Introduction: purpose of this paper

Having broadly sketched the key characteristics of Australia and the US’s approaches to security in the Indo-Pacific and the strategic concerns that underpin them in discussion paper one, this second discussion paper explores the AUKUS security pact and other key examples of deepening US-Australian military engagement/integration. In doing so it maps the extent and depth of Australian and US military collaboration in the name of securing the Indo-Pacific, especially where these are occurring in the Pacific Islands region. This includes Australian-US collaboration in marine domain awareness initiatives in the Pacific and the range of activities organised under the Australia-US enhanced force posture initiatives.

This paper is split into two sections. Section one begins with an examination of what exactly AUKUS is, what specific activities are being organised in its name, and the price tag accompanying these developments. Section 2, in turn, examines the broader pattern of militarisation of which the AUKUS developments form a crucial aspect. Of particular concern is the widening and deepening level of military integration being pursued by the Australian and US militaries, specifically in Australian territory under the Australian-US Force Posture Agreement. Some important consequences of these developments are discussed, however, for a more detailed discussion of what AUKUS and US-Australian militarisation means for the Pacific region, see discussion paper three.
A2/AD - Area Access/Area Denial
AUKUS – the trilateral security pact signed by Australia, the UK and the US
ADF – Australian Defence Force
ANZUS – Australia, New Zealand, and the US defence alliance
DPWP – Defence Policy White Paper (Australia, 2016)
FPWP – Foreign Policy White Paper (Australia, 2017)
DCP – Defence Cooperation Program (Australia)
DSR – Defence Strategic Review (Australia, 2023)
DSU – Defence Strategic Update (Australia, 2020)
FOIP – Free and Open Indo-Pacific
FPA – Force Posture Agreement (Australia and the US)
HMAS – Her Majesty's Australian Ship
IAEA – International Atomic Energy Agency
NC3I – Nuclear command, control, communications, and intelligence
PMSP – Pacific Maritime Security Program
RAAF – Royal Australian Air Force
RAN – Royal Australian Navy
SCS – South China Sea
SEA – Southeast Asia
SOFA – Status of Forces Agreement
SPNFZ – South Pacific Nuclear Free Zone (Rarotonga Treaty)
SRF-West – Submarine Rotational Force West (UK, US, and Australia)
SSN – Nuclear-powered attack submarine
The Quad – the Quadrilateral Security Dialogue
UK – United Kingdom
US – United States of America
USINDOPACOM – US Indo-Pacific Command
What is AUKUS?

AUKUS is a comprehensive trilateral security pact involving the United States, the United Kingdom, and Australia. Unlike a traditional security alliance, such as those already in place between the participating nations, AUKUS serves primarily as a technology accelerator agreement and seeks to establish the frameworks for greater military integration. According to statements by AUKUS leaders, the official goal of partnership is twofold: first, it seeks to "strengthen the ability of each government to support their security and defence interests"; and second, it aims to "develop and provide joint advanced military capabilities" in order to promote "security and stability in the Indo-Pacific region".

The implicit aim behind these official statements is, however, that AUKUS will dramatically escalate the strategy of containment and strategic denial that the United States and its allies are pursuing with regards to China by enhancing the collective military capacity and interoperability of the partner states, especially Australia.

In service of these objectives, AUKUS consists of two distinctive yet interconnected initiatives, commonly referred to as "Pillars." Pillar 1 centres on helping Australia to acquire conventionally armed nuclear-powered submarines (nuclear submarines) while Pillar 2 is dedicated to the development and provision of what are referred to as "advanced joint-military capabilities". These pillars are examined in turn.

Pillar 1: Nuclear-Powered Submarines

While Pillar 1 is ostensibly about supporting Australia to acquire nuclear submarines, practically, the project involves significantly more. It is a multi-decade, multi-billion dollar project explicitly designed to more deeply enmesh the US, UK, and Australian navies and military-industrial complexes and facilitate Australia constructing, acquiring, and learning to operate and maintain nuclear-powered submarines in order to expand the partner states' "individual and collective undersea presence in the Indo-Pacific" through "interoperable nuclear submarines".

The steps for achieving the objectives of Pillar 1 are set out in the "AUKUS Optimal Pathway Report" released in March 2023. An overview of these steps is provided in Figure 1. However, it is worth looking at these developments and the conditions required for them to occur in detail as they reveal some of the most important characteristics of AUKUS.
In examining the various aspects of Pillar 1 it is important to note that certain developments are likely to be far more impactful than others, especially in the near-term. Despite the overarching aim of helping Australia acquire nuclear-submarine capabilities, the first submarines under Australian control won’t arrive until the 2030’s at the earliest, and even then, there is significant doubt over whether this will happen at all. The reasons for this include the Australian Department of Defence’s woeful track record of managing (far less) complex procurement projects, a likely lack of willingness in the American government to sell US nuclear submarines to Australia in the future, and the capacity of the US and UK submarine industrial bases to support the manufacture of additional AUKUS submarines. Of greater immediate concern, therefore, are the increasing port visits from US and UK nuclear submarines with the aim of establishing a permanent regional submarine force from 2027 onward and the expansion of the military industrial complex required to support the development of a nuclear submarine industry and force in Australia.

1) Transfer of Nuclear Technology

Foundational to Pillar 1 is the US and UK sharing nuclear propulsion technology with Australia and transferring nuclear fuel into Australian care – both of which represent significant precedents in the context of nuclear non-proliferation (discussed in more detail in discussion paper three). It will be the first time in history that a non-nuclear state has used a special loophole in the nuclear non-proliferation treaty (Article 15) to acquire nuclear material outside of the supervision of the International Atomic Energy Agency (IAEA) and first time nuclear propulsion technology has been shared with a non-nuclear state. As a result, Australia, the US, and the UK have gone to great lengths to stress the non-proliferation standards of the AUKUS project and their ongoing commitment to existing non-proliferation treaties.

In seeking to make the case that AUKUS does not represent a threat to the nuclear security architecture, the optimal pathway lays out a series of safeguarding steps:

1. Australia will not seek nuclear weapons, engage in uranium enrichment, or reprocess spent fuel. The nuclear submarines will be conventionally armed.
2. The project will not produce its own nuclear fuel but will use complete, welded power units that require no refuelling during their operational life.

3. The nuclear fuel provided to Australia through AUKUS cannot be used for weapons without complex chemical processing facilities, which Australia neither has nor intends to build.

