

UWA DEFENCE AND SECURITY INSTITUTE AND PROGRAM







The *maali* and Rose Window of Winthrop Hall entwine as a symbol of connection between UWA and the Indigenous communities.

Artist: Dr Richard Barry Walley OAM

The maali (black swan) stands proudly on the UWA coat of arms. It has been represented by Dr Richard Walley in the swan story.

The story of the swan and the river have been shared by Dr Richard Barry Walley OAM. Dr Walley is a Nyoongar man and one of Australia's leading Aboriginal performers, musicians, writers, and community leaders.

We are privileged to draw on his wisdom, and the wisdom of our place in the world.

The University of Western Australia acknowledges the custodians and traditional owners of land on which any of its campuses are located.

At the main campus, Crawley, the University acknowledges the Whadjuk Noongar people as the traditional owners of the land on which it is situated. The Whadjuk Noongar remain the spiritual and cultural custodians of their land, and continue to practise their value, languages, beliefs and knowledge.

UWA Defence and Security Institute The University of Western Australia

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Contents

INTRODUCTION	4
OUR HISTORY	5
MESSAGE FROM OUR CHAIR	6
MESSAGE FROM OUR DIRECTOR	7
OUR MISSION	8
ACTIVITY HIGHLIGHTS	9
ADVISORY BOARD	10
EXECUTIVE COMMITTEE	12
INSTITUTE STAFF	14
INSTITUTE FELLOWS	15
EDUCATION AND OUTREACH:	
UWA DEFENCE AND SECURITY INTERNSHIP PROGRAM	16
THE UNIVERSITY OF WESTERN AUSTRALIA DEFENCE AND SECURITY RESEARCH CAPABILITIES	19
PUBLICATIONS: THE BLACK SWAN STRATEGY PAPER	26
UWA DEFENCE AND SECURITY POLICY BRIEFS	29
UWA DEFENCE INTERACTION GROUP	30
UWA DEFENCE AND SECURITY PROGRAM ACTIVITY:	
PUBLIC EVENTS AND STAKEHOLDER ENGAGEMENT	34
ROUNDTABLE DISCUSSION SERIES	36
DIALOGUE SERIES	39
OTHER INSTITUTIONAL ACTIVITIES	40
U.S. EMBASSY GRANTS:	
NEXT GENERATION U.S AUSTRALIA ALLIANCE REGIONAL WORKSHOP	44
U.S. – AUSTRALIA ALLIANCE NETWORK	45
BRIEFINGS AND MEETINGS	46
DEFENCE INDUSTRY SECURITY PROGRAM (DISP) COMPLIANCE	46
ACKNOWLEDGMENTS	47



Introduction

The UWA Defence and Security Institute (UWA DSI) is an initiative by The University of Western Australia (UWA), a global top 100 institution with a rich tradition of academic excellence and innovation.

UWA DSI unifies and focusses UWA's expertise and builds partnerships in defence and security research, policy, engagement, and education.

Defence and security provides the foundation of our nation's sovereignty. In an era of rapidly evolving geopolitics this critical area of national policy sits at the forefront of government and public debates. UWA DSI plays a central role in helping to develop Australia's sovereign defence capabilities in WA by working collaboratively with local, state and federal governments, industry and business, research institutions and the community to help generate solutions towards a peaceful, prosperous and secure Australia and Indo-Pacific region.

This report celebrates the work of UWA DSI since inception in 2021, and particularly the UWA Defence and Security Program, a central pillar of UWA DSI activities.

Our History

The UWA Defence and Security Program (DSP), funded through the Commonwealth of Australia represented by the Department of Defence: Strategic Policy Grants Program, Department of Defence, commenced in June 2020 and was completed in November 2023.

The development of this program in Western Australia was used to leverage the untapped local expertise and perspectives on issues such as Defence industry, maritime security, and the Indian Ocean.

During its 3-year activity, the DSP has collaborated with state government, industry, academia, Defence and key regional partners and allies to deliver academic publications, public commentary and policy-orientated defence strategy research, as well as a suite of private and public events and programs, with new priority interests, partners and areas of research added as the program evolved. The program has brought public attention and nuanced understanding to key issues and research, exceeding its initial deliverables and outcomes, and these activities will be highlighted throughout this report.

In parallel with the commencement of the DSP, UWA conceived and stood up the Defence and Security Institute, which was officially launched in March 2021 (with the University Defence and Security Committee providing oversight of the DSP prior to this). Building on the activities under the DSP, UWA DSI has a broad mandate as a key partner in advancing Australia's defence and security agenda and capability needs through research, education and policy contributions. This has led to a much enhanced breadth and nature of engagement and activities, alongside those of the DSP.





Message from OUR CHAIR

Thanks to the vision and dedication of Professor Peter Dean, Professor the Honourable Stephen Smith, and the Honourable Kim Beazley AC, the University of Western Australia has founded and established an Institute dedicated to specialising and focusing on Western Australia's significant contribution to the national and international defence and security sectors, ensuring strategic expertise and innovation in safeguarding our nation's interests and fostering global stability.

As a former Defence Minister and the current Chair of the University's Defence and Security Institute, I congratulate and thank the Vice Chancellor of the University Professor Amit Chakma and the Deputy Vice Chancellor (Research) Professor Anna Nowak for their continuing support and commitment to the Institute.

As a measure of the regard for our Institute, we have enjoyed the support and confidence of the Consular heads of each of the United States, the United Kingdom and Japan, with continuing and regular events and interaction at UWA with Defence focused scholars and Ambassadors from each.

Further to this we have enjoyed the support and patronage of our Commonwealth Department of Defence, Defence West and the state minister for Defence Industry, the Honourable Paul Papalia, together with the State Department of Jobs, Industry, Tourism, Science and Innovation's senior Departmental Officers.

The culmination of this regard is in the calibre of the members of our advisory board (as set out herein) leading to our 2023 AUKUS (Pillar I) Masterclass featuring many distinguished speakers including the UK's Deputy High Commissioner and U.S. Pacific Commander of Submarines, attending and participating at UWA in Perth last August before more than 150 participants.

I take this opportunity to thank our Director, Professor Gia Parish for her dynamic leadership and engagement of our own Defence Department and State Government together with the impressive list of past and future guest speakers and facilitators she continues to engage. I must also pay tribute to our Business Manager Fiona Considine who provides the outstanding professional skill in the management of the Program and Institute in its entirety and continues to deliver our mission with continued success. She has executed all the events and stakeholder engagement over the last 3 years which is highlighted throughout this report. Finally, I acknowledge Dr. Troy Lee-Brown for the insightful work and astute analysis he does in terms of research for our various commentaries and particularly with respect to our primary output, our Black Swan Strategy Papers.

In closing I must acknowledge and thank the Senior Defence Officer in Western Australia, namely Commodore Ivan Ingham AM and the former Commanding Officer of 13 Brigade at Irwin Barracks, Brigadier General Brett Chaloner CSC whose ongoing support and advice has been a foundation stone upon which we have built our successful and close relationship with Defence here in Western Australia.

As we review and celebrate our relatively brief history, I anticipate with much interest and expectation our future Defence engagements and events in these changing and uncertain times in the Indo-Pacific.

The Honourable David Johnson Chair

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MESSAGE FROM OUR **DIRECTOR**

The contents of this report represent a snapshot of the amazing first phase of the UWA Defence and Security Institute. With the inaugural Defence and Security Program drawing to an end, we thought it was a perfect opportunity to take stock and share the achievements of these past few years with our past, present and future stakeholders and friends.

As you will see from the extensive array of activities, output and achievements, it has been a very full few years. It's hard to believe we are less than five years on from when a handful of us, steered ably by The Honourable Stephen Smith who became our inaugural Chair, put in place the groundwork for the award of the Defence and Security Program Strategic Grant by the Commonwealth, and formation of the UWA Defence and Security Institute.

It has been my pleasure to work alongside Professor Stephen Smith, our current Chair, the Honourable David Johnston, our inaugural Director Professor Peter Dean, and all the many Advisory Board members, Executive Committee members, and Institute Fellows along the way as we (in various measures) led, championed and enabled our colleagues and partners in delivering all of the incredible activities, publications, and partnerships that lie within. It is the partnerships that matter the most, and I look forward to the next phase of the UWA Defence and Security Institute as we build on everything we have achieved together, looking to do more together in the years to come.

Professor Gia Parish Director



Our Mission

Defence and security provide the foundation of our nation's sovereignty. In an era of rapidly evolving geopolitics this critical area of national policy sits at the forefront of government and public debates.

