Planning the unthinkable war 'AirSea Battle' and its implications for Australia

AUSTRALIAN STRATEGIC

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April 2013



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Acknowledgements

The author would like to thank Peter Jennings and Andrew Davies for their invaluable feedback, and Ms Sheryn Lee for her outstanding research assistance.

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First published April 2013

Published in Australia by the Australian Strategic Policy Institute

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Schreer, Benjamin

Planning the unthinkable war: 'airsea battle' and its implications for Australia / Benjamin Schreer.

ISBN: 978-1-921302-81-7 (paperback)

Series: Strategy (Australian Strategic Policy Institute)

Notes: Includes bibliographical references.

Military planning--United States.

Deterrence (Strategy)

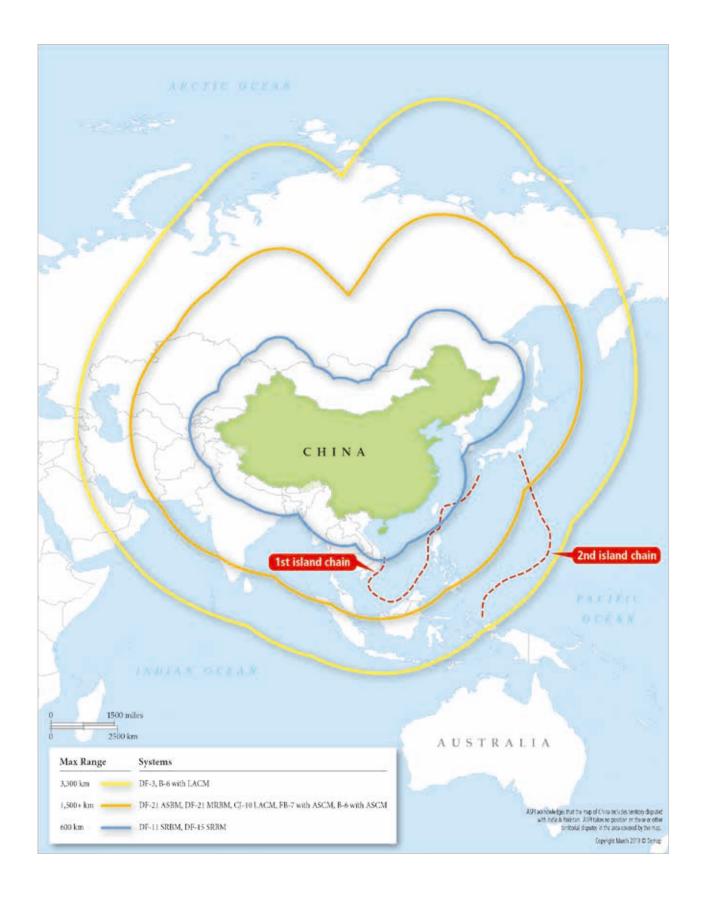
United States--Foreign relations--Pacific Area. Pacific Area--Foreign relations--United States. Australia--Foreign relations--United States. United States--Foreign relations--Australia.

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Australian Strategic Policy Institute.

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EXECUTIVE SUMMARY

As part of America's 'rebalance' towards the Asia-Pacific region, Australia's most important ally is reconsidering its military posture to deal with China's growing 'anti-access/area-denial' (A2/AD) capability, which is gradually eroding America's maritime dominance in the Western Pacific. China's missiles can now reach large parts of the region. In response, the Pentagon is working on an 'AirSea Battle' operational concept that aims to deter and, if necessary, to defeat the Chinese military. While officially the concept isn't targeted against any specific country and is applicable elsewhere (for example, in the Strait of Hormuz), the US military's increased focus on China has given the concept much prominence in the strategic community.

The potential implications of AirSea Battle for Australia are far from trivial. US policymakers consider Australia a key ally in the concept, not least because of our reliability to contribute forces to coalition operations. We have a major interest in supporting America's rebalancing towards the Asia-Pacific region and a credible US war-fighting strategy as a deterrent against a China that's increasingly flexing its military muscles. However, we also need to think through the potential implications of AirSea Battle. After all, this is about a potential military escalation with a major nuclear power.