4. All nuclear activities under AUKUS will be governed by Australia's Comprehensive Safeguards Agreement (CSA) and Additional Protocol (AP) with the IAEA.

5. Australia has committed to manage all radioactive waste generated through the acquisition and operation of our nuclear-powered submarines on Australian soil (and will not dump nuclear waste at sea).

Because of these safeguards, AUKUS proponents make the extraordinary claim that their approach will actually "strengthen the nuclear non-proliferation regime and set the strongest non-proliferation precedent."\(^{10}\)

This argument is interrogated in much greater depth in discussion paper three.

2) Closer integration of Australian, US, and UK submarine navies and industrial bases

Another crucial aspect of Pillar 1 is the closer integration of the US and UK nuclear submarine navies and industrial bases in order to help Australia develop the capability to build, operate, and maintain a fleet of nuclear submarines, as well as to build its capacity to support the deployment of US and UK nuclear submarines in the region. Starting from this year (2023) Australian military and civilian personnel will be embedded in the US Navy, the Royal (UK) Navy, and in the submarine industrial bases of both the US and UK. Also beginning in 2023, Australia will begin to receive an increasing number of "port visits" from US and UK nuclear submarines. In order to facilitate this and future interoperability, Australia will make significant upgrades to HMAS Stirling (Australia's submarine base in Western Australia) in order to support nuclear submarine maintenance and operations\(^{11}\).

3) The formation of a distinct AUKUS nuclear submarine force operating out of Australia

Building on the integration agenda above, Australia will, as early as 2027, be regularly hosting nuclear submarines from the UK and US at HMAS Stirling as part of a distinct joint submarine force (Submarine Rotational Force West or SRF-West). This closer and more structured submarine engagement is intended to "accelerate" the development of Australian Navy personnel, workforce, infrastructure, and regulatory systems capabilities with regards to operating nuclear submarines\(^{12}\).

The Australian Department of Defence indicates this rotational force will comprise one UK and up to four US nuclear submarines.

The importance of SRF-West should not be understated - it is being described as "one of the most significant force posture initiatives" put forward by the Biden administration and could result in a two-fold increase in the number of nuclear submarines West of the International Date Line\(^{13}\).

Furthermore, the location of HMAS Stirling "enables the dispersal of submarine forces more widely in the Pacific and provides a third base from which the U.S. Navy can operate."\(^{14}\) Indeed, HMAS Stirling could likely become a trilateral base for "everything from forward-based maintenance, repair, and overhaul to coordinated mission planning and sustainment"\(^{15}\), making it clear that the SRF-West has been specifically designed to suit US strategic interests and nuclear deterrence architecture by providing an alternative base of operations for their submarine force to Guam. These trends will only be reinforced by the "Enhanced Maritime Cooperation" projects being pursued bilaterally by Australia and the US as part of their broader suite of Enhanced Force-Posture Initiatives (discussed in more detail below).
The development of a distinct rotational force is also significant in the context of nuclear deterrence architecture as both the US and UK are nuclear weapons states with nuclear-armed submarines. Little information has been given on whether visiting US and UK submarines will be armed with nuclear weapons. However, by the logic of nuclear deterrence to which both powers subscribe it seems highly probable that they will – if not now, then in the near future.

Different submarines play different and distinct roles. The submarines participating in SRF-West are likely to be US Virginia class and UK Royal Navy Astute class “attack” submarines. Both classes, at present are generally not nuclear armed. However, the US military has indicated it wants to develop a new range of nuclear warheads to arm its Virginia class submarines sometime in the near future\textsuperscript{16}.

Worryingly, in the context of this ambiguity, attempts to gain clarity over the parallel issue of potentially nuclear-armed bombers entering Australia (discussed below) were shut down in by the Australian Foreign Minister, suggesting the Australian government expects US vessels and aircraft to be nuclear armed, but will not seek information to maintain deniability in line with the US policy of neither confirming nor denying the presence of nuclear weapons\textsuperscript{17}.

4) Australia purchasing nuclear submarines from the US

Following the establishment of SRF-West, the next step in the AUKUS optimal pathway is Australia purchasing US Virginia Class from the US. In the early 2030s, the US government, pending congressional approval, intends to sell 3 nuclear submarines to Australia, with provisions for selling up to 2 more (N.B., these are distinct from the AUKUS-specific nuclear submarines that Australia, the US and the UK intend to build for Australia). In return for purchasing US nuclear submarines, Australia has also committed to “help improve the US submarine construction facilities to increase the production rate of new Virginia class submarines”\textsuperscript{18}. In practice, this means Australia will invest AUD 3 billion into American submarine shipyards\textsuperscript{19}.

5) The construction of AUKUS-specific nuclear submarines

The final aspect of the AUKUS optimal pathway (and by far the most vague) is Australia actually acquiring its own, AUKUS-specific nuclear submarines and the ability to build an as-yet-undefined number of these vessels at its shipyards in South Australia\textsuperscript{20}. The final number of AUKUS-specific submarines Australia plans to acquire – which will be built by both the UK and Australia - is not clear\textsuperscript{21}. However, what is clear is that any attempt to manufacture such vessels in Australia will require significant infrastructure upgrades to South Australia’s existing shipyards, works for which will begin in 2023. Australia also plans to use these shipyards to manufacture components for use by the UK and US production lines, before commencing construction of the first AUKUS nuclear submarines. It is (very optimistically) anticipated that the first AUKUS submarines will be delivered in the early 2040s.

6) Other important developments in service of the acquiring nuclear submarines

There are several other important elements included in the optimal pathway report. For many of these elements, details and timelines are still lacking.

- The development of a new east coast naval base capable of hosting nuclear submarines. This will likely occur at one of three already identified sites (one in Queensland and two in New South Wales). However a decision on where exactly this base will be has been deferred to after the next Federal election (2025)\textsuperscript{22}.
Pillar 2: Advanced Capabilities

The second initiative being pursued through AUKUS is the AUKUS Advanced Capabilities Pillar (Pillar 2). Pillar 2 centres around the collaborative development of advanced military capabilities across a range of conventional and non-conventional (e.g., quantum mechanics) military domains through the exchange of advanced military technologies (both developed and in development) and the integration of partner state's military forces. It encompasses a wide range of activities and projects that will see Australia become increasingly enmeshed in the US military-industrial complex. Indeed, it explicitly sets out to “deepen government, academic, and defence industrial base cooperation on advanced [military] systems”\(^\text{25}\). Significantly, Pillar 2 carves out a substantial role for AI and autonomous weapons systems.