Once personified by the idea of geographical remoteness and the 'tyranny of distance' from the world's economic and strategic centres of gravity, Australia is now empowered by proximity to matters of global security. We sit at the crossroads of the vast Indo-Pacific strategic system that forms the centre of strategic and economic competition in the modern age. Australia's new geostrategic position brings both enormous opportunities as well as new risks to manage. This environment creates particular opportunities for Western Australia, as geostrategic issues require closer attention be paid to Australia's western and northern approaches.

UWA DSI is committed to serving as a hub for the university and the WA community, drawing together UWA researchers and educators with practitioners and partners across the State and the nation. With a focus on the dynamic Indo-Pacific region we leverage local perspectives and expertise on issues such as disruptive and converging technologies; defence industry; defence capability development and maritime security; Australia's international and defence relations and regional security.

Drawing on WA's distinct geographical advantage as Australia's Indian Ocean capital city, we support the production of vital perspectives that contribute to an effective defence and security ecosystem.

UWA DSI aims to:

- Be a leader in WA defence partnerships to benefit the state, the nation and the region.
- Develop UWA's external relationships and collaborations with the Defence sector and stakeholders across WA, Australia and the region.
- Define and advocate UWA research strengths and opportunities, to increase visibility and impact of research to address Western Australian, Australian and regional defence and security challenges.
- Increase UWA's impact on national defence policy, particularly in Indo-Pacific defence and security policy and issues and in relation to key diplomatic partnerships such as AUKUS, the Quad and the RAA.
- Facilitate and advocate defence and security educational and workforce training offerings, including industry experience opportunities for students, Defence-relevant content and offerings at degree level (including higher degrees by research) and professional development short courses and microcredentials.

<u>Activity</u> HIGHLIGHTS

CONVENED OVER



Published



Black Swan Strategy Papers

Event sponsors

- Honeywell
- Bechtel

Events convened

- Washington, D.C
- Hawaii
- Jakarta
- Vietnam
- Nationally throughout Australia



Collective audience of approx. **3200**

Subscribers in database 824

5 UWA DSI Policy Briefs

Delivered 2 U.S. Embassy Grants

with scholars representing Australia in Washington D.C. for the Alliance Network Program and Hawaii for the Regional Workshop

Hosted just over **300** expert speakers

Twitter Followers

LinkedIn Followers

789

36,252

Total website views in 2023 2021: 4,731 | 2022: 16,538

Mentored Interns through the UWA DSI internship Program 2023: Launched the inaugural UWA Defence and Security Masterclass Series: AUKUS Pillar I

Engagement **8.5%**

Engagement **10,692** Impressions 103.5k

> Impressions **13,417**

Advisory Board



The Honourable David Johnston

Chair UWA Defence and Security Institute University Defence and Security Committee 2020



Professor Gia Parish

Deputy Chair, Director UWA Defence and Security Institute University Defence and Security Committee 2020



The Honourable Kim Beazley AC

Former 33rd Governor of Western Australia University Defence and Security Committee 2020



Professor Amit Chakma

Vice-Chancellor, The University of Western Australia University Defence and Security Committee 2020



Linda Dawson Deputy Director General,

Deputy Director General, Industry, Science and Innovation at the Department of Jobs, Tourism, Science and Innovation



Major General (Ret'd) Professor Adam Findlay AO

Professor of Practice and Director of the Griffith University Defence Network (GDNet)



Professor Gordon Flake

Founding Chief Executive Officer, Perth USAsia Centre University Defence and Security Committee 2020



Emily Fogarty

Executive Officer Office of the Deputy Vice-Chancellor (Research) The University of Western Australia



Rear Admiral Wendy Malcolm AM, CSM RAN

Head Patrol Boats & Specialist Ships at Naval Shipbuilding and Sustainment Group



Dr. Todd Mansell

Senior Executive, Australian Department of Defence



David Norman Senior Policy Advisor to the Vice-Chancellor The University of Western Australia Advisory Board and Executive Committee Secretary University Defence and Security Committee in 2020



Chris Rodwell

Chief Executive, Chamber of Commerce and Industry of WA



Nicole Roocke

Chief Executive Officer and Chief Financial Officer Minerals Research Institute of Western Australia (MRIWA)



Rear Admiral Philip Spedding, DSC AM, RAN (Ret'd)

Defence Advocate Western Australian Government



Samantha Tough Pro Vice-Chancellor Industry Engagement The University of Western Australia



Brigadier Amanda Williamson Commander of the 13th Brigade Australian Army

<u>Executive</u> COMMITTEE



The Honourable David Johnston

Chair UWA Defence and Security Institute University Defence and Security Committee 2020



Professor Gia Parish

Deputy Chair, Director UWA Defence and Security Institute University Defence and Security Committee 2020



Dr Caroline Chapman Research Development Advisor Office of Research The University of Western Australia



Paul Collings

Associate Director, Industry Engagement The University of Western Australia



Fiona Considine

Business Manager UWA Defence and Security Institute



Associate Professor Tim Inglis

Health Department of Western Australia Translation Fellow, School of Medicine, The University of Western Australia and Medical Microbiologist, PathWest Laboratory Medicine, WA. University Defence and Security Committee in 2020



Dr Troy Lee-Brown Research Fellow

UWA Defence and Security Institute



Professor Shayne Loft

Australian Research Council (ARC) Future Research Fellow (2021-2024) Director of the Human Factors and Applied Cognition Laboratory University Defence and Security Committee in 2020



Fatima Moosa

International Compliance Officer, Office of Research The University of Western Australia

13



David Norman

Senior Policy Advisor to the Vice-Chancellor The University of Western Australia Advisory Board and Executive Committee Secretary University Defence and Security Committee in 2020



Professor Peter Robertson

Dean, Business School, The University of Western Australia

Past Members



The Honourable Stephen Smith

Inaugural Chair 2021 - 2022 Chair, University Defence and Security Committee



Professor Peter Dean

Inaugural Director 2021 – 2022 University Defence and Security Committee 2020



Anthony Fortina Advisory Board 2021 - 2022 Former Deputy Director Office of Research Enterprise Research The University of Western Australia 2021 - 2022



Pru Steinerts

Foundational Deputy Chair 2021 Former Manager, Innovation and Industry Engagement, The University of Western Australia Deputy Chair 2020, University Defence and Security Committee 2020



Hayley Channer Advisory Board 2021 - 2022 Former Senior Policy Fellow Perth USAsia Centre



Laurence Coleman

Advisory Board and Executive Committee Secretary 2021-2022 Former Senior Policy Advisor to the Vice-Chancellor The University of Western Australia



Lee Patterson

Executive Committee 2021 - 2022 Lead, Cyber Security and Technology Risk Management team The University of Western Australia

Institute **STAFF**



Fiona Considine

Business Manager

Fiona joined as an inaugural member of the UWA Defence and Security Program in November 2020. As Business Manager, she is responsible for the high-level planning and operational leadership for all the Institute's programs, stakeholder engagement and outreach activities. She is also creative director of the UWA DSI Black Swan Strategy Papers. Prior to this role she was the Events Manager for the Perth USAsia Centre from 2014-2020 and was responsible for the managing, planning and execution of all the Centre's events.



Dr Troy Lee-Brown

Research Fellow

Troy Lee-Brown is a researcher in regional security, maritime security and international relations with a focus on defence and security issues in the Indian Ocean Region and broader Indo-Pacific. He is currently a Research Fellow at the Defence and Security Institute at the University of Western Australia. Troy is the Editor of the DSI Black Swan Strategy Paper and also the Project Manager for the Blue Security Program a DFAT funded project which focuses on issues of maritime security in the Indo-Pacific. His research interests include the Indian Ocean, Indo-Pacific, maritime security, South Asia, Southeast Asia, East Asia, regionalism, defence, littoral strategies and climate change.



Marcus Schultz Administration Officer 2021-2022



Judith Ann Kumar Administration Officer 2023





Institute FELLOWS

UWA DSI Honorary Fellowships are awarded as a mark of esteem, honour, or recognition for an individual's outstanding work, support, or dedication to the Institute.