The Australian strategic debate about AirSea Battle, to the degree that there's been one, has largely centred around two opposing camps: those who see it as a dangerous instrument to 'contain' China and potentially drag Australia into a nuclear escalation between the two great powers, and those who embrace the concept's logic and even argue that Australia should develop long-range strike capabilities to contribute to potential offensive operations against China. However, it's possible to come to a more nuanced position—one that recognises the potential benefits of AirSea Battle while also identifying its shortcomings and the prospects and limitations of Australia's contribution.

The study addresses some key questions related to AirSea Battle: Is it feasible? Does it make strategic sense? How do key allies and partners in Northeast and Southeast Asia view the concept, and what role could they play? What could and should be Australia's specific contributions to AirSea Battle?

Chapter 1 describes China's growing military capacity to pose an increasingly sophisticated A2/AD challenge for US forward-deployed forces. While it's important not to overstate the current power projection capabilities of the People's Liberation Army (PLA), China has already changed the military balance in its 'near seas', particularly in the Taiwan Strait. The PLA doesn't need to reach strategic parity with US forces. Instead, its asymmetric strategy aims to prevent or complicate US interventions in territorial disputes by making the potential costs for American forces prohibitively high. AirSea Battle aims at defeating such A2/AD strategies by withstanding an initial Chinese attack, followed by a 'blinding campaign' against PLA command and control networks, a 'missile suppression campaign' against China's land-based systems, and a 'distant blockade' against Chinese merchant ships in the Malacca Strait and elsewhere. Importantly, it's based on the assumptions that the escalation can be kept below the nuclear threshold, and that Japan and Australia will be active allies throughout the campaign. Far from being just a fancy of Pentagon planners, AirSea Battle has gained institutional momentum and first steps towards its implementation are being taken.

Chapter 2 analyses the feasibility and utility of AirSea Battle. A common criticism is that the concept might be unaffordable, given severe cuts to the US defence budget. Moreover, interservice rivalry might obstruct major shifts of resources. However, despite inevitable budget cuts, the US military will most likely be able to spend well over US\$450 billion (in today's dollars) annually between 2013 and 2021, so significant financial resources will be available for AirSea Battle. The US has already begun shifting some of those resources away from the US Army and towards the Navy and Air Force. Furthermore, interservice rivalries could be mitigated by incorporating the US Marines and the US Army in a broader strategy to counter A2/AD challenges.

The biggest questions about AirSea Battle are strategic. In principle, the initiative should be welcomed as a way to strengthen America's conventional deterrence vis-a-vis China by developing a concept for operations in maritime zones contested by the PLA. Deterrence is based on perceptions about intentions and capabilities. Any Chinese leader would need to calculate the possibility of a US reaction in response to a major military action designed to change the status quo in the Western Pacific. And, contrary to conventional wisdom, states go to war over 'reputational' interests. AirSea Battle could thus make a contribution to regional stability by promoting deterrence in Sino-US strategic affairs.

That said, AirSea Battle is optimised for high-intensity conventional war between China and the US and its allies. It applies only in extreme cases, such as a Chinese attack on Taiwan, PLA missile attacks on Japan or US bases in the region, or the sinking of an American aircraft carrier. However, Chinese coercive military actions in territorial disputes with its neighbours (short of high levels of escalation) are much more likely. AirSea Battle is therefore not a 'catch all' solution to America's conventional deterrence dilemma in the Western Pacific. Moreover, it isn't clear how AirSea Battle fits within a broader US grand strategic framework to deal with China's military rise. As a result, the concept suffers from an image problem, as many observers equate it to US attempts to militarily 'contain' China and wonder about the relationship between operational and political objectives. Analysts have therefore called for the development of a grand strategic framework to guide US Asia–Pacific defence strategy. Allies such as Australia should press for a declassified, allied version of AirSea Battle to have a better understanding about Pentagon thinking.

AirSea Battle also faces the challenge of a potential nuclear escalation. A central element of the concept is the deep penetration of Chinese territory to destroy and disrupt PLA command and control nodes used for conventional operations. But such a 'blinding campaign' could increase the risk of a disproportionate Chinese response, including nuclear escalation. Beijing might well perceive such attacks as American attempts to disarm China's nuclear deterrent and could thus be tempted to nuclear pre-emption. Thus it's important to also consider alternatives debated among US strategists, such as 'offshore control', which refrains from direct strikes against the Chinese mainland while still retaining the capability to deny China freedom of military action in its maritime approaches.

