Royal Military College, Duntroon in 1985 to the Infantry Corps. He has seen service in 8th/9th Battalion, the Royal Australian Regiment and the Special Air Service Regiment, which he commanded in 2003-04.

His senior leadership roles have been diverse. He was previously the Deputy Chief of Army, and prior to that had unique service as Deputy Commanding General US Army-Pacific – the first foreign officer to hold such a position. In 2011–12 he was commander of the 1st Division and Deployable Joint Force Headquarters. His operational commands include the theatre-level multinational command of all Special Forces assigned to the International Security Assistance Force in Afghanistan in 2008, and command of the Australian Special Forces Task Group in Afghanistan 2002 and Iraq 2003.

In addition to his command roles, he gained broad experience across Army, Defence and Government in a range of staff, training and representational appointments.

Committed to the development of our future leaders, he has been an instructor at the Royal Military College – Duntroon, and Chief Instructor of the Australian Defence Force Warfare Centre, responsible for the education and training of ADF officers in planning joint operations.

In key staff roles he was the senior operations and plans officer in Special Operations Headquarters in 2001–02, and Military Assistant to the Chief of the Army in 2005. As a Colonel he served as Director of Force Structure and then Director-General Preparedness and Plans in Army Headquarters. In 2007 he was seconded as a senior adviser to the Department of Prime Minister and Cabinet, and was Director-General Military Strategic Commitments in 2009–10. In a key representational appointment, he was the Equerry to Her Majesty Queen Elizabeth II for the Royal Visit to Australia in 2000.

Lieutenant General Burr is a Distinguished Graduate of the United States Marine Corps Command and Staff College and graduate of the USMC School of Advanced Warfighting. He holds a Bachelor of Arts from the University of New South Wales, a Master of Military Studies from the Marine Corps University, and has completed the Harvard Business School Advanced Management Program. His personal awards include Officer of the Order of Australia, Distinguished Service Cross, Member of the Royal Victorian Order and a number of foreign awards for distinguished service. He is Patron of Defence Australian Rules Football.

He and his wife Bronwyn are originally from the Riverland in South Australia.

Glenn Dunbier

Deputy Executive Director, Australian Civil-Military Centre

Glenn Dunbier is the Deputy Executive Director of the Australian Civil-Military Centre. He is seconded to ACMC from New Zealand Police, where he holds the rank of Deputy Commissioner, and was in charge of Resource Management for New Zealand Police.

With over 32 years in policing, including a strong understanding of covert policing, he served in Auckland, Counties Manukau and Waikato Districts in Uniform and Detective roles, and was promoted in both branches through to Senior Sergeant. After taking Area Command in the eastern Waikato as an Inspector, he then was appointed to the District Commander position in the Bay of Plenty Police District, achieving significant reductions in crime across the District by leading a Prevention First strategy.

He served as lead police liaison officer in Turkey, coordinating the tri-lateral Australia – New Zealand – Turkey commemorations for the Anzac centenary of Gallipoli in 2015.

Deputy Commissioner Dunbier joined the Australian Civil-Military Centre in 2017.

Major General Justin 'Jake' Ellwood, DSC

Deputy Chief of Army

Major General Justin ('Jake') Ellwood assumed the appointment of Deputy Chief of Army on 3 May 2018. He graduated from the Royal Military College – Duntroon in 1990 into the Royal Australian Infantry Corps. His early career includes platoon command in the 2nd/4th Battalion and operational service with the Irish Guards in Kosovo as Second in Command of a Warrior Company. Major General Ellwood commanded an infantry company in East Timor and served as the Brigade Major of the 1st Brigade.

Major General Ellwood was appointed Commanding Officer of the 5th Battalion from 2007 to 2008. During his tenure, he commanded a light armoured battlegroup in Iraq and a light infantry battlegroup in East Timor. He has also served as Commander of the Combat Training Centre. Major General Ellwood deployed to Afghanistan as the Chief of Operations within Headquarters Resolute Support from 2014 to 2015. His career also encompasses diverse staff roles as Director Reserves – Army, Liaison Officer to the United States Marine Corps, Chief of Staff Headquarters Forces Command and as Director General Career Management – Army.