Professor Peter Dean Honourary Professor

Director, Foreign Policy and Defence, The United States Studies Centre, University of Sydney



Jim Serpless Honourary Fellow

Honourary Fellow Australian Army officer, Royal Australian Infantry Corps and Special Operations



Dr Shannon Ford

Honourary Fellow Coordinator of the International Relations Major, Curtin University





Natalie Sambhi Honourary Fellow Founder and Executive Director, Verve Research

<u>Matt Moran</u> Honourary Fellow Head of Strategy and Government Relations, Luerssen Australia

Education and **OUTREACH**

UWA DSI INTERNSHIP PROGRAM

UWA DSI offers Research Analyst and Communication/Events internships to UWA students with a passion in Defence, Communications, and International Relations. The primary purpose of the internships opportunity is to provide participants with practical exposure in various fields.

Our research analyst internship offers individuals the chance to gain hands-on experience in a research environment, develop skills, and contribute to the advancement of knowledge in a specific field. These experiences are particularly valuable for students, as they bridge the gap between theoretical learning and practical application. UWA DSI also offers the interns the chance to write a policy paper under the guidance and supervision of our Research Fellow.

A communication/events internship is an educational opportunity hands-on learning experience that allows individuals to gain practical experience in the fields of communication, public relations, marketing, or event planning. These internships help participants develop skills, build a network, and gain a better understanding of their chosen field, making them better prepared for careers in these industries.

SHORT INTERNSHIP/WORK EXPERIENCE

2022



Juliette Libert

Master's Degree in Health Law Amiens, France *Graduated 2023*



2023

Abbey Watkins

Bachelor of Arts in Political Science and International Relations & Korean Studies *Graduated 2023*

COMMUNICATIONS AND EVENTS INTERNSHIP

Semester 2, 2023



Tina Ferraro

Bachelor of Commerce, Human Resource Management and Marketing *Graduated 2023*

RESEARCH ANALYST INTERNSHIP

Semester 2, 2021



Faiza Samatar

Commerce degree with a major in Economics *Graduated 2022*



Max Jetzinger

Master of International Relations *Graduated 2022*



Marcus Schultz Master of International Relations Graduated 2022

Semester 1, 2022



Bridget Davis Bachelor of Economics with a major in Professional

Economics

Graduated 2022



Fraser Wipp

Master of International Relations *Graduated 2022*

Semester 1, 2023



Michael Hilliard Bachelor of International Relations and Economics

Graduated 2023



Robert Springett Bachelor of Arts

Graduated 2023

Semester 2, 2023



Sarah Duong

Bachelor of Arts Major: Law and Society Second major: Political Science and International Relations *Graduated 2023*

INTERN Testimonials

Marcus Schultz, Research Analyst Internship - Semester 2, 2021

"The UWA DSI Internship Program offers students a unique and valuable opportunity to develop skills necessary as an early career researcher. UWA DSI interns go through a structured learning process and gain exposure to a professional working environment that encourages innovative thought and contestable ideas.

There were a number of high points during my internship with UWA DSI. One highlight was seeing my policy brief on the necessity of a new Australian force posture review published online to positive reception, a piece that I find is still often cited by policy practitioners and analysts. Another was participating in various thought-provoking roundtable discussions attended by former Defence Ministers and senior government officials, established academics and prominent business leaders.

Looking back, the 2021 iteration has proven to be a great networking experience and important milestone in my educational history. It was a fantastic entrypoint into writing for Defence planners and building understanding of complex and interdependent Indo-Pacific security issues and topics".



Sarah Duong, Research Analyst Internship - Semester 2, 2023

"The DSI Internship Program was an immensely rewarding experience for me, not just professionally, but also personally. Through meaningful project work, such as the publication of a Policy Brief, and actively helping with event management, I was given a safe space to develop resilience, self-confidence and succeed in realworld tasks. The most memorable highlight for me was being an attendee at the DSI's 2-day Masterclass Series concerning AUKUS Pillar 1. Not only did I acquire valuable knowledge from the course, but I was also privileged to have the real opportunity to observe the inner workings of the defence industry within a professional setting".



THE UNIVERSITY OF WESTERN AUSTRALIA DEFENCE AND SECURITY

Research CAPABILITIES

The University of Western Australia (UWA), with its rich tradition of academic excellence and innovation, stands as a key partner in advancing Australia's defence and security agenda. Central to UWA's efforts in this critical area is UWA DSI which consolidates and channels UWA's expertise in defence and security research.

In a time where geopolitical tides are shifting and national security is front of mind in policy considerations, the DSI emerges as a leading entity, working collaboratively with local, state, and federal governments, as well as industry stakeholders and the wider research community. Our commitment at UWA, utilising UWA DSI as a facilitator and driver of partnerships and activities, is unwavering: to align our capabilities with Australia's strategic needs, driving forward solutions that support a peaceful, prosperous, and secure future for our nation and the broader Indo-Pacific region.

We pride ourselves on being a trusted, inclusive and capable partner across a broad range of disciplines and technologies. Central to DSI's platform is our Trust and Assurance policy which orients our systems for management of Foreign Interference and Security risks, ensuring we remain capable of delivering now and in the future.

OUR FOCUS AREAS

An important part of UWA DSI's role over the past three years has been to discern and advocate UWA's research strengths in areas relevant to defence and security. Over 2021-2022 twelve research themes were identified and a comprehensive capability statement produced (https:// defenceuwa.com.au/research-capability/). In 2023 the online version of this statement was updated, and further work was undertaken to discern the areas of greatest strength and relevance to Defence problems and needs.

Five core focus areas – Coastal and Maritime Defence, Human Decision Science, Law and Policy, Health and Biosecurity, and Sensing, Quantum and AI – have been strategically crafted to engage with and support key national priorities.



Science & Technology KEY CAPABILITIES

The University of Western Australia (UWA), a global top 100 University with a rich tradition of academic excellence and innovation, stands as a key partner in advancing Australia's defence and security agenda and capability needs. Central to UWA's efforts in this critical area is the Defence and Security Institute (DSI). This premier institution consolidates and channels UWA's expertise in defence and security research, engagement, and education.

Our focus areas have been strategically crafted to engage with and support key national priorities. Recognising the pivotal nature of initiatives like the Defence Strategic Review, Australian Strategic Capability Accelerator (ASCA), and AUKUS, our approach seeks to seamlessly integrate academic and research excellence with the nation's defence and security blueprint. In doing so, UWA endeavours to bolster Australia's defence posture, ensuring our contributions are both relevant and impactful in the broader national and regional context.



Team WA Universities and Group of 8



QUANTUM, AI AND SENSING

UWA excels in the fields of quantum technologies, advanced sensing, and Al applications. This expertise offers a decisive technological advantage, enhancing decision-making in defence contexts to directly support Australia's defence and security objectives.

Key Achievements

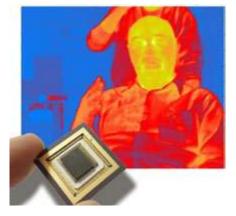
- World's lowest noise microwave Precision measurement echnology (10 patents).
- A fully Australian-made IR imaging array, packaged as a camera-ready IR imaging system.
- Software tools and AI systems for situational awareness, navigation, target localisation, maritime surveillance.
- Inception of the Non-Kinetic Misinformation Wargame Dronemounted IR imaging system for improving threat detection (2 patents).

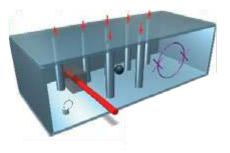
Strategic Relevance

AUKUS focus on quantum technologies, electronic warfare and artificial intelligence and autonomy. Furthermore, the Defence Strategic Review emphasises the importance of robust cyber and data networks; UWA's capabilities are pivotal in advancing "collect and integrate diverse information" goals, supporting superior decision-making in defence.

Our Expertise

By harnessing expertise from areas like computing, engineering, information systems, and psychological science, UWA serves as an epicentre for innovation and collaboration, setting the foundation for advanced sensing, cyber and AI solutions tailored to defence needs.







In addition to the priority science and technology areas identified on the previous pages, UWA has two more focus areas for research and engagement: health and biosecurity, and law and policy, both of which are areas in which our researchers have strong records of academic and research excellence combined with applications and engagement in defence locally, nationally and internationally.

HUMAN DECISION SCIENCE

UWA aims to explore interactions in human teams and between humans, technology and the operational environment to enhance personal resilience and capability and augment and improve cognition, endurance and protection during operations.

Key Achievements

- Training interventions for improving Australian Army soldier readiness for human-automation (AI) teaming
- Understanding information overload to operators for improved augmented reality displays in battlefield environments
- Innovative human-machine interfaces to optimise the integration of advanced automation and robotics with human counterparts.