There are eight areas of “critical defence and security capabilities” being pursued under Pillar 2 (referred to as capabilities). Each capability is led by a trilateral working group, with a joint steering group overseeing the working groups and a senior officials group providing overall direction\(^\text{26}\). The capabilities include undersea capabilities; quantum technologies; artificial intelligence and autonomy; cyber security; hypersonic and counter-hypersonic missile development; electronic warfare; integration of commercial technologies into defence apparatus (specifically “warfighting needs”); and intelligence\(^\text{27}\).

There remains relatively little information about the workstreams of the eight priority areas – a joint factsheet published by the three countries in April 2022\(^\text{28}\) provides the most detail alongside two research papers from the US Congress and UK Parliament\(^\text{29}\). However, from what is known, Pillar 2 is likely to be as, if not more, significant for the Pacific region than Pillar 1. Certainly, it has a far more immediate development trajectory, with works on priority areas already well-established (see below). Furthermore, the ambitious agenda of military and industrial integration across all partner states points to the possibility of “wide-reaching societal and economic implications, since much of the research and development capacity sits in civilian industries and universities”\(^\text{30}\). There is also the issue of the technologies themselves, with “no way to predict how they will develop or be adopted for military purposes”. Worryingly, there are comments from AUKUS leaders “point to the likelihood of various combinations of lethal and autonomous capabilities” emerging\(^\text{31}\). Finally, unlike Pillar 1, Pillar 2 may be open to other “trusted partners” such as NZ, Japan, Canada, expanding the scope of dangerous militarisation in the region\(^\text{32}\).

Pillar 2 capability workstreams: current status and future developments

1) Undersea capabilities

This capability area centres on unmanned, underwater vehicles (UUVs) with applications in intelligence, surveillance and reconnaissance, anti-submarine warfare, anti-surface warfare, and minesweeping\(^\text{33}\). The undersea capabilities working group has already established the AUKUS

- Significant investments in expanding and deepening military-industrial complex to create a “pipeline” of people to fill submariner positions, nuclear safety/regulatory positions, and nuclear submarine builders and engineers. Steps are already being taken to increase the number of specialist courses at Australian higher education institutions to grow this “talent pool”\(^\text{23}\).
- The development of a submarine agency and the establishment of an independent regulator, responsible for regulating the Australia nuclear submarine developments (Australian Nuclear-Powered Submarine Safety Regulator)\(^\text{24}\).
Undersea Robotics Autonomous Systems (AURAS) project to develop autonomous underwater vehicles that can serve as a “significant force multiplier”\(^{34}\). It is expected to begin trials in 2023.

The work being undertaken in this capability area may or may not be connected to the Australian government and US company Anduril Industries’ recent partnership aimed at delivering three extra-large autonomous undersea vehicle prototypes to the Royal Australian Navy (RAN) by 2025”\(^{35}\).

2) Quantum technologies

This capability area is concerned with developments in quantum technologies as they pertain to communications systems, sensor capabilities, and information processing and security\(^{36}\). Already the working group has established the AUKUS Quantum Arrangement (AQuA) which intends to develop quantum technologies for meeting defence needs in “positioning, navigation, and timing” using trials and experimentation through 2025.

3) Artificial intelligence (AI) and autonomy

This capability area seeks to improve the speed and precision of AI-enabled and autonomous decision making processes in military assets and the capacity for participating militaries to defend against AI-enabled threats. Though definitions vary, in a military context, autonomous “typically refer to technologies that can perform tasks under varying and unpredictable circumstances without significant human oversight, in a manner that replicates certain human qualities (e.g., learning from experience)”.

AUKUS partners recently undertook an AI based autonomous weapons system that involved the “joint deployment of Australian, UK and U.S. AI-enabled assets in a collaborative swarm to detect and track military targets”\(^{37}\).

4) Cyber security

This capability area centres on protecting critical communications and operations systems as well as developing offensive cyber capabilities. Few other publicly available details have been found.

5) Hypersonic and counter-hypersonic missile development

This priority areas is concerned with accelerating the development of hypersonic missile attack and defence systems, especially for use in Australia. In this context, hypersonic and counter-hypersonic capabilities refer to maneuverable weapons that fly at speeds of Mach 5 or greater and the systems intended to counter such weapons respectively.

The Australian government has pursued the development of hypersonic capabilities before AUKUS through a bilateral hypersonic-focused cooperation with the United States\(^{38}\).

There are very few details publicly available, but “analysts have speculated that Australia’s missile testing infrastructure—including a newly opened “Hypersonic Research Precinct” in Brisbane, Australia—could feature significantly in initial projects”\(^{39}\).

6) Electronic warfare

This priority area centres improving interoperability for warfighting with the electromagnetic spectrum and defending against electromagnetic attacks. This area is seen to be especially relevant
because “all three AUKUS nations are to operate the U.S. Air Force E-7 Wedgetail, an airborne EW platform”\textsuperscript{40}. No further details have been found.

7) Innovation

This capability area is concerned with the integration of commercial technologies into the military apparatus specifically to meet “warfighting needs”. In order to facilitate this kind of “innovation”, the AUKUS governments have committed to making “purposeful changes in the technologies, operations, processes, or organizations employed by governments for military purposes” (US Congress 2023, 8).

8) Intelligence through information sharing

As the name suggests, this priority area aims at deepening the information sharing processes between partner governments. It will go beyond the current “5 eyes” intelligence apparatus and may be connected to the joint US-Australia intelligence organisation under development (known as the Combined Intelligence Centre) and to be hosted within Australia's Defence Intelligence Organisation by 2024.

\textbf{How much will AUKUS cost?}

Data on how much AUKUS will cost has only been released for the submarine components of the project. Information on how much will be spent pursuing Pillar 2 activities isn’t readily available. Presently, the overall cost of the AUKUS submarine program is estimated to reach up to AUD $368 billion by the year 2055 (see Figure 2).\textsuperscript{41} Importantly, this figure includes provision for an unprecedented 50% cost overrun, signalling both how underprepared Australia is to undertake this project and how uncertain costing for it are. Indeed, given the Department of Defence's track record of managing the construction of navy vessels, it is likely the delivery of AUKUS submarines will far exceed even the 50% cost-overrun limit.