Major General Ellwood's personal awards include a Commander British Forces Commendation and a Divisional Commander's Commendation. He was awarded the Distinguished Service Cross for his command and leadership in Iraq and a Commendation for Distinguished Service and the United States Legion of Merit (Degree of Officer) for his service in Afghanistan.

He holds a Bachelor of Arts from Deakin University (with a double major in Strategic Studies and International Relations), a Master of Arts (Strategic Studies) from Deakin University, a Masters of Management (Defence Studies) from the University of Canberra and a Graduate Diploma in Education (Secondary) from Monash University. Major General Ellwood is also a graduate of the Oxford Advanced Management and Leadership Program.

Major General Adam Findlay, AM

Commander of Special Operations

Major General Adam Findlay, AM, graduated from the Royal Military College – Duntroon in 1987. He has served regimentally in 1st Battalion, Royal Australian Regiment and the Special Air Service Regiment. He commanded 3rd Battalion, Royal Australian Regiment (3RAR), (2003–05) and in 7th Combat Brigade (2014–16).

He has deployed on operations to East Timor in 2001–02, twice to Afghanistan in 2009 and 2012–13, and twice to Iraq 1998 and 2016–17. On 29 June 2017, he was promoted to the rank of Major General and assumed the appointment of Special Operations Commander – Australia. In 2014, he was awarded a PhD in Military History from the University of New South Wales and is a fellow of the Harvard Business School.

Major General Findlay was appointed a Member of the Order of Australia in 2006 for his command of 3RAR and awarded a US Legion of Merit for his command of the Special Operations Joint Task Force – Iraq in 2017.

Mr Allan Gyngell, AO, FAIIA

President of the Australian Institute of International Affairs

Allan Gyngell, AO, FAIIA, is National President of the Australian Institute of International Affairs and an Honorary Professor at the Australian National University. His long career in Australian foreign and national security policy included appointments as Director-General of the Office of National Assessments (ONA), as the inaugural Executive Director of the Lowy Institute for International Policy in Sydney, and to senior positions in the Prime Minister's office, the Department of the Prime Minister and Cabinet and the Department of Foreign Affairs and Trade.

He has spoken and written extensively on Australian foreign policy, intelligence issues, Asian regional relations and the development of global and regional institutions.

He is the author of Fear of Abandonment: Australia in the World Since 1942, (La Trobe University Press) and, with Michael Wesley, Making Australian Foreign Policy (Cambridge University Press).

He is an Officer in the Order of Australia and a Fellow of the Australian Institute of International Affairs.

Mr Tom Hamilton

Acting Deputy Secretary, Strategic Policy and Intelligence Group, Department of Defence

Tom Hamilton is acting Deputy Secretary of the Strategic Policy and Intelligence Group in the Department of Defence. He was promoted to the position of First Assistant Secretary Strategic Policy Division in March 2016. The Strategic Policy Division develops policy, military strategy and strategic planning and advice for the Australian Government, senior Defence leaders and other government agencies on the strategic implications of defence and national security matters.

Prior to this position, Mr Hamilton held the position of Assistant Secretary Global Interests, located within the International Policy Division in the Department of Defence. The branch was responsible for providing policy advice on Australia's defence interests including relationships and military operations involving: Iraq; Afghanistan; the Middle East; Europe; Africa; Canada; and international organisations including the United Nations, NATO and the EU.

Mr Hamilton joined the Department of Defence in 2001 and has served in a number of roles in Defence focussing on strategy and capability development, including major capability project analysis and budgeting.

From 2004 to 2009 Mr Hamilton served in the Department of the Prime Minister and Cabinet in the National Security Division, with responsibility for Defence capability policy and domestic security policy including maritime security operations. He was also a senior adviser in the Social Policy Division in the Department of the Prime Minister and Cabinet, responsible for Indigenous policy and employment services policy.

From 2009 to 2013 Mr Hamilton was seconded to the Office of the Minister for Defence as a policy adviser and subsequently served as Deputy Chief of Staff to the Minister for Defence.

Mr Hamilton has a Bachelor of Arts (Honours) from Adelaide University.

Mr Duncan Lewis, AO, DSC, CSC

Director-General of Security, Australian Security Intelligence Organisation (ASIO)

The Director-General of Security leads ASIO and is responsible to the Minister for Home Affairs.