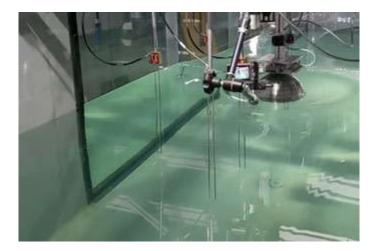
Strategic Relevance

Our research directly aligns with the DSTG STaR Shot's Agile C2, promoting adaptability and resilience in modern warfare. Concurrently, the Defence Strategic Review accentuates the importance of information warfare and guided weapons. Through our advancements, we are poised to elevate national defence by fusing human cognition with cutting-edge technologies, resonating with the Review's goals.

Our Expertise

World class expertise in applying cognitive science to bolster the ADF personnel's adaptability and resilience (human factors). Our key facilities such as the Human Factors and Applied Cognition Laboratory and the Sensory Neuroscience, Attention, and Perception Laboratory, exemplify UWA's comprehensive capabilities, positioning the ADF at the forefront of human decision science.





COASTAL AND MARITIME DEFENCE

UWA offers a comprehensive fusion of scientific, technical, and geopolitical insights tailored to enhance the operational performance of defence platforms within the maritime arena, particularly in the Indian Ocean. Our expertise spans a broad spectrum, from marine science, oceanography and offshore geotechnical engineering to geopolitics and international relations.

Key Achievements

- Machine Learning systems that enhance wave forecasts, ensuring safer and more efficient maritime operations
- Sensor package and algorithms to rapidly assess environmental conditions, predict vessel behaviour and fatigue, and exploit ocean energy sources to power offshore and remote assets
- Development of subsea technologies for instrument deployment at depths of up to 10,000m

Strategic Relevance

Recognising Australia's pivotal role as an Indian Ocean state, UWA's maritime research is attuned to the Defence Strategic Review's emphasis on enhanced, all-domain maritime capabilities for sea denial operations and localised sea control. In alignment with the AUKUS's focus on undersea capabilities and the DSTG STaR Shot's priority on Remote Undersea Surveillance, UWA's approach demonstrates a deep commitment to supporting the nation's maritime strategic initiatives and advancing undersea warfare capabilities.

Our Expertise

Our expertise spans Undersea, Offshore and Littoral Science and Engineering, supported by a significant pool of oceanographic field research equipment including in situ instrumentation, remote sensing and bioacoustic platforms.



HEALTH AND BIOSECURITY

UWA is at the forefront of ensuring the health and security of Defence personnel. Their commitment is manifested in their drive to develop advanced medical countermeasures against a spectrum of threats including chemical, biological, and radiological challenges, with a keen eye on the ever-present risk of pandemics and emerging infectious diseases.

Strategic Relevance

Health and resilience are at the core of national security. UWA's dedication to health and biosecurity seamlessly fits the Defence Strategic Review's emphasis on resilience. Our focus on protecting Defence personnel and the broader community resonates with the review's call for resilience through disaggregated and dispersed logistic networks.

Our Expertise

UWA's research commitment to health and biosecurity is focused on:

- Human performance optimisation, injury management, real time measurement of stress and mental health.
- Innovative research combating antimicrobial resistance. And developing medical countermeasures to bio warfare.
- Managing security sensitive biological agents and detection of radio isotopes
- Pioneering drug testing
- Equipment sterilisation post



LAW AND POLICY

UWA critically examines Australia's strategic ambitions, integrating socio-ethical, legal, political, and economic perspectives. With a focus on the Indo Indo-Pacific region, our expertise spans from defence policy to geopolitics and international law.

Strategic Relevance

UWA's expertise in law and policy, especially in the maritime domain, reflects the Defence Strategic Review's focus on Australia's strategic interests in the Indo Indo-Pacific. Our critical examination of Australia's strategic ambitions and the evolving geopolitics aligns with the review's emphasis on non-geographic security threats, such as cyber and long long-range missile capabilities, ensuring a comprehensive grasp of the region's complexities.

Our Expertise

UWA's prowess in defence defence-related law and policy is evident through institutions like the Perth USAsia Centre and the Defence and Security Institute, which have worked together closely since inception of the DSI, especially in relation to delivery of the DSP. These centres amalgamate rich expertise, ensuring UWA stays ahead in geopolitics, policy formulation, and defence research, always aligned with the contemporary needs and strategies of the Australian defence sector.

UWA BROADER RESEARCH CAPABILITIES

<u>Our 12</u> <u>Themes</u>

As noted previously, twelve themes were initially identified and these capture all of the defence and security relevant research at UWA.

These themes sit within and across the five focus areas previously outlined. As a research-intensive Group of 8 university, UWA has comprehensive research capability beyond only the outlined focus areas. As such, UWA DSI has identified research theme representatives for each of the twelve themes so that there are contact points into each area both internally and externally. The twelve themes are:

- Climate and Environmental Security
- Cyber and Information Warfare
- Defence and Security Policy, Law and Ethics
- Enhanced Human & Team Performance
- Health, Medical & Biosecurity
- Indian Ocean Maritime Security
 and Defence
- Quantum Technologies
- Sensors and Surveillance
- Multi-Disciplinary Material Sciences
- Space Situational Awareness
- Trusted Autonomous Systems, AI & Automation
- Undersea, Offshore and Littoral Science and Engineering

<u>The Black Swan</u> STRATEGY PAPERS

The Black Swan Strategy Papers are the flagship publication of the UWA Defence and Security Institute.

They represent the intersection between Western Australia and strategic studies - both of which are famous for their black swans. The series aims to provide high-quality analysis and strategic insights into the Indo-Pacific region through a defence and security lens.

The Black Swan Strategy Papers were initiated by our previous director Professor Peter Dean and are currently edited by Dr. Troy Lee-Brown, Research Fellow at the UWA Defence and Security Institute with Fiona Considine as the Creative Director. These papers are shared amongst our subscribers, defence, academics and business stakeholders and hard copies are sent to a select group identified in senior positions of leadership within Defence and Academia. The papers can be found at defenceuwa.com.au/publications/black-swan-strategy-papers



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ISSUE 1

Published: September 2021 ROK-Australia Defence and Security Ties: Prospects and Reflections on the 60th Anniversary of Diplomatic Relations

Authors: Professor Peter J. Dean and Associate Professor Jo Elfving-Hwang

On 10 June, the UWA Korea Research Centre and the UWA Defence and Security Institute reflected on the past 60 years of diplomatic engagements between the Republic of Korea (ROK) and Australia. Amidst the changing security landscape in the Indo-Pacific, the relationship has perhaps never been closer or more significant.

ISSUE 2

Published: November 2021 Unifying Space: Australia Needs a Whole of Government Space Policy

Author: Dr Tristan Moss

From the outset, Australia's participation in space was one in which the lines between national security interests and those of civilians were blurred, more often than not in the service of the country's interests in securing the friendship of great powers. To secure its future in space, Australia must answer the question of what it wants to achieve in and through space.

This paper was part of the US Embassy Grant deliverable for the Alliance Network Program.

ISSUE 3

Published: March 2022 ANZUS Pivot Points: Reappraising 'The Alliance' for a New Strategic Age

Author: Professor Peter J. Dean

Significant changes in international affairs or a nation's security posture can either be sudden, striking and self-evident or can occur with little fanfare or notice, with their significance being revealed only with the passage of time. Some changes, like the title of this public policy paper series, are classified as 'black swans' – a surprise event, beyond normal expectations, that have a major impact. The events of 2021 in Australian strategic policy bear the hallmarks of all of these changes.



ISSUE 4

Published: June 2022 Biosecurity in the Indo-Pacific Region

Author: Associate Professor Tim Inglis

The wide influence of the COVID-19 pandemic on policy development dictates that a COVID-19 lens be used to view biosecurity in the Indo-Pacific region. Biosecurity provisions, practice and policy can be set on a COVID-19 pandemic timeline to understand our biosecurity's origins, current limits and future priorities.



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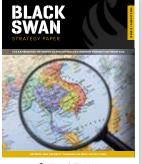
ISSUE 5

Published: July 2022 The U.S.-Australia Alliance in the Age of Automated Mechanism Design

Author: Dr Zac Rogers

The rapidly digitising economies of Australia and America mean that traditional human-centred, institutionally mediated interactions between government and citizen, vendor and consumer, are being captured by automated mechanisms. While a growing discourse focuses attention on these techno-political shifts and the implications for each society, little attention has been paid to the implications in international relations terms.

This paper was part of the U.S. Embassy Grant deliverable for the Alliance Network Program.