Spending on AUKUS submarines will occur in several phases. An initial AUD$9 billion expenditure is projected over the initial four years, with AUD $3 billion of this designated for supporting the construction of American nuclear submarines (submarines Australia will later purchase). Subsequently, between 2023 and 2033, expenditure is anticipated to range from AUD $50 billion to AUD $58 billion and by 2055, the total Is expected to reach between AUD $268 billion and AUD $368 billion. In terms of annual GDP percentages, this expenditure averages out to approximately 0.15% per year\textsuperscript{42}.

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<th>Budget forward estimates (FY24 to FY27)</th>
<th>Medium term (10 years to FY33)</th>
<th>Longer term (FY24 to FY55)</th>
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<td>Program costs</td>
<td>$9b</td>
<td>$50b-$58b</td>
<td>$268b-$368b (equivalent to 0.15% of GDP p.a.)</td>
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\textit{Figure 2 - Cost of AUKUS Commitments (AUD) (source: Tillet and Cranston 2023)}

Given the long term nature of AUKUS, details on what and where money will be spent is not exactly clear, especially beyond the next decade. However, some clarity has been given in the latest budget statements. Over the next decade, AUD $4.2 billion has been allocated for the establishment and operation of a new Australian Submarine Agency, with ongoing costs estimated at AUD $483 million.
annually thereafter. At the same time, the government has allocated AUD $87.2 million over the next two years to establish the regulatory bodies tasked with developing and overseeing safety regulations, ensuring compliance with nuclear safeguard protocols, and upholding non-proliferation laws. There will also be an investment of AUD $127.3 million over the next a four-year period to create 4,000 places at universities and other higher education institutions designed to equip individuals with the necessary skills required to support the construction, maintenance, and operation of nuclear-powered submarines.

Finally, reflecting AUKUS's controversial nature and price of lobbying the region to accept the pact, the Australian government has allocated an enormous AUD $52.7 million to the Department of Foreign Affairs and Trade (DFAT) to support diplomatic efforts aimed at mitigating concerns related to the AUKUS program.

Section 2: The Australian and US militarisation agenda beyond AUKUS

For the US and Australia, the military integration being pursued in pillar 2 of AUKUS is only one component of a much broader suites of activities aimed at expanding and deepening US-Australia military ties in service of their security objectives in the “Indo-Pacific”. While there is a long history of Australian and US military cooperation, recent agreements and initiatives (AUKUS among them) point to a “transformation in the character and purpose of the U.S.-Australia alliance—one that will see Australia play an increasingly pivotal role in actively supporting U.S. military operations as part of a strategy of collective deterrence”43. A crucial aspect of this trend is the shift in Australia’s defence posture (i.e., its military capability). As discussed in the first discussion paper, Australia is now pursuing a strategy of “National Defence” which is premised on “forward defence”, or the projection of power beyond Australia’s borders backed by the nuclear deterrence “umbrella”44. Investing in nuclear attack submarines with a global strike capability (AUKUS pillar 1) is one example of the steps Australia is taking in support of this defence posture. However, such a strategy also explicitly relies on closer and deeper ties to the US military and the maintenance of US military hegemony in the region. The Australian Defence Force have long called for closer ties with US military, with recent defence reviews making such calls even more explicit45.

Looking beyond AUKUS, there have been a number of other concrete and concerning steps taken to improve the interoperability of the US and Australian militaries and expand the infrastructural supports Australia provides for US military assets and operatives. While falling just short of establishing a permanent US base on Australian territory, these developments nevertheless make a farce out of the Australian government’s policy of no foreign bases on Australian soil. Moreover, looked at in concert with AUKUS they point to a worrying (though clearly wilful) erosion of Australia’s ability to decide if and how it might support US military operations in the region46.

While the majority of these developments centre on Australian territories, there’s evidence of expanding joint military engagements in the Pacific Islands region too. These developments, in turn, are of course accompanied by independent expansions of both US and Australian military engagements regionally. This section charts these developments in turn, starting with one of the most important mechanisms for US-Australian military cooperation, the Force Posture Agreement (FPA) and the various initiatives currently being organised through it.
One of the primary instruments for increasing US-Australian military engagements/collaboration in recent years is the Force Posture Agreement (FPA) initiated between Gillard and Obama governments in 2011 and formalised in 2014. The FPA extends pre-existing bilateral agreements between Australia and the US concerning military engagements and alongside the "Australia-U.S. Status of Forces Agreement" (SOFA), provides an internationally recognisable legal basis for US military presence in Australia and US military use of Australia facilities.

Although the FPA is continually evolving, its core aspects revolve around the rotation of approximately 2,500 US Marines through northern Australia, primarily in Darwin, increased US military access to and use of Australian air force, navy and army bases, and extensive provisions for the prepositioning of US military equipment, supplies, and materials.

In seeking to create the conditions for realising the enhanced cooperation and integration agenda at its core, the FPA makes some extraordinary concessions for the US military. First, it contains provisions that allow the US military and military contractors unimpeded access to a number of "agreed facilities and areas" (so called "joint facilities") and even provides grounds for them to take operational control of these facilities and areas in delivering upgrades deemed strategically necessary. In addition to unimpeded access, the FPA also makes it possible for the US to conduct a range of military activities including “training, transit, support, the stationing and maintenance of vehicles, vessels and aircraft, temporary accommodation, communications, equipment storage and deployment of force” all without specifying the types or quantities involved in such activities.

Since AUKUS, the last 3 annual Australia-US ministerial consultations, AUSMIN’s, have identified the FPA as the means to significantly expand and deepen US-Australian military integration (alongside AUKUS) with a view to “reinforce the United States' military position in the Indo-Pacific by leveraging Australia's strategic geography, geopolitical alignment, and capacity for high-end military integration”. These include:

1. Enhanced air cooperation through the rotational deployment of US aircraft of all types in Australia and appropriate aircraft training and exercises.
2. Enhanced maritime cooperation by increasing logistics and sustainment capabilities of US surface and subsurface vessels in Australia (connected to Pillar 1 of AUKUS).
3. Enhanced land cooperation by conducting more complex and more integrated joint-military exercises and pursuing a “greater combined engagement with Allies and Partners in the region”.
4. Enhanced space cooperation.
5. The establishment of a “combined logistics, sustainment, and maintenance enterprise to support high end warfighting and combined military operations in the region”.