Chapter 3 discusses the potential role of key allies and partners in Northeast and Southeast Asia in AirSea Battle. Not surprisingly, the result is mixed. In Northeast Asia, Japan and Taiwan are the most comfortable with the premises of the concept, given that they're 'frontline' states and deeply worried about China's rise and intentions. Japan, in particular, is moving to acquire significant air and maritime capability to support its US ally in the event of war. Despite the fact that South Korea has also become more concerned about China and has started to shift its defence planning more towards maritime power projection, it's much more ambivalent about the concept. Its main objective remains to defend against North Korean aggression, and its political disputes with China are of much lesser intensity.

Southeast Asian allies and partners seem even more guarded, partly because it's unclear how AirSea Battle could apply to their maritime disputes with China. The Philippines is politically the most supportive and could bring added value as a geostrategic location for US forces. The most potent military power in the region is Singapore, where the US has now forward deployed littoral combat ships and could potentially use naval bases for submarines and repairs. However, Singapore doesn't have maritime disputes with China and is ambivalent about how it would react in times of war. Vietnam and Indonesia could also play important roles in the AirSea

Battle concept. However, both Hanoi and Jakarta are also reluctant to be seen to be close to Washington. As a result, political support for involvement in AirSea Battle planning in Southeast Asia might be low despite regional countries looking to the US to support their hedging strategies against a more assertive China.

Chapter 4 analyses the potential implications of AirSea Battle for Australia. Our political reliability as an ally, our geostrategic position between the Pacific and Indian oceans, and the high standard of the ADF make us a preferred US partner. In the view of some proponents, Australia's maximum contribution could include:

- providing 'strategic depth' for the US ally (including by allowing the US access to Australian facilities), and conducting so-called 'supportive rearguard operations', by protecting forward-operating troops and allied bases in Northeast Asia, and even by developing a long-range strike capability to penetrate Chinese airspace
- conducting 'offensive amphibious strike' operations in the Southeast Asian and South Pacific archipelagos to attack Chinese facilities and troops operating in the area
- contributing to 'peripheral campaigns' (that is, participating in the maritime interdiction of Chinese merchant and energy vessels to threaten Beijing with a crippling 'distant blockade').

The Australian Government has an interest in making an active contribution to the US military 'rebalance'. Providing the US with greater strategic depth is one means to do so. While the rotational deployment of a US Marine Air-Ground Task Force (MAGTF) to Darwin so far has been largely symbolic and not directly tied to America's AirSea Battle planning, the MAGTF in combination with long-range American strike aircraft operating from our north could become an integral component of such an operational framework in a Southeast Asian context. In the (however unlikely) event of a major war in Northeast Asia between the US and China, Australia would most likely allow its US ally to operate from Australian territory. A major upgrade of HMAS *Sterling* to host US carrier strike groups or the use of Cocos Island airfields for US strike aircraft is also a future option should the strategic environment deteriorate significantly. Finally, the ADF could provide niche capabilities (such as tanker aircraft, airborne early warning and control, and airborne electronic warfare assets) and 'backfill' for US assets involved in direct attacks.

That said, fully embracing the logic behind AirSea Battle or developing specific military capabilities to underpin the concept's implementation are so far not in Australia's interests. Openly signing up for the concept would send a strong political message to China that the ADF is now actively planning and equipping for a potential war with the PLA. There's no need to do so—the government's decision to invite the US Marines to Darwin has already displayed Australia's political commitment to the ANZUS alliance. The development of long-range strike capabilities against China would also be an unnecessary provocation to Beijing, let alone a very costly one. Likewise, a serious Australian amphibious strike capability is a rather unrealistic prospect. Finally, a 'distant blockade' against China in Southeast Asian maritime chokepoints (the Malacca, Lombok and/or Sunda straits) is much easier proposed than done. In any event, such actions would be considered by Beijing as an act of war. Still, Australia could play a role in such operations, given our proximity to maritime chokepoints and our maritime and air capabilities.