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ISSUE 6

Published: August 2022 T.I.G.E.R Priorities: Optimising US and Australian Strategies Towards Southeast Asia

Author: Dr Huong Le Thu

The U.S.' and Australia's roles, strategies and contributions to the Indo-Pacific are distinct, but there are also an increasing number of areas in which they can join efforts to make a stronger impact. It is important to understand the strengths and weaknesses of Washington and Canberra individually, and to coordinate where cooperation would be welcome. In Southeast Asia in particular, American and Australian strategies have recently been seen as too security- and defence-focused. While some appreciate that, others worry that such an approach contributes to rising tensions in the region. This paper looks at the areas in which Washington-Canberra cooperation and coordination in the region would be positive and unequivocally well-received.

This paper was part of the U.S. Embassy Grant deliverable for the Alliance Network program.

ISSUE 7

Published: March 2023 ANZUS at 100: Adapting to Next-Generation Alliance Issues

Author: Kate Clayton

In 2021 the ANZUS treaty celebrated its 70th anniversary. The Alliance relationship today is remarkably different from how it was at the signing of ANZUS in San Francisco in 1951. The United States and Australia are now faced with new security threats which challenge domestic and international security. ANZUS at 100 will look even more different.

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This paper was part of the U.S. Embassy Grant deliverable for the Alliance Network Program.

2020-2023 ACTIVITY REPORT



Stites. 39989



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ISSUE 8

Published: April 2023

Climate Allies: Australia-US Cooperation in a Warming World

Author: Dr Wesley Morgan

Climate change is an unprecedented global challenge and a threat to national security in Australia and the United States. The Australia-US Alliance was not established with a warming planet in mind, but close defence relations between Australia and the US provide a firm basis for cooperation to address the threat.

This paper was part of the U.S. Embassy Grant deliverable for the Alliance Network Program.

ISSUE 9

Published: June 2023 Defence Innovation and the Australian National Interest

Author: Jennifer Jackett

Rapid technological advances are transforming the nature of political, economic, and military power in the Indo-Pacific region. Leadership of development and deployment of advanced technologies is a defining arena of strategic rivalry between China and the United States (US), which each country sees as vital to their security and prosperity.

This paper was part of the U.S. Embassy Grant deliverable for the Alliance Network Program.

ISSUE 10

Published: October 2023 Security of Critical Mineral Supply Chains in The Indo-Pacific: A View from Indonesia and Australia

Authors: Professor Allan Trench and Dr. Nugroho Adi Sasongko

The Indo-Pacific region is set to play a more important role in providing the world with vital critical minerals. Future developments, notably in Indonesia and Australia, target the production of critical raw materials and an expanded footprint in downstream, value-added, mineral products as feedstock to new energy and advanced technological applications.



ISSUE 11

Published: December 2023 Australia and the Provision of Maritime Security in the Indian Ocean: Mobilising Regional Partnerships and Leveraging the Alliance

Author: Dr Troy Lee-Brown

The Indian Ocean Region (IOR) has become an increasingly competitive maritime domain for the world's great powers in an era where the region also faces quickly-escalating environmental pressures and an array of non-military maritime security threats. For Australia – with a vast Indian Ocean coastline, an enormous resource-laden EEZ, and crucial exports of iron ore and hydrocarbons from the North West of the country – the Indian Ocean is vitally important to the national bottom-line. Over the past decade, Australia has been at the forefront of redefining the region from the 'Asia-Pacific' to the 'Indo-Pacific' thus viewing the Indian Ocean and Pacific Ocean as an interconnected strategic space.

This paper was part of the U.S. Embassy Grant deliverable for the Alliance Network Program.

UWA Defence and Security POLICY BRIEFS

The UWA DSI Policy Briefs represent concise outlines of key issues and topics in Indo-Pacific Defence and Security.

These briefs can be either advocacy focused or more focused on providing objective background information to inform the policy debate. The UWA DSI Policy Briefs are a deliverable from the DSI Internship Program giving each Research Analyst intern the opportunity to publish an article. The Policy Briefs can be found here - defenceuwa.com.au/publications/policy-briefs



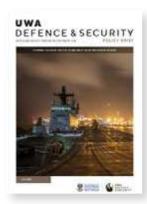
DECEMBER 2021 Then and Now: Why the Future Defence of Australia Requires a New Force Posture Review

Author: Marcus Schultz

DEFENCE & SECURITY



JUNE 2022 Australia's Future Presence in the Solomon Islands Author: Fraser Wipp



JUNE 2022 Economic Coercion: The Fuel of Instability in the Indo-Pacific Region?

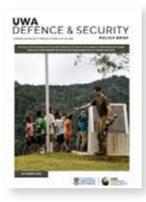
Author: Bridget Davis



JUNE 2023

Between a Rock and a Hard Place: A Risk Analysis of Australia's Rare Earth Supply Chain Strategy and its Implications for National Security

Author: Michael Hilliard



OCTOBER 2023

It's the Little Things that Count: The Role of Youth in Shaping a Stronger and More Resilient Partnership between Australia and Pacific Island Nations General Perth

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UWA Defence INTERACTION GROUP

The UWA Defence Interaction Group brings together UWA researchers with a focus on various aspects of defence and security research.

This group play a crucial role in advancing knowledge and understanding in the defence and security domains and can contribute to the development of national security policy and strategy.

The UWA Defence Interaction Group (DIG) serves as a hub for connecting experts, students, and professionals in the field of defence and security.

The below listed engagements were arranged to promote dialogue and awareness about defence and security issues within the UWA community, and to introduce the UWA research and education community and their capabilities to relevant leaders in the defence ecosystem.





2022

Meeting with Brigadier Brett Chaloner, CSC Commander of the 13th Brigade in Western Australia

Topic: Discussion on UWA Defence-relevant research, and how 13 Brigade has been designated as an innovation centre testbed for Army.

Meeting with Defence Theresa Hay, Associate Director for Defence Science Centre (DSC), and Warren Smith, Science & Technology Group relationship executive for UWA and Program Leader Undersea Combat & Surveillance.

Topic: Striving to Add value to Your Defence Research & Engagement - Defence-relevant research at UWA that can assist with DSTG in their mission to do "More, Together" to advance defence research and innovation for our national defence and security.



2023

Roundtable discussion with Rear Admiral Richard Seif, Commander, Submarine Force, U.S. Pacific Fleet - CTF 54 / CTF 74 Theater Undersea Warfare Commander for CENTCOM and IPACOM

Meeting with Michele Clement, Director of the Defence Science Centre.

Topic: An introduction to MATCH, the Maritime and Advanced Technologies Collaboration Hub

Meeting with The Honourable Paul Papalia CSC, MLA, Minister for Police, Road Safety, Defence Industry and Veterans Issues.

Topic: Update on the State Government's vision for WA defence industry and how UWA researchers and educators can play a role.

Meeting with Rear Admiral Philip Spedding DSC AM RAN (Rtd), Western Australian Defence Advocate

Topic: Opportunities for and with WA defence industry as they relate to research capabilities at UWA.

OTHER ENGAGEMENTS AND UWA RESEARCH OUTREACH

Beyond our DIG events, UWA DSI regularly assists in connecting and showcasing our researchers with relevant individuals and agencies to advance their research activities and impact. For example, we frequently host and coordinate briefings and/or lab tours with national and international defence funding, innovation and science/technology agencies. Below are listed some major showcase events in the past year, during which a focus of the UWA DSI research and engagement team has been to bring industry ready UWA research to Defence and defence industry.

CHIEF OF ARMY SYMPOSIUM

Perth Convention and Exhibition Centre 29 - 30 August 2023

The Chief of Army Symposium (CAS) 2023 showcased Army's enduring commitment to innovation and fostering partnerships with our allies, partner forces and Defence Industry. The event was hosted by the Chief of Army, Lieutenant General, Simon Stuart, AO, DSC, in Perth on Tuesday 29 August and Wednesday 30 August.

UWA DSI supported four Defence researchers/research Groups in a successful bid to co-exhibit in the Robotics and Automation challenge. Two additional UWA research groups were also exhibitors; one group invited by Army to exhibit as Quantum Technology challenge alumni and another part of a multi university-industry collaborative demonstration in the Robotics and Automation challenge.

QUANTUM COMPUTING AND TECHNOLOGY TOUR

The release of the National Quantum Strategy in early May was a great opportunity for UWA to provide an overview of our world-leading capability across quantum research, education, industry engagement and commercialisation of emerging technologies to key WA government representatives.