The combined significance of these initiatives cannot be understated, especially alongside the developments occurring under the auspices of AUKUS. Indeed, the Asia-Pacific Security Regional Security Assessment 2022 called the developments “the most significant enhancements to force-posture initiatives in a generation”.

Moreover, these developments are significant in what they do not specify. The announcements regarding rotational deployments and the establishment of logistics support do not exclude long-range nuclear armed bombers, nuclear-capable ballistic missile submarines, or the other various platforms capable of deploying tactical nuclear cruise missiles, nor do they specifically exclude the...
storage of nuclear weapons. Although Australia continues to stringently deny the possibility of it seeking to obtain nuclear weapons for itself, it is far more opaque when it comes to the possibility of hosting (even temporarily) US nuclear weapons and has consistently acquiesced to the US policy of neither confirming nor denying the presence of nuclear weapons on its vessels or aircraft despite its own policy of “full knowledge and concurrent” when it comes to the kinds of weaponry that enters Australian territory. The significance of these actions in relation to Australia's nuclear non-proliferation obligations, especially with respect to the Rarotonga Treaty, will be discussed in greater detail in discussion paper 3.

Such developments take on a particular significance in the context of Australia's long standing role in US nuclear strike capabilities. Indeed, beyond the tacit support that the FPA lends to US nuclear militarism through its non-specification of the types of military assets the US can bring into and operate in/from Australia, Australia actively supports the US nuclear architecture in a number of other important ways. This support comes largely through the 'joint facilities' and 'collaborative facilities' hosted in Australia which the US uses for its nuclear command, control, communications and intelligence (NC3I). These include:

- The Joint Defence Facility Pine Gap in Alice Springs which operates a signals intelligence interception and missile launch surveillance program.
- The Harold E. Holt Naval Communications Station in the North West Cape which is used for a US nuclear-armed ballistic missile submarine communications
- The Joint Geological and Geophysical Research Station, Alice Springs used for nuclear detonation seismic detection.

Other ‘collaborative facilities’ providing support for US nuclear military through NC3I activities may also include the Space Surveillance Telescope and Space Surveillance Radar, North West Cape.

While a detailed discussion of each of the enhanced force posture initiatives are provided in the appendix, a few key details are worth noting here.

There are significant infrastructural developments associated with supporting the Enhanced Air Cooperation initiative that will make Australia “one of the only places that can be used as forward operating base for the US strategic bomber force.” This will put Australia in the same camp as Guam, Diego Garcia and Hawaii and points to a new role for the Australian military “sustaining and operating dedicated facilities for rotationally basing bombers and associated support aircrafts, US and Australian fighter escorts, ground crews, fuel and munitions stocks, combined mission planning, maintenance facilities…”

This is also true of HMAS Stirling. In addition to the developments taking place through AUKUS, the Enhanced Maritime Cooperation initiative makes it very likely that HMAS Stirling (Australia's Western Submarine Base) will become a “full-spectrum trilateral submarine operating hub for everything from forward-based maintenance, repair, and overhaul to coordinated mission planning and sustainment.”

US and Australian military activities in the Pacific

In addition to the significant military build-up occurring within Australia, the US and Australian pursuit of a Free and Open Pacific (FOIP) is also resulting in an intensification of military and other traditional security engagements in and with the Pacific Islands region.
These include, inter alia, new security agreements; joint military exercises; the establishment of access agreements for military bases and new joint military bases; the expansion of permanent and rotational military presences; and more ambiguous investments in maritime security.

**US military and security arrangements in the Pacific**

The US maintains a vast military presence in the Pacific. It is beyond the scope of this report to survey this presence in its entirety, however, there are some notable developments that point to an expansion and intensification of this presence. The clearest articulation of these ambitions can be found in the Biden administrations “Pacific Deterrence Initiative” (PDI), defined as “a set of prioritized defence investments and activities established by Congress to enhance U.S. deterrence and defence, assure allies and partners, and counter adversary threats in the Indo-Pacific region in response to China’s growing military power”63.

For the 2023 Financial year alone, the PDI has received authorised funding for a range of activities for enhancing the US’s military’s presence and capabilities across the Indo-Pacific. No cost breakdown exists for exactly how much will be spent in the Pacific Islands region specifically, however, given the significant US presence and strategic value placed on the US military’s Pacific “assets”, it is likely that a large portion of such funds will be spent on the Pacific. Funding for the PDI includes64:

- USD $6.46 billion to strengthen “the presence, positioning, readiness, and resilience of U.S. forces in the Indo-Pacific”, including further developments to the US missile defence infrastructure on Guam.
- USD $500 million for activities that “aim to improve logistical support and the stockpiling of munitions, fuel, and other materiel in the Indo-Pacific”
- USD $2 billion for activities that “support the conduct of exercises and training for U.S. and partner forces in the Indo-Pacific, as well as experimental development of new capabilities”
- USD $1.8 billion for activities that “aim to build new infrastructure and improve existing facilities in the Indo-Pacific”. Significantly, “over half of this category is allocated towards military construction projects in Guam, Japan, Australia, and the Mariana Islands”. It also likely includes funds for the new military facility in FSM announced in 202165 and a high-frequency radar system in Palau (currently under construction).
- USD $732 million for activities that “aim to improve the militaries and security forces of U.S. allies and partners in the Indo-Pacific”.

Much of the spending set out above is likely destined to support the substantial (and growing) US military presence across what the Biden Administration’s 2022 Indo-Pacific Strategy refers as “the bedrock of the U.S. role in the Pacific”66 – the compacts of free association between Palau, FSM and the Republic of the Marshall Islands. The recent renegotiation of these agreements point to an intensification of the US’s right to construct military facilities on the Islands and engage in “strategic denial”, foreclosing any third party access to islands territories and territorial waters for military purposes. Indeed, in renegotiating the compacts of free association, US officials have been increasingly insistent that it is their right to deny third-party military forces access to not only the islands themselves, but their exclusive economic zones (EEZs) too. However, through Articles 58 and 87, UNCLOS preserves the rights of states to engage in navigation and overflight in the EEZs of other countries. As such, there is no legal basis for the US’s claims to be able to deny foreign militaries access to the compacts of association EEZs.