Duncan Lewis joined the Australian Army after schooling in Western Australia, and graduated from the Royal Military College – Duntroon in 1975. During his 33-year career in the military, Duncan commanded at all levels, including command of the Special Air Service Regiment. He served with the United Nations during the 1982 Lebanon War and on operations in East Timor. His last military appointment was as a Major General, Special Operations Commander Australia, where his forces were engaged in operations in Iraq and Afghanistan.

In 2005, Duncan joined the Australian Public Service. His initial appointment

was as First Assistant Secretary of the National Security Division within the Department of the Prime Minister and Cabinet. Later that year, he was promoted to Deputy Secretary, and in 2008 he was appointed as an Associate Secretary, where he led the National Security and International Policy Group and contributed to the department's broader leadership team as a member of its executive.

From December 2008, Duncan served as Australia's inaugural National Security Adviser. Duncan was the Prime Minister's principal source of advice on all national security matters. He had responsibility for the strategic leadership of the national security community, as well as the coordination of national security policy development and crisis response. During this period, he chaired the National Intelligence Coordination Committee.

In 2011, building on almost four decades of experience in defence and national security communities, Duncan was appointed Secretary of the Department of Defence.

Late in 2012, Duncan was appointed Ambassador to Belgium, Luxembourg, the European Union and NATO. On 15 September 2014, Duncan was appointed Director-General of Security and head of the Australian Security Intelligence Organisation.

Duncan was awarded Officer of the Order of Australia in 2005 for his service as the inaugural Special Operations Commander Australia. He holds a Bachelor of Arts degree from the University of New South Wales and a Graduate Diploma in Defence Studies and Management from Deakin University. He is a graduate of the British Army Staff College and the United States Army War College. He is fluent in Indonesian.

The Hon Christopher Pyne MP

Minister for Defence

Christopher Pyne was sworn in as the Minister for Defence on 28 August 2018. Prior to his appointment, Christopher served as Minister for Defence Industry where he was responsible for delivering the \$200 billion worth of investment in Australia's defence capabilities outlined in the Defence White Paper and having the nation grasp this once in a generation opportunity to

maximise job creation, business development, and economic growth.

Christopher has been Leader of the House since November 2013 was elected to the House of Representatives for the seat of Sturt in 1993 at the age of 25.

In his time in Parliament he has also served as Minister for Industry, Innovation and Science, developing and delivering the National Innovation and Science Agenda, a transformative economic plan to encourage Australians to embrace risk and commercialise their ideas.

Christopher also spent two years as Minister for Education and Training, and in this role, amongst other things, he reformed the National Curriculum, introduced compulsory literacy and numeracy testing for Australian teaching graduates and expanded phonics teaching in remote schools in northern Australia.

In addition to these Cabinet positions he has also served as Minister for Ageing and Parliamentary Secretary for Health in the Howard Government. As Parliamentary Secretary for Health he founded "headspace: the Youth Mental Health Initiative" in 2006.

Christopher is the author of the Best Selling book, "A Letter to my Children", published by Melbourne University Press in 2015.

Before entering Parliament, Christopher practised as a solicitor.

Christopher is a member of many community, social and sporting groups in his electorate, and is an Adelaide Crows Ambassador and supporter of the Norwood Redlegs Football Club!

Christopher is married to Carolyn and is the proud father of Eleanor, Barnaby, Felix and Aurelia.

Mr Richard Sadleir

First Assistant Secretary, International Security Division, Department of Foreign Affairs and Trade (DFAT)

Mr Sadleir commenced as the First Assistant Secretary, International Security Division at the Department of Foreign Affairs and Trade (DFAT) in

April 2016.

His previous positions include service as First Assistant Secretary, National Security Division at the Department of the Prime Minister and Cabinet (PM&C), and various Senior Executive Service roles in PM&C, the Department of Foreign Affairs and Trade, the Attorney-General's Department and the Department of Defence.

Overseas, Mr Sadleir has served in the Australian High Commission in Wellington (1995-1996) and the Australian Embassy in Washington DC (1998-2001).

Educated at the University of New South Wales, Mr Sadleir holds degrees in law and political science.