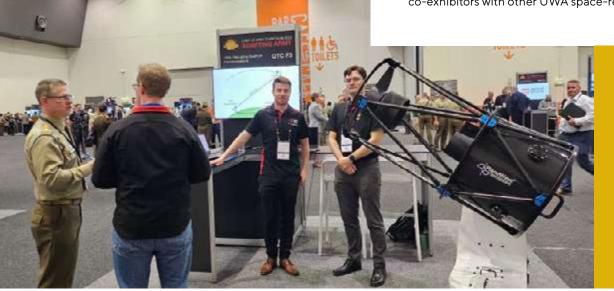
With quantum a clear area of interest for defence, including AUKUS Pillar II, the visiting group included WA Defence Advocate Rear Admiral Phil Spedding (Retd), and Michele Clement and Jeff Malone from the Defence Science Centre. After presentations, there was a tour of the UWA research labs including quantum sensing, gravitational wave detection using quantum architectures, and advanced optical communications. The tour reinforced UWA's contribution to Australia's national quantum ecosystem.

INDO-PACIFIC SPACE & EARTH CONFERENCE

Pan Pacific Hotel, Perth 23 – 24 October 2023

The Indo-Pacific Space & Earth Conference delves into all the technologies that can be applied both on Earth and in space. From AI and robotics to remote operations, we can use these technologies to advance our life on Earth and beyond. All industries from mining, oil and gas, agriculture, medicine and more can benefit from investing resources into these technologies. Supported by key industry players and the government, our goal is to bring everyone together to discover new innovations and capabilities to create future opportunities.

UWA DSI was part of the UWA sponsorship of this conference and supported the Australian National Fabrication Facility (WA node) to exhibit their capabilities, particularly infrared sensing technology platforms for defence and space applications, as co-exhibitors with other UWA space-relevant groups.





UWA DEFENCE CAPABILITY SHOWCASE: UWA COASTAL OFFSHORE RESEARCH LABORATORY TOUR

UWA Shenton Park Field Station, Perth 30 October 2023

The event brought together esteemed guests from the defence and subsea industries for a tour of the of the UWA Coastal and Offshore Research Lab (CORL). Led by Associate Professor Scott Draper, Professor Ryan Lowe, and the dedicated CORL team, they showcased their unique 1900m2 multi-purpose hydraulics lab—a one-of-a-kind Australian facility enabling concurrent research in offshore and coastal engineering, spanning from the water's surface to the seabed.

Panel discussion speakers included:

- Associate Professor Scott Draper (UWA)
- Colin McIvor, Head of Department, School of Engineering, Civil, Environmental and Mining Engineering.
- Linda Dawson, Deputy Director General Industry, Science, Innovation, Department of Jobs, Tourism, Science and Innovation
- Brigadier Brett Chaloner, 13th Brigade Commander (WA)
- Moderated by Michele Clement, Director, Defence Science Centre

INDO PACIFIC 2023 INTERNATIONAL MARITIME EXPOSITION

International Convention Centre, Sydney 7 - 9 November 2023

Attracting industry professionals from around Australia, the region and the world, Indo Pacific 2023 saw key players from the maritime and naval defence communities come together for three days of business, discussion and networking.

UWA DSI supported two researchers/research groups to attend as co-exhibitors of defence technology in the Defence Science Centre area at the Defence West stand. UWA DSI's research fellow Dr Troy Lee-Brown was also a panel presenter at Sea Power Conference.



PUBLIC EVENTS AND STAKEHOLDER ENGAGEMENTS

UWA DEFENCE AND SECURITY PROGRAM

2020

Public Event: Launch of the UWA Defence and Security Program

Speakers included:

UWA Defence

nd Se rity

- Master of Ceremonies: Professor Stephen Smith, Chair, UWA Defence and Security Institute
- Panel discussion moderated by Natalie Sambhi, Executive Director and Founder, Verve Research
- The Honourable Kim Beazley AC, Governor of Western Australia
- The Honourable Paul Papalia, Minister for Defence Issues CSC, MLA
- The Honourable David Johnston, Australian Defence Export Advocate
- Lieutenant Colonel Jasmin Diab, Australian Army
- Professor Amit Chakma, Vice-Chancellor, The University of Western Australia.

Public Event: Perth Think and Drink Networking Event with the Honourable Kim Beazley AC, Governor of Western Australia.

Topic: Post U.S. Election: Where to know for defence?

The Think and Drink Networking events run across Australia and are community-based to encourage discussion and debate in a casual and relaxed atmosphere for anyone that has an interest in defence and security.

2021

Public Event: The Future of the U.S.-AUS Alliance under the new Biden Administration

THE UNIVERSITY OF

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AUSTRALIA

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Defence

Security

Speakers included:

- Master of Ceremonies: Professor Stephen Smith, Chair, UWA Defence and Security Institute
- Panel discussion moderated by Natalie Sambhi, Executive Director and Founder, Verve Research
- Dr Jennifer Hunt, Lecturer in Security Studies, Macquarie University
- Dr Rebecca Strating, Executive Director, La Trobe Asia
- Hayley Channer, Senior Policy Fellow, Perth USAsia Centre

Public Event: Perth Think and Drink Networking Event with the Honourable Kim Beazley AC, Governor of Western Australia.

Topic: Post U.S. Election: Where to know for defence?

Speakers included:

- Master of Ceremonies: Professor Stephen Smith, Chair, UWA Defence and Security Institute
- Moderated by: Professor Gia Parish, Deputy Chair, UWA Defence and Security Program
- Mr Matt Moran, Executive Director, Defence West
- Kristian Constantinides, President, Australian Industry & Defence Network
- Linda Dawson, Deputy Director General Industry, Science, Innovation

Public Event: In Conversation with His Excellency Vasyl Myroshnychenko, Ambassador to Australia.

Topic: Reflections on the Russian invasion of Ukraine, the reaction of the international community, and Australia-Ukraine relations.

Public Event: Perth Think and Drink Networking Event with special guest speakers from the Team WA Defence Universities - A Team WA Tapas of Defence Innovation Topics.

Speakers included:

- Dr Abbie Rogers, The University of Western Australia.
 Topic: Research and Innovation Agency (BRIN). Decision support tools for coastal resilience
- Associate Professor Nicolas Fay, The University of Western Australia. Topic: Manufacturing Misinformation: Are falsehoods more persuasive than truths?
- Dr Paola Magni, Murdoch University. Topic: When defence meets forensic investigation
- Professor Andrew Woodward, ECU. Topic: Cyber Security
- Associate Professor Alexey Muraviev, National Security and Strategic Studies, Curtin University
- Associate Professor Ellie Samson, Manager, Desert Fireball Network. Topic: Solving remote operations engineering & surveillance problems – experiences from the DFN.



2023

Public Event: Perth Think and Drink Networking Event with Professor Peter J. Dean.

Topic: Unpacking the Defence Strategic Review Announcements.

Master of Ceremonies: Matt Moran, Head of Strategy and Government Relations, Luerssen Australia.

Public Event: *Black Swan Strategy Paper Launch* - Security of Critical Mineral Supply Chains in The Indo-Pacific: A View from Indonesia and Australia by Professor Allan Trench and Dr. Nugroho Adi Sasongko, in collaboration with Universitas Pertahanan Indonesia and The National Research and Innovation Agency (BRIN).





Roundtable Discussion **SERIES**

Regular roundtables have been established as a fixture of the Defence and Security Program and more broadly the UWA DSI calendar.

These invitation-only events bring together participants from Defence, defence industry, all levels of government, diplomatic and consular corps, not-for-profits and academia, to hear from local and visiting experts on matters of relevance to national and regional defence and security, with Chatham House Rules invoked to allow free and forthright discussion.

UWA DEFENCE AND SECURITY PROGRAM

2020

UWA Defence and Security Forum

Roundtable discussion bringing together key players in state government, defence industry and academia for a strategic conversation to discuss and help shape the next stage of the defence debate in Western Australia.

2021

Roundtable discussion with Brigadier Brett Chaloner, CSC, Commander of the 13th Brigade in Western Australia.

Topic: Understanding of The Developing Role of Army in our National Defence.

Roundtable discussion with Vice Admiral Professor Paul Maddison CMM MSM CD.

Topic: Reflections on the Russian invasion of Ukraine, the reaction of the international community, and Australia-Ukraine relations.