Beyond Micronesia, the US has recently signed a security agreement with PNG. Like Australia’s FPA with US, the US’s new security agreement with PNG gives the US the ability to “station troops and vessels at six key ports and airports, including Lombrum naval base on Manus Island and facilities in
the capital, Port Moresby.” Moreover, across these sites the US would have “unimpeded access” to “pre-position equipment, supplies and materiel”, and could even establish “exclusive use” of some areas to carry out “construction activities”. The agreement will be in force for 15 years.

In addition to the security agreement with PNG, the US has also signed a “shiprider” agreement that will allow US Coast Guard vessels to patrol their waters with PNG security forces participating in patrols.

The US has also announced it will be providing funding for training future military leaders for Fiji, Tonga, and Papua New Guinea under its Pacific Partnerships Program.

**Australian military and security arrangements in the Pacific**

Increased harmonisation and inter-operability between the AUKUS countries will ultimately flow out through the other defence partnerships that AUKUS members have. Australia has deep defence and security relationships across the Pacific, established through a range of both bilateral and regional programs. As a result of these relationships Australian military officers are embedded across regional defence forces and the ADF maintains “a near-continuous… presence in the South-West Pacific”.

Current developments in Australia’s military presence regionally are squarely aimed at meeting their goal of becoming (or remaining) the “partner of choice in terms of development of systems, security agreements and more”. This is part of the broader pursuit of strategic denial central to Australia’s Indo-Pacific strategy as it relates to the Pacific (see Paper 1). In pursuing these objectives, Australia has, in recent years, begun to intensify its military and security activities in the Pacific region. This is only likely to increase, as current Defence Minister, Richard Marles, has openly declared his desire to significantly expand defence cooperation in the region and the government allocating AUD $1.4 billion on expanding defence and law enforcement engagements in the Pacific over the next four years.

One of the longest-standing and most influential aspects of Australia’s military engagement regionally is the Defence Cooperation Program (DCP). Presented as a “means of facilitating cooperative activities between the Australian Defence Force and regional security forces”, the program involves Australia providing a range of military assistances (notionally at the request of partner states) including embedding ADF advisers in regional military and security forces, training initiatives and bilateral exercises, capacity building initiatives, and equipment and infrastructure projects. Overall, the DCP (which includes programs in Southeast Asia) cost AUD $227 million in 2022-23 financial year.

What is considered one of the most important aspects of the DCP is the Pacific Maritime Security Program (the replacement of the Pacific Patrol Boat Program, the PPBP). Through the PMSP, Australia is providing 22 patrol boats to 15 Pacific Island countries and Timor-Leste, along with training and programs for “enhanced regional coordination” on matters of maritime security. The PSMP is accompanied by an extensive regional aerial surveillance program and is expected to run for 30 years at a cost of AUD $2 billion. While geared toward supporting Pacific nations patrol and ostensibly “secure” their maritime territories from various security threats (e.g., IUU fishing, drug trafficking etc.), the PMSP (and the PPBP before) has been explicitly identified as supporting Australia “secure its maritime approaches from powers or forces hostile to western interests”. This is because, although the boats themselves are the sovereign property of the recipient countries, the program has “effectively established an Australian-controlled network of maritime surveillance in the Pacific Islands, which has enabled Australia to gain situational awareness throughout the maritime region” (emphasis added).
Beyond regional military programs, Australia has been aggressively pursuing a range of bilateral military engagements. In 2018 Australia announced they would be redeveloping the Lombrum Naval Base on Manus Island in PNG with the help of the US. The expected cost of the base upgrade (which is still happening) is AUD $175 million. Through details are lacking, the base will be owned and run by the PNGDF with ADF able to make use of the facility for joint training exercises and mentoring programs. The US military, through the US-PNG security agreement, will have a far more expansive remit to use the redeveloped base (as noted above).

Beyond Lombrum Naval Base, Australia is pursuing an “ambitious” military agenda in PNG and wants to deepen existing military cooperation with a “treaty level” security agreement (much like the US) as soon as possible. Although significant progress has been made, negotiations are ongoing. In early May, however, it was announced that PNG Defence Force personnel will also be embedded with the ADF.

Together with the Lombrum base redevelopment and the US security and shiprider agreements, these developments raise important “issues of command and control, of non-discriminate interoperability and training of naval officers, the parking of Australia’s [and US] hypersonic military transport assets and munitions”.

Australia is also expanding its engagement with Fiji. In October 2022, Australia and Fiji signed a status of forces agreement, or SOFA. This is seen to be the first step towards greater military engagement and complements Australia’s funding for the redevelopment of the Black Rock Military Base in Fiji.

Australia has also been progressing a security agreement with Vanuatu that was signed in December 2022. The agreement has already been the cause of significant trouble in Vanuatu, in the context of AUKUS.

Australia has also recently expressed that it is willing to support Pacific governments with interest in setting up a military. On a visit to the Solomon Islands, Defence Minister Richard Marles declared Australia was "very keen" to help Solomon Islands set up its own defence force (and possibly Vanuatu too). This raises some very important questions about the purpose of such forces, in whose interests they will serve and how they will be financed in the face of national debt and deficits.

Finally, Australia has committed significant funds to two regional security institutions: the Pacific Fusion Centre and the Pacific Security College. The role of these institutions in servicing both traditional and non-traditional security priorities is not clear.

Conclusion: Key takeaways

There are several important takeaways from the AUKUS security pact, the activities being organised through it, the broader patterns of force integration of which it is a part, and the intensifying US and Australian military engagements regionally.

First, these developments unequivocally reinforce the militarised approach that the US and Australia are taking to achieve their strategic objectives under the Indo-Pacific security framing and their vision of a “Free and Open Indo-Pacific”. Both AUKUS and the enhanced force posture initiatives between
the US and Australia are designed to dramatically escalate the militarised strategy of containment the US is pursuing with regards to China by significantly enhancing the military capabilities of its key partner in the region (especially Australia) and the ability for Australia to support it in its war fighting capabilities regionally (through joint-force integration and infrastructure developments). In doing so, AUKUS and the broader pattern of military integration can be read as an explicit threat to would-be enemies of Australia and the US (i.e., China) under the euphemism of “deterrence”.