Lieutenant General Mahesh Senanyake, RWP, RSP, VSV, USP, USACGSC

Commander of the Sri Lanka Army

Lieutenant General N U M M W Senanayake, RWP, RSP, USP, psc was appointed as the 22nd Commander of the Sri Lanka Army, effective from 27 June 2017 by His Excellency the President Maithripala Sirisena as the Commander-in-Chief of the Armed Forces after he was elevated to the rank of Lieutenant General with effect from the same date.

Lieutenant General N U M M W Senanayake, RWP, RSP, USP, psc, more popularly known as Mahesh Senanayake is a proud product of the prestigious Ananda College, Colombo, and was enlisted to the Sri Lanka Army on 16 October 1981 under the Officer Cadet Intake 16. Upon successful completion of military training, he was commissioned as a Second Lieutenant, and passed out as the first in order of merits and awarded with the Sword of Honor. He opted to join the Corps of Engineers and was subsequently posted to the 1st Plant Engineer Regiment on 23 June 1983.

During his illustrious military career, he held many Command, Staff and Instructional appointments. The Senior Officer has held the appointment of Troop Commander/Squadron Commander in the Sri Lanka Army Plant Engineer Regiment and many other appointments, including extra regimental employment as an Officer Instructor at the Sri Lanka Military Academy, Diyatalawa. Subsequently, the Senior Officer volunteered for an inter-unit transfer to the Regiment of Special Forces in 1989. Lieutenant General N U M M W Senanayake has actively contributed to all major military operations conducted in the North and East of Sri Lanka. In the Special Forces Regiment, he has served the appointment of Squadron Commander of the 1st Regiment Special Forces and commanded the 3rd Regiment Special Forces.

The Senior Officer has held the appointments of Regimental Center Commandant of the Special Forces Regiment, Commander of the 211 Infantry Brigade – Vavuniya, Commander of the Special Forces Brigade and the General Officer Commanding of the 52 Division in Varani, Jaffna. In addition, he has also performed staff appointment duties, including the office of the Colonel General Staff at 52 Division and the Brigadier General Staff in the Security Force Headquarters – Jaffna during the most critical period of the war. Lieutenant General N U M M W Senanayake has also served the appointment of Directing Staff at the Army Command and Staff College at Sapugaskanda.

Further, the Senior Officer held the appointment of Director Plans during the Humanitarian Operations after the year 2006. Subsequently in 2015, he took office as the Military Secretary at the Army Headquarters.

In 2016, he was appointed the Commander Security Forces – Jaffna during which he made an outstanding contribution towards resettlement of Internally Displaced Persons (IDPs) in the peninsula. His unparalleled service towards the reconciliation process was well recognised by the community and government authorities. In March 2017, he was appointed as the Chief of Staff of the Sri Lanka Army.

Lieutenant General N U M M W Senanayake is a graduate of the prestigious United States Army Command and General Staff College. Further, he holds a Bachelor of Science Degree in Civil Engineering from Jawaharlal Nehru University, India.

In recognition of his gallantry and bravery in the face of the enemy during operations, Lieutenant General N U M M W Senanayake was awarded the Rana Wickrama Padakkama (RWP), Rana Soora Padakkama (RSP) several

times and the Uththama Seva Padakkma (USP) for his unblemished services in the Army.

Lieutenant General N U M M W Senanayake, RWP, RSP, USP, psc is also serving as the Colonel of the Regiment of Special Forces at present. He is married and blessed with two daughters and a son.

Mr Michael Shoebridge

Direct of Defence and Strategy, Australian Strategic Policy Institute

Michael joined ASPI in February 2018 as the Director of the Defence & Strategy program. Michael has worked in policy, intelligence and project delivery in Defence.

He headed the Defence, Intelligence and Research Coordination Division in the Prime Minister's department. Michael also started a new Defence Capability Assessment Branch in the Department of Finance, which provided the Finance department's assessment of all major Defence capability investment proposals to inform Cabinet decision making.

Michael led the Defence team that wrote the 2013 Defence White Paper when he was head of Defence's Strategic Policy Division. He has worked as the Deputy Director of Australia's Defence Intelligence Organisation (one of two assessment agencies in Australia's intelligence community and partner to the US DIA) and as one of the four deputies in the Australian Signals Directorate (partner to the US NSA).

He was the senior Defence civilian in the Australian Embassy in Washington during the time of the Iraq surge and the return of the Australian SAS to Afghanistan. He has worked in two Commonwealth Ministers' offices.