Australian governments will be able to make a noteworthy military contribution to a US AirSea Battle framework independently of any public commitment to a concept that's still in its early stages and seems designed for a strategic environment in Asia that's yet to materialise.

CHAPTER 1

Introduction

The Obama administration has announced to 'rebalance' towards the Asia-Pacific region to reassure allies and partners about America's commitment in an era of relative US decline and China's strategic rise. Consequently, the US military has started to think about the military strategy needed to support this shift. Previously, its strategy was based on its ability to 'command the commons', which meant that no other power in Asia could seriously contest the US military in the sea, air and space domains. Now, China's military build-up is gradually undermining America's military preponderance. The People's Liberation Army (PLA) is developing a comprehensive anti-access and area-denial (A2/AD) strategy, which it calls a 'counter-intervention' strategy.

This strategy aims at denying American forces the ability to operate freely in China's 'near seas'—an area usually referred to as the 'first island chain'—by restricting deployments of US forces into theatre (anti-access) and denying the freedom of movement of US forces already there (area denial). By threatening to strike at fixed targets such as US bases in Japan and South Korea, and high-value mobile targets such as US carrier strike groups, A2/AD aims to deter or delay US forces entering into a regional conflict, particularly over Taiwan. The strategic aim is to inflict such damage to US military capabilities that the prospect of a prolonged and costly conflict either deters the US from fighting in the first place or coerces it into ending the fight.

While the PLA still has a long way to go before it can challenge the US in the wider Western Pacific, it's already significantly changed the military balance in the Taiwan Strait. In the long term it could even develop capabilities to extend its strategic reach into the 'second island chain', which includes US bases on Guam (Figure 1).

Figure 1: First and second island chains



Source: Modelled after US DoD (2012a:40).

As a result, the Pentagon has started to 'think about the unthinkable': a military strategy for fighting and winning a potential war against China.

As a result, the Pentagon has started to 'think about the unthinkable': a military strategy for fighting and winning a potential war against China. The aim is to deter China from using military action to resolve disputes in the Western Pacific by signalling both resolve and the capability to project power into the first and second island chains despite the PLA's growing ability to hold US forces at risk. Surely, a Sino-US war not only seems a remote possibility but would be catastrophic for the region in general. No-one wants war, but deterrence strategy follows a paradoxical logic: in order to deter war and preserve the peace, the defender has to signal credibility in both intention and capability to go to war with the potential aggressor.

The Pentagon pivots to the Pacific

At the broader strategic level, the US Government has signalled its intent to strengthen America's military presence in the region. In July 2012, Defense Secretary Leon Panetta announced that the US would assign 60% of the US Navy's vessels towards the Asia–Pacific, including six aircraft carriers and most of its cruisers, destroyers, littoral combat ships and submarines. Future capabilities to support this new posture will include fifth-generation multi-role F-35 Joint Strike Fighter (JSF) combat aircraft; enhanced Virginia-class nuclear attack submarines; new electronic warfare (EW) and communications capabilities; improved precision weapons; new aerial-refuelling tankers; new long-range stealth bombers; and advanced maritime patrol and antisubmarine warfare (ASW) aircraft.

Moreover, the 2012 *Defense Strategic Guidance* vowed to ensure America's ability to operate effectively in A2/AD environments. To do that, the US Navy and Air Force had signed a classified memo in 2009 to develop a joint 'AirSea Battle' concept based on integrating naval and air forces to project power in contested zones against an adversary employing sophisticated A2/AD strategies. The 2010 *Quadrennial Defense Review* officially directed the development of AirSea Battle, and the Pentagon established an 'Air–Sea Battle Office' to facilitate the concept's implementation. More recently, Chief of Naval Operations Admiral Jonathan Greenert re-emphasised in a *Foreign Policy* article in November 2012 that AirSea Battle was the key to the US Navy's 'pivot' to Asia (Greenert 2012).