Second, and relatedly, AUKUS and the enhanced force posture initiatives are a clear demonstration of Australia’s willingness to reinforce, expand, deepen its alliance commitments to the US. And, because of this extraordinary commitment, these developments have firmly locked Australia into joining any future war effort by the US in the region while simultaneously raising the stakes of such a war occurring (through the dramatic escalation of military capabilities in the region). Despite what proponents of AUKUS argue, Australia has almost completely forgone the choice of participating in a future warfighting alongside the US: it is inconceivable that America would sell submarines to Australia unless it was absolutely certain that such submarines would be used to support any military endeavour they view as necessary (they are simply too valuable to the US force posture).

This second point is revealing of a third feature of AUKUS and the broader pattern of military integration - that Australia is incapable of imagining an Asia-Pacific region that is not militarily dominated by the United States and will continue to align all its activities in the region in accordance with this imagined future. This is reinforced by the extraordinary timelines being pursued under AUKUS – pretty much half a century. Perhaps the most significant aspect of this commitment is the efforts to make Australia a proxy base for the US military. Through AUKUS and the combination of the FPA and other defence agreements with the US, Australia will soon be the “only ally in the world to host and support military operations by forward-deployed U.S. strategic bombers and nuclear submarine attack submarines, and it’s fast becoming a hub for other forms of power projection”.85 As Richard Tranter puts it, Australia has bent over backwards to provide the US with “secured areas under its control from which it may conduct a war, and second, with comprehensive logistical support for any such folly” (Tranter 2023). Concerningly, security pundits believe that “as these new force posture initiatives mature and become more central to American plans, U.S. warfighters will not only be reliant on Australian bases, infrastructure, logistics, and prepositioned equipment. They’ll also come to depend on ADF personnel and military platforms for a wide range of supporting, auxiliary, and operational roles as part of a combined effort to preserve the regional balance of power and deter Chinese aggression.”86 Such positioning of Australia may also impact its ability to maintain other relationships in the region, particularly good economic relations with China.

Fourth, the sum total of funds committed to the various aspects of both AUKUS, the enhanced force posture initiatives and US-Australian military engagements are astronomical. AUKUS alone, as a multi-billion dollar, multi-decadal investment, represents the single biggest defence spend in Australia’s history (and one of the biggest national investments full stop). Furthermore, for AUKUS in particular, such funds are tied up in subsidising the American and British weapons manufacturing industry and investing heavily in the expanding and deepening the military-industrial complex in Australia. This is particularly true of AUKUS Pillar 2, which is predicted to have “wide-reaching societal and economic implications, since much of the research and development capacity sits in civilian industries and universities.”87

Fifth, with respect to the Pacific specifically, the expansion of US and Australian military engagements in and with the region is likely to increase the prioritisation of military issues in security matters and expand the role of the military in delivering security initiatives. Moreover, the growing military
presence in the region raises the stakes in a possible future conflict. While this is most acute for the heavily militarised US territories in the Northern Pacific, it is also true of PNG and other states being draw into the Australian and US Indo-Pacific gambit. These consequences will be explored further in the following discussion paper.

Finally, with respect to AUKUS at least, the pact is not set in stone, despite its lofty ambitions. As neither an alliance nor treaty nor a legally enforceable agreement it does not have to happen. Domestically, there is mounting pressure against the Australian government’s pursuit of AUKUS and key aspects of AUKUS – namely the purchasing of US nuclear submarines – are contingent on Congressional approval in the US. With rising debt and defence concerns over undercapacity in US Navy, the US may not wish to provide Australia with any of its submarines in the future, recent assurances non-withstanding.88

Appendix A: Enhance Force Posture Initiatives

The Enhance Force Posture Initiatives

Marine Rotational Force-Darwin (MRF-D)

The MRF-D refers to program in which a contingent of US marines (approximately 2500) is regularly rotated through Darwin, usually on 6-month rotations. While on rotation, the marines engage in a variety of training exercises and joint activities with their Australian counterparts. These exercises are designed to improve interoperability, increase readiness, and strengthen the ability of both forces to work together effectively, with a specific focus on capabilities in the Indo-Pacific region. To this end, joint exercises and training often occurs with the armed forces of regional partners including the Philippines, Thailand, Indonesia, Malaysia, Brunei, Cambodia, Bangladesh, New Zealand, Tonga, and the French military force in the South Pacific organised as the New Caledonian Armed Forces (FANC).89

Though the MRFD force is much smaller than US marine contingents elsewhere, the degree to which ADF counterparts are becoming increasingly integrated with US forces through “training, doctrine, logistics pre-deployment, interoperability, and combined operational planning, including for coalition operations in Korea”90 is making the military significance of this force clear. Indeed, examined in concert with the other initiatives, it is clear that the US intends to develop the Darwin hub into a “combined contribution to US-led regional rapid deployment capability for East and Southeast Asia”91. This will be supported by the already dense communications connections between ADF training grounds, air force bases, the ADF headquarters and the Indo-Pacific Command in Hawaii.92

Enhanced Air Cooperation

The EAC began in 2017 but has been significantly expanded since the 2021 AUSMIN. In its most recent form, the EAC has committed Australia and the US to developing the airfields, fuel depots, prepositioned weapons stores, and what are called the “habits of interoperability” necessary for operating and sustaining the US’ nuclear-capable Bomber Task Forces out of northern Australia. Additionally, and in support of this objective, the EAC includes plans to establish a US Air Force Mission Planning and Operations Centre in Darwin.
The importance of these developments is not that Australia will be hosting US strategic bombers - this has been happening for a long time, initially in 2006, and more systematically since 2018. What is important are the infrastructural supports being developed that will make Australia “one of the only places that can be used as forward operating base for the US strategic bomber force” 95. This will put Australia in the same camp as Guam, Diego Garcia and Hawaii and points to a new role for the Australian military “sustaining and operating dedicated facilities for rotationally basing bombers and associated support aircrafts, US and Australian fighter escorts, ground crews, fuel and munitions stocks, combined mission planning, maintenance facilities…” 96

One of the key infrastructure developments being pursued is a suite of upgrades to the RAAF base Tindal in the Northern Territory that includes a parking apron for nuclear-capable US bomber aircraft 97. However, beyond RAAF Tindal, RAAF Scherger near Weipa in Queensland and RAAF Curtin near Derby in Western Australia will also be expanded to service aircraft used by both Australia and the US including the F-35 Lightning, Super Hornet fighters and C-17 cargo planes 98.