His role before joining ASPI was as the head of Defence's Contestability function, providing critical but constructive analysis of the projects and programs in the Government's \$200 billion integrated investment program for Defence, which is the investment element of the 2016 Defence White Paper.

Ms Katja Theodorakis

Programme Manager for Foreign/Security Policy and Counter-Terrorism

Katja Theodorakis is Programme Manager for Foreign/Security Policy and CounterTerrorism at the Konrad-Adenauer Foundation's Regional Programme Australia and the Pacific in Canberra. She is also a PhD researcher at the Centre for Arab and Islamic Studies at the Australian National University (ANU), where she focuses on Jihadi ideology, radicalization and foreign fighters. In particular, her research is concerned with anti-Western ideology and its strategic use in propaganda. Katja has previously lived in the Middle East, where she was engaged in educational projects and NGO work in Syria during the early years of Bashar al-Assad's presidency.

She publishes and presents at seminars and conferences on the topics of national security/counter-terrorism, jihadism and Middle East politics, and has appeared on national TV and radio for commentary. At ANU, Katja has also been involved in teaching courses on Middle East politics and Islam, the West and International Terrorism.

She holds a First-Class Honours degree in International Development from the Australian National University, was recipient of an Australian Government Research Training PhD Scholarship, and has been awarded the 2016 ANU Media and Outreach Award as Emerging Media Talent.

Major General Kathryn Toohey, AM, CSC

Head of Land Capability

Major General Kathryn Toohey joined the Australian Army in 1987, graduating from the Royal Military College – Duntroon in 1990. Major General Toohey was assigned to the Royal Australian Signals Corps and commenced her military career as a troop commander with 2nd Signals Regiment.

Major General Toohey went on to serve in 7th Signals Regiment (Electronic Warfare), 1st Brigade Headquarters and in the Strategic Operations Division of Headquarters Northern Command. Her other appointments have included

a posting as an instructor at the Royal Military College – Duntroon and as the Aide-de-Camp to the Governor-General of Australia. In addition, Major General Toohey deployed for a 13-month period as a troop commander in the Force Communications Unit as part of the United Nations Transitional Authority – Cambodia.

Since 2001, Major General Toohey has served in a range of staff appointments in the Capability Development Group (CDG) and Capability Acquisition and Sustainment Group (CASG) and Force Development Group. In 2009, she served as the European Liaison Officer for CDG, representing the ADF at various multinational, NATO and European Union fora.

In 2012, Major General Toohey was assigned directorship of the Capability and Technology Management College (CTMC), an advanced education college providing mid-ranking officers and public servants Masters-level education and training and preparing them for capability lifecycle leadership within CDG and CASG. This role was expanded to include administrative command of Australia's Federation Guard; command of the Defence Force Chaplains' College and responsibility for the Defence-sponsored postgraduate students at UNSW Canberra.

In 2013, Major General Toohey was appointed Director-General Integrated Capability Development (CDG), responsible for several and varied joint ADF projects, later serving as the Acting Head of Capability Systems within the group. In 2016, Major General Toohey took leave from the Army to assume the statutory appointment of Deputy Electoral Commissioner in the Australian Electoral Commission. Upon her return to the Army in 2017, Major General Toohey was appointed the Head of Army's Land Capability division.

Major General Toohey holds an Executive Masters in Business Management, a Masters of Management in Defence Studies; a Graduate Diploma in Information Technology and a Bachelor of Electrical Engineering (Hons). She is also a graduate of the Australian Joint Command and Staff College. In 2017, she was conferred with the Medal of the Order of Australia for her service to the Australian Defence Force in the fields of capability development and education.

Major General Toohey is married with three school-aged children.

Brigadier General Gilbert Toropo, DMS, CBE

Commander Papua New Guinea Defence Force

Brigadier General Gilbert Toropo was born on 4th April 1962. He successfully completed his Officer Training course at the PNG Defence Academy and was commissioned as an officer with a rank of Second Lieutenant on the 20th of June 1987. After graduation, he was posted to the Second Royal Pacific Islands Regiment (2RPIR) for regimental duties.

Brigadier General Toropo was promoted to the rank of Captain in 1993 and was posted to the Royal Military College – Duntroon in Australia as an instructor from 1993 to 1994. In 1996, he was promoted to the rank of Major, and was posted as the Officer Commanding Special Force Unit.