Roundtable discussion with His Excellency Vasyl Myroshnychenko, Ambassador of Ukraine to Australia. *Topic: Reflections on the Russian invasion of Ukraine, the reaction of the international community, and Australia-Ukraine Relations.*

Roundtable discussion with Professor Peter J. Dean and launch of the Black Swan Strategy Paper. *Topic: ANZUS Pivot Points Black Swan Strategy Paper.*

Roundtable discussion with Associate Professor Tim Inglis and launch of the Black Swan Strategy Paper. *Topic: Biosecurity in the Indo-Pacific Region.*

Discussion moderated by Dr Andy Robertson, Chief Health Officer and Assistant Director General within the Public and Aboriginal Health Division in the Western Australia Department of Health (WA Health).

Roundtable discussion with Mr Rexon Y. Ryu, President, The Asia Group in collaboration with the Perth USAsia Centre.

Topic: Unfolding trends in the Indo-Pacific region, and how the US and Australia can work together to tackle the big issues facing government and industry. Roundtable discussion with Mr Reinhard Bütikofer, Member of the European Parliament for the German Green Party.

Topic: Implications of Russia's war in Ukraine for the Indo-Pacific region existing EU and European interests in Southeast Asia and the Pacific.

Roundtable discussion with Claire Young, Independent Researcher on Antarctic Security.

Topic: Cold Partners: China, Russia and Australia's interests in Antarctica.

Roundtable discussion with Mr Bruce Edwards, Australian Ambassador to Ukraine and Mr Vasyl Myroshnychenko, Ukrainian Ambassador to Australia

Topic: Reflections on the Russian invasion of Ukraine, the reaction of the international community, and Australia-Ukraine Relations.



Roundtable discussion with US Congressional Staff Delegation in collaboration with the Perth USAsia Centre.

Speakers included:

- Sean Falvey, National Security Advisor for Rep. Joe Courtney
- Reed Craddock, National Security Advisor to incoming House Seapower Subcommittee Chairman Rep.
- James Mismash, Military Legislative Assistant for Rep. Mike Gallagher
- Katie Sudhoff, National Security Advisor for Sen. Tammy Duckworth
- Alec Johnson, National Security Advisor for Senator Chris Murphy
- Lauren Johnson, Professional Staff Member on the House Select Committee on Strategic Competition with China
- The Honourable Kim Beazley AC.

Roundtable discussion with US Congressional Staff Delegation.

Speakers included:

- Kaitlin Kleiber, National Security Advisor to Senator Tim Kaine (D-Virginia)
- Chadd Montgomery, National Security Advisor to Senator Dan Sullivan (R-Alaska)
- Maddie Mitchell, Legislative Director to Representative Jen Kiggans (R-Virginia)
- Nate Guajardo, Military Legislative Assistant to Senator Richard Blumenthal (D-Connecticut)
- Hakela Hapner, Military Legislative Assistant to Senator Kevin Cramer (R-North Dakota)
- The Honourable David Johnston.



Roundtable discussion with Jennifer Jacket, Non-Resident Fellow in the Foreign Policy and Defence Program at the United States Studies Centre and launch of the Black Swan

Topic: Defence Innovation and the Australian National Interest.

Roundtable discussion with Professor Peter J. Dean. Topic: Unpacking the Defence Strategic Review.

Roundtable discussion with His Excellency Former President of the Republic of Latvia, Dr Egils Levits (2019–2023) and His Excellency Margers Krams, Latvian Ambassador to Australia.

Topic: Geopolitical Implications of Russia's War Against Ukraine.







Republic of Korea-Australia Bilateral Security: Track 2 Dialogue

In collaboration with the UWA Korea Research Centre and the UWA Defence and Security Institute to reflect on the past 60 years of diplomatic engagements in order to enhance strategic understanding of the importance of ROK-Australia relations, and to provoke dialogue around missed and future possibilities of this important relationship.



2022

AUKUS: Track 1.5 Dialogue

New Frontiers in Defence Innovation: AUKUS and Beyond

This event was convened as it was a response by the UWA Defence and Security Institute in understanding the need for the AUKUS Alliance and our close partnerships with government, industry and business, research institutions and the community to adjust to, and innovate for, widening capability gaps and emerging technologies.

This event was hosted at UWA and was a unique opportunity for the invited guests to receive some formal information on the progress of AUKUS as well as participate in an open, Chatham House Rule dialogue with senior government officials as well as academic and think tank staff from around the country.

Research and Innovation Stream and Strategy Stream Dialogues convened.



2023

UWA Defence and Security Masterclass Series: AUKUS Pillar I

The University of Western Australia's Defence and Security Institute Masterclass Series: AUKUS Pillar I, with the support from the Department of Defence, the Australia Department of Foreign Affairs and Trade, the Department of Jobs, Tourism, Science and Innovation and the Australian Submarine Agency hosted approximately 13 hours of content delivery from over 40 local, national and international expert speakers, and introduced an audience of over 140 participants to AUKUS: Pillar I (nuclear powered submarines) and its impacts for Western Australia and beyond.

Further information https://defenceuwa.com.au/aukus-masterclass-pillar1/



Institutional Collaborations AND SUPPORTED ACTIVITES

2021

Public Event: Launch of the UWA Defence and Security Institute

Speakers include:

- Master of Ceremonies: Professor Stephen Smith, Chair, UWA Defence and Security Institute
- Greg Moriarty, Secretary of the Department of Defence of Australia
- The Honourable Kim Beazley AC, Governor of Western Australia
- Professor Amit Chakma, Vice-Chancellor, The University of Western Australia.

Public Event: Collaboration with the Navy Clearance Diver Trust

Topic: Australia, Maritime Security & Sovereign Capabilities: A WA Perspective

Speakers included:

- Master of Ceremonies: Denise Goldsworthy AO, Chair, Navy Clearance Divers Trust
- The Honourable Kim Beazley AC, Governor of Western Australia
- The Honourable Paul Papalia CSC MLA
- Professor Amit Chakma, Vice-Chancellor, The University of Western Australia
- The Honourable David Johnston, Australian Defence Export Advocate

- Professor Caroline Finch AO, Deputy Vice-Chancellor (Research), Edith Cowan University
- Eve Clark, General Manager, L3Harris

2022

Public Event: Collaboration with the Navy Clearance Diver Trust

Topic: Antarctica: defence and human performance in an extreme environment

Speakers included:

- Master of Ceremonies: Denise Goldsworthy AO, Chair, Navy Clearance Divers Trust
- Mike Deeks, Blue Ocean Marine Tech Systems
- Eve Clark, General Manager, L3Harris
- Claire Young, former senior analyst with the Australian government
- Panellists: Facilitator: RADM Allan Du Toit (RAN Ret'd), Chairman JFD, Emily Chapman, RAAF, Vincent Carlson, RAN, Jack Forbes, RAN

Roundtable discussion with Dr. Jaques Reifman, Director, Biotechnology High Performance Computing Software Application Institute, U.S. Department of Defense.

Topic: Opportunities for data Driven Solutions for Health Care

Event in collaboration and supported by the Department of Jobs, Tourism, Science & Industry.



<u>Indian Ocean Defence and</u> SECURITY CONFERENCE 2022

The Emerging Security Relevance of the Indian Ocean Optus Stadium, Perth

First held in 2018 and then 2019 and convened by Defence West in the Department of Jobs, Tourism, Science and Innovation in partnership with the Perth USAsia Centre at The University of Western Australia, the Indian Ocean Defence and Security Conference is a biennial event that showcases Western Australia and Australia's world-class defence industry and research capabilities. It was hosted by the West Australian Government through Defence West, in partnership with the Perth USAsia Centre and the University of Western Australia's Defence and Security Institute.

The 2022 Indian Ocean Defence and Security Conference Beyond Transits: The emerging security relevance of the Indian Ocean was hosted at Optus Stadium on 25 and 26 August 2022, and attended by over 500 attendees across government, academia, and the defence industry.





Public Event: In collaboration with the Navy Clearance Diver Trust

Topic: Antarctica: Leadership, teamwork and human resilience in an Extreme Environment

Speakers included:

- Master of ceremonies: Denise Goldsworthy AO, Chair, Navy Clearance Divers Trust
- The Honourable David Johnston, Chair, UWA Defence and Security Institute
- David Wotherspoon, Manager, Diving and Hyperbaric Products, JFD
- Professor Peter Galvin, Associate Dean Research, ECU School of Business and Law
- Tim Walton, Group Business Development Manager, Blue Ocean Marine Tech Systems

Private Event: 13th Engineer Regiment Parade - First Birthday Anniversary Parade UWA DSI provided support for this event.