Under the EAC, Australia will also host future rotations of US Navy Maritime Patrol and Reconnaissance Aircraft to Australia “to enhance regional maritime domain awareness” 99

Enhanced Land Cooperation

No significant details have been released on this initiative beyond that it will involve “a range of complex, integrated and combined engagement activities with allies and partners in the region”, most likely these will centre on training and exercises.

Enhanced Maritime Cooperation

The EMC is a new initiative under the FPA and one intimately connected with the submarine components of AUKUS. It is all about the Australian Defence Force’s (ADF) ability to sustain and integrate with US naval forces.

In addition to the developments taking place through AUKUS, the EMC makes it very likely that HMAS Stirling (Australia’s Western Submarine Base) will become a “full-spectrum trilateral submarine operating hub 100 for everything from forward-based maintenance, repair, and overhaul to coordinated mission planning and sustainment” 101.

Combined Logistics Sustainment and Maintenance Enterprise (CoLSME)

This is perhaps one of the most significant aspects of deepening US-Australian military engagements. Like the EAC, its importance lies in the commitments Australia is making in supporting US military operations in the Indo-Pacific, including active military conflicts. As the initiative explicitly sets out, the whole purpose of the CoLSME is to support “high-end warfighting and combined military operations” in the region. As a key priority for the US, both governments have already announced their “intention to pre-position US Army stores and materiel at the Bandiana Army base, near Wodonga in Victoria, as a precursor for longer-term establishment of an enduring Logistics Support Area in Queensland” 102.

Enhanced Space Cooperation (ESC)

No significant details have been released beyond that this initiative will involve “closer cooperation through increased space integration on existing exercises and operations” 103.
Most notably the ANZUS treaty between Australia and the US.


The partners of AUKUS have repeatedly sought to reassure the global community that the nuclear submarines that Australia acquires will be conventionally armed – i.e., they will not be armed with nuclear weapons. What is not clear is whether they will have the capacity to be nuclear armed.


Ibid

The White House, “FACT SHEET 2022”

The White House, “Joint leaders Statement on AUKUS (2)”

Ibid


Ibid.


Richard Marles, “AUKUS Pathway”


The White House, “FACT SHEET 2022”.
In pursuing their objectives across the eight “critical areas” the Pillar II working groups will engage in what the US Department of Defense describes as “international armaments cooperation”. This might involve the exchange of controlled technical information; the exchange of military, civilian, and industry personnel; cooperative research, development, testing, and evaluation (RDT&E) projects (including through civilian education institutions); joint procurement efforts; and other acquisition partnerships. See: Parrish and Nicastro, “AUKUS Pillar 2”

Already there is debate occurring within NZ about the possibility of signing onto the Pillar 2. Given the focus on developing and integrating high-technology military capabilities across militaries, it is likely that only the most advanced militaries among US-aligned states will participate.


This can be broadly defined as the reliance on American nuclear forces to deter any nuclear attack on Australia.

The Agreement states (Article VII):

“United States Forces and its contractors shall have unimpeded access to Agreed Facilities and Areas for all matters relating to the pre-positioning and storage of defence equipment and supplies including delivery, management, inspection, use, maintenance and removal of such pre-positioned material.

As mutually determined by the Parties, aircraft, vehicles and vessels operated by or for United States Forces shall have access to aerial ports and sea ports of Australia and other locations, for the delivery to, storage and maintenance in, and removal from, the territory of Australia of United States Forces’ pre-positioned material.”

Quoted in Tranter, “What is the US-Australia Force Posture Agreement?”

As set out by current defence minister Richard Marles: “‘Full knowledge’ means Australia has a full and detailed understanding of any capability or activity with a presence on Australian territory, or making use of Australian assets” while “‘Concurrence’ means that Australia approves of the presence of a capability or function in Australia, in support of mutually-agreed goals.” See Richard Marles, 2023, “Securing Australia’s Sovereignty”, Statement, February 9. From: https://www.minister.defence.gov.au/statements/2023-02-09/securing-australias-sovereignty

See for example the senate estimates hearing involving questions over the possibility of US bombers carrying nuclear bombs into Australia: Greene, “Officials will not confirm”
Note the choice of “operating hub” not base. Although it seems to be functionally irrelevant, Australia does technically have a policy of no foreign bases on its territory.

Townsend, “The AUKUS Submarine Deal”

Parrish and Nicastro, “AUKUS Pillar 2”

Note the PDI is not a separate fund to resource DOD activities, but a representation of how DOD funding is being directed to the goals of the PDI.

It is through the compacts of free association and its ongoing colonisation of Guam and the Northern Mariana Islands, the US maintains a dominant security presence across Micronesia and by extension both the Pacific and the east China Sea.


Emmanuel Maipe, 2023, “Ship-Rider Agreement to be Signed between the US and PNG”, PNG Haus Bung, January 12. From: https://pnghausbung.com/ship-rider-agreement-to-be-signed-between-us-and-png/#:~:text=The%2520Ship%2520Rider%2520agreement%2520will,such%2520as%2520illegal%2520fishing%2520human

The White House, “FACT SHEET 2023”


The PMSP sits alongside new US announcements regarding support for Pacific States in the area of Maritime Domain Awareness. These include: A Coast Guard (USCG) Cutter visit to the Pacific in 2024 to advance maritime security cooperation and expanding Maritime Domain awareness initiatives through the “Indo-Pacific Partnership for Maritime Domain Awareness – Pacific Pilot” – which will bring in “cutting edge maritime domain awareness technology to the Pacific and facilitate coordination on maritime law enforcement and in formation analysis”. See The White House, “FACT SHEET 2023”

Mann and Maykin, “Australia and Fiji sign a status of forces agreement”


Albiston and Johnson, “Pacific treaties must be built with care”


Townsend, “The AUKUS Submarine Deal”

Moses and Troath, “AUKUS is already trialling autonomous weapons systems”


Ibid

Ibid


John Garrick and Michael Hatherall, 2023, “As Australia's military ties with the US deepen, the Top End becomes even more vital to our security”, The Conversation, March 3. From: https://theconversation.com/as-australias-military-ties-with-the-us-deepen-the-top-end-becomes-even-more-vital-to-our-security-199783

Townsend, “Twitter Post October 2022”

Ibid


Note the choice of “operating hub” not base. Although it seems to be functionally irrelevant, Australia does technically have a policy of no foreign bases on its territory.

Townsend, “The AUKUS Submarine Deal”