In 1997, he was posted to Officer Cadet Training Wing at the PNG Defence Academy as a senior instructor. The following year, he was posted to Headquarters PNGDF as Staff Officer Grade 2, Directorate of Land Operations, under Operations Branch. In 2001, he was selected to attend the Command and Staff College in Canberra, Australia.

On completion of Command and Staff College, Brigadier General Toropo was promoted to Lieutenant Colonel and posted as Research Officer and Military Assistant to the Commander PNGDF. In 2004, he undertook a year-long study posting to the Centre for Security and Strategic Studies and Diplomacy in Paris, France.

In 2005 to 2006 he served as the Commanding Officer of First Royal Pacific Islands Regiment (1RPIR) at Taurama, Port Moresby. After completing his command he was selected in 2007 to attend the Centre for Defence and Strategic Studies in Canberra, Australia.

On return to Papua New Guinea, he was posted as Director Other Ranks Management from 2008 to 2012. Brigadier General Toropo was then promoted to the Rank of Colonel and appointed Chief of Joint Operations and was responsible for all security operations within the country.

On January 09, 2014, the National Executive Council appointed Brigadier General Gilbert Toropo as the Commander of PNG Defence Force. After serving his first term as the Chief of Defence Force, Brigadier General Toropo was again reappointed on June 14, 2018 for a second term. He is a graduate of the Australian Defence Force Command and Staff College and the Center for Defence Strategic Studies (CDSS) in Canberra, Australia. He also attended other short courses and seminars on military art, management and strategic studies in United States, Australia, New Zealand and France. He is a graduate of US Ranger School.

Brigadier General Gilbert Toropo is a recipient of the Distinguished Military Service Medal (DMS) and the Commander of the British Empire (CBE).

Brigadier General Gilbert Toropo is married to Mary and they have four children: Thompson and Ashley who are at university, and Cameron and Hamilton at high school. Brigadier Toropo's main recreational interest is golf.

Professor You Ji

Head, Department of Government and Public Administration University of Macau

Dr. You is Professor of International Relations in the Department of Government and Public Administration at the University of Macau. He holds a Ph.D. and M.A. from the Australian National University and a B.A. from Peking University. Previously, he was a Reader in the School of Social Sciences at the University of New South Wales. His research focuses on China's political and economic reforms, elite politics, military modernisation, and foreign policy.

Dr You is the author of three books, including China's Enterprise Reform (Routledge, 2013) and The Armed Forces of China (I.B. Tauris, 1999). He has also published numerous book chapters and articles in journals including Problems of Communism, International Journal of Korean Unification Studies, The China Journal, Pacific Review, Comparative Strategy, Asia Policy, Japanese Studies, Contemporary Southeast Asia, the Naval War College Review, Strategic Analysis, Journal of Contemporary China, and Contemporary Security Policy.

He sits on the editorial board of eight academic journals including The China Journal, Issues and Studies, and Journal of Contemporary China.

Accelerated Warfare:

Call for Submissions

The Australian Army Journal is seeking submissions on the topic of Accelerated Warfare.

Accelerated Warfare is a philosophical framework for Army's transformation. It informs how we think, equip, train, educate, organise and prepare for war. As a call to action, Accelerated Warfare will make Army future ready by accelerating transformation as an enduring organisational posture.

Army's operating environment is rapidly changing. We need to anticipate and actively prepare for our future roles and not merely react to a changing world. The Chief of Army needs our people to become actively engaged in the 'contest of ideas' around the nature of future conflict and Army's role in it.

Accelerated Warfare acts as a concept for an Army focused on:

- gaining access across our region
- maintaining a persistent presence as a declaration of commitment
 and intent
- generating influence and shaping effects during periods of competition, and
- being able to generate relative superiority and overmatch when in conflict.

Army must preserve its core combat skills. But it must also prepare for future war by becoming more capable in other areas. This is not an 'either/ or' proposition, for Army needs both. For this to be realised, Army calls on all personnel to be part of this discussion.

To further this discussion, the Australian Army Journal with publish on the theme of Accelerated Warfare in an upcoming edition. For your submission to be considered, please submit by no later than 1 August 2019.

Please direct all submissions and questions to the Managing Editor at aarc@defence.gov.au

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