Public Event: Panel discussion and Book Launch with Dr. Sarah Percy, School of Political Science and International Studies, Faculty of Humanities, Arts and Social Sciences, The University of Queensland. Book Title: 'Forgotten Warriors' A History of Women on the Front Line. This event was in collaboration with Australian Institute of International Affairs and 13th Brigade (WA).

Speakers included:

- Master of ceremonies: The Honourable David Johnston
- Senator the Hon Linda Reynolds CSC
- Natalie Sambhi, Executive Director and Founder, Verve Research
- Lieutenant Colonel Nicole Collier, 13th Brigade

Roundtable Workshop: In collaboration with Veterans, Emergency Services, and Police Industry Institute Australia (VESPIIA).

Policymakers, experts, and stakeholders were invited from across the region to delve into a crucial facet of disaster management and the well-being of those who are on the front lines when disaster strikes.

Discussion moderated by Shannon Hennessy, Chief Executive Officer, VESPIIA.

Public Lecture with Professor Dale Stephens: In collaboration with UWA Law School.

Topic: Space Law and Armed Forces: The Law Applicable to Military Activities and Operations in Outer Space – The Woomera Manual Experience.







A MARITIME EXCHANGE PROJECT

The Blue Security program aims to strengthen and sharpen the analysis of maritime security challenges across the Indo-Pacific region, with a focus on Southeast Asia and is supported by the Australian Department of Foreign Affairs and Trade's Maritime Exchange Program. Blue Security endeavours to build a network of maritime scholars and practitioners from across the region with an emphasis on cross-country collaboration, gender equality and a blend of established and emerging scholarship.

The Blue Security program publishes a series of substantive working papers on contemporary issues in regional maritime security, under the broad headings of order, law, and power. The program also convenes workshops across Australia and Southeast Asia with a focus on maritime-related issues. Blue Security is led by Professor Rebecca Strating from La Trobe Asia and managed by Dr Troy Lee-Brown from the University of Western Australia's Defence and Security Institute. Blue Security's consortium members are Professor Peter Dean from United States Studies Centre, Professor Ian Hall from Griffith Asia Institute, Professor Douglas Guilfoyle from UNSW Canberra and Melissa Conley Tyler from Asia Pacific Development, Diplomacy & Defence Dialogue.





U.S. Embassy Grant



NEXT GENERATION U.S. - AUSTRALIA ALLIANCE REGIONAL WORKSHOPS

The Next Generation U.S. – Australia Alliance Regional Workshop was part of a two-year program that involved five 3-day workshops held in Perth, Brisbane and Adelaide. We also offered this program an in an online platform to regional participants with the final workshop hosted at ANU in Canberra.

Through these workshops we introduced approximately 80 young professionals to a range of Alliance issues through workshop sessions led by established academics and policymakers giving the participants the opportunity to engage and potential to be the next generation of alliance leaders.

Each of the workshop involved detailed discussions and presentations on topics such as:

- Shared values and democratic principles
- The Evolution of ANZUS In the Context of Australian Strategy
- U.S.-Australia strategic relations
- Trade and Economics in the Indo-Pacific Region
- Regional geopolitical issues and emerging security challenges
- U.S.-Australia cooperation on trade and economics
- Broader bilateral cooperation
- Military to Military Relations with the U.S.-Australian Alliance

The last two sessions in each workshop the participants were set up in groups to produce a joint statement with a focus on current and future issues for U.S.-Australia cooperation in the Indo-Pacific region. These statements then helped guide and inform the discussion and sessions in the Canberra-based workshop. Five of the strongest and most impressive candidates in each of the four workshops were selected to participate in a National Workshop at ANU in Canberra and produce four Joint Statements, and from that cohort, a final group of five were chosen to attend a capstone program in Honolulu, Hawaii.

The U.S. – Australia Alliance Next Generation Leaders Hawaii Program brought together the ten most outstanding scholars from the two iterations of the program – the first iteration culminating in July 2020 through the Perth USAsia Centre and the second through the UWA Defence and Security Institute culminating in August 2022.

Whilst in Hawaii, the scholars engaged with leading experts in think tanks, U.S. Indo-Pacific Command and the Australian Consulate. They also had the opportunity to discuss their ideas for strengthening the Alliance with young scholars from the U.S. Pacific Forum and present their policy reports to the Australian Consul General in Honolulu during a roundtable discussion.

Further details on the Workshops and Policy Papers can be found at <u>defenceuwa.com.au/public-</u> <u>diplomacy-programs</u>

The University of Western Australia would like to acknowledge the funding provided by the United States Government that underpins these Regional Workshops.













U.S. – AUSTRALIA ALLIANCE NETWORK

The Alliance Network brought together a range of scholars, practitioners and community leaders to discuss the contemporary nature of the Australia-United States Alliance in the context of regional security development.

This interactive workshop using the Chatham House Rule explored the impact of COVID-19, geopolitical change, domestics politics, security cooperation, economics and trade as well as strategic interests and values. It was part of an initiative to create an 'Alliance Network' of thought leaders around the country.

This is the second iteration of this program with the previous version being a one-day workshop held in Canberra during 2019. In 2021, given COVID-19 interruptions, the program was based around three half day invitation-only workshops in Perth, Brisbane and Sydney. In Perth the UWA DSI partnered with The University of Western Australia, in Brisbane with Griffith Asia Institute and in Sydney with the United States Studies Centre.

The aim of this program was to provide recommendations for the future of the U.S.-Australia bilateral relationship. The program built networks and partnerships to explore a range of topics and to foster further outcomes from a select group of thought leaders.

Further to this, the Alliance Network also helped to develop the next generation of scholars by nurturing new and innovative research into the U.S.-Australian relationship from previously unheard voices in policy discussions.

Two scholars were selected from the cohort to travel to Washington, D.C. to meet with key think tanks, policymakers and academics and present their recommendations. Dr Wesley Morgan, Adjunct Research Fellow, Griffith Asia Institute, authored a policy paper on Climate Allies: Australia-U.S. Cooperation in a Warming World and Kate Clayton, Research Officer, La Trobe Asia, authored her policy paper on ANZUS at 100: Adapting to Next Generation Alliance Issues.

The policy orientated research were used and branded as part of the Black Swan Strategy Papers.

Further details on the program can be found defenceuwa.com.au/public-diplomacy-programs



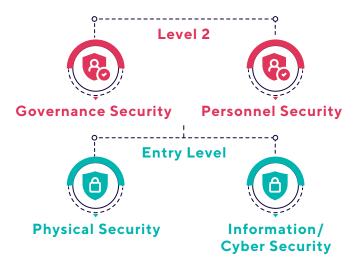
Briefings and Meetings

UWA DSI executive members conduct regular briefings and meetings with Defence, government, diplomatic/consular corps, industry, and academia.

These serve as a two-way conduit for enhanced context and nuanced information for development and implementation of defence and security strategy and policies, investment, and partnerships.

Defence Industry Security Program COMPLIANCE

The University of Western Australia is an accredited Defence Industry Security Program (DISP) organisation with accreditation at the following levels:



Acknowledgments



We wish to recognise and sincerely thank our numerous collaborative partners with whom we work closely to execute our programming schedule and activities.

It is due to their unwavering support that we achieve our ongoing success.



The UWA DSI work closely with schools, departments and individual academics across the university's campuses as well as with relevant external partners, such as industry, key state and Commonwealth departments and agencies to deliver its activities.

- 13 Brigade, Army Reserve formation of the Australian Army
- American Chamber of Commerce
- AROSE
- Australian Consulate-General, Honolulu
- Australian National University, Strategic and Defence Studies Centre
- Bechtel
- Blue Security
- Boffins Books
- British Consulate General Perth
- Chamber of Commerce and Industry
- Consulate-General of the United States of America, Perth
- Curtin University
- Daniel K. Inouye Asia-Pacific Center for Security Studies
- Defence Science Centre

- Defence West
- Department of Defence
- Department of Foreign Affairs and Trade
- Department of Jobs, Tourism, Science and Innovation
- East West Center, Honolulu, Hawaii
- Embassy of the United States of America
- Government House Perth
- Griffith Asia Institute
- Griffith University, Queensland Australia
- Honeywell
- Korean Research Centre
- La Trobe University, Melbourne
- Murdoch University
- National Security College, ANU
- Navy Clearance Diver Trust

- Pacific Forum, Honolulu, Hawaii
- Perth USAsia Centre
- Team WA
- The National Research and Innovation Agency (BRIN).
- The United States Studies Centre
- The University of Adelaide
- U.S. Indo-Pacific Command
- U.S. State Department
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