The potential implications of AirSea Battle for Australia are far from trivial. It's about a US strategy to fight a war with China and, given our geostrategic location, the high standard of the ADF and our political reliability as an ally, Australia (alongside Japan) is identified in US strategic debate as a key enabler for the concept. Of course, US defence officials insist that the concept's not specifically aimed at China, but no other country has the ability and the will to pose such a formidable A2/AD challenge to America's leadership in the Asia–Pacific region. It's very hard to disagree with Geoffrey Till:

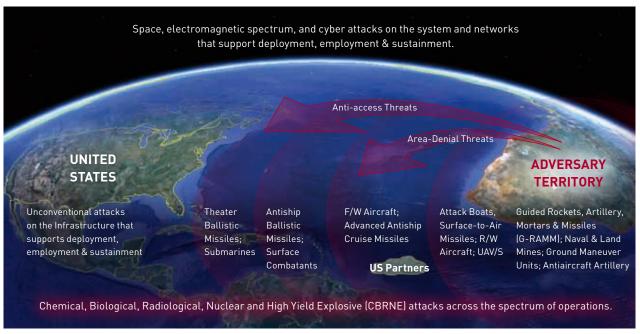
Despite frequent protestations to the contrary, Air–Sea battle ideas are inevitably associated with rather traditional political assumptions which explicitly identify China ... as a putative adversary that needs to be 'offset' in order to preserve a 'stable military balance' in the Western Pacific and more generally. (Till 2012:83–84)

The PLA is emerging as America's 'default adversary' (Dobbins 2012), and AirSea Battle is about maintaining Sino-US deterrence under such conditions.

What is AirSea Battle?

While the Pentagon's current version of AirSea Battle remains classified, the 2012 Joint Operational Access Concept provides a detailed description of how US forces could counter A2/AD challenges (Figure 2). The principal goal is to provide US forces access to and freedom of manoeuvre in contested air and maritime zones. The enemy is to be deterred and, if necessary, defeated through a range of offensive and defensive measures, including attacking sophisticated enemy A2/AD systems 'in depth'. This includes striking deep into enemy territory, as well as targeting its space and cyber capabilities. Highly integrated air—maritime forces will operate across the domains of land, air, sea and space, staging attacks from multiple entry points in a theatre of operations.

Figure 2: Multilayered anti-access/area-denial environment



Source: US DoD (2012b:11).

AirSea Battle is about preparing for a conflict with a 'peer competitor'. Consequently, the US debate draws frequent analogies to the 'Air-Land Battle' doctrine developed during the Cold War to deter the Soviet Union from invading Western Europe. The aim was to offset the Warsaw Pact's numerical advantages through technological superiority and new ways of employing forces on the battlefield. The Center for Strategic and Budgetary Assessment (CSBA), an influential US think tank, has developed a scenario for the application of AirSea Battle in a Sino-US military conflict:

First, the US would concentrate on withstanding initial PLA attacks and limiting damage to American and allied forces. They would then conduct a 'blinding' campaign' against PLA battle networks and intelligence, surveillance and reconnaissance (ISR) systems to deny the PLA situational awareness. US carrier battle groups would be able to enter the 'contested zones' to support a missile suppression campaign against China's land-based missile launchers, surface-to-surface missiles and supporting infrastructure. Long-range strategic strike and submarine-launched weapons would also be used to destroy or degrade China's air-defence assets and to establish US air superiority. In the event of a prolonged conventional conflict, US and allied forces would conduct follow-on operations, including 'distant blockades' against Chinese ships to threaten Beijing with economic strangulation (van Tol et al. 2010).

More specifically, some of the integrated air-sea operations would include:

- US Air Force counter-space operations to blind the PLA's space-based ocean surveillance systems and prevent it targeting US Navy surface ships, in order to give the navy operational freedom to manoeuvre
- Aegis destroyers supplementing other missile defence assets in forward bases in the Western Pacific
- long-range strike operations destroying PLA ground-based, long-range maritime surveillance systems and long-range ballistic missile launchers to expand the US Navy's freedom to manoeuvre and to reduce strikes on US and allied bases
- carrier-based fighter aircraft 'rolling back' PLA manned and unmanned airborne ISR systems and combat aircraft to secure the forward operation of US Air Force tankers and other support aircraft
- US Air Force aircraft supporting ASW operations through offensive mining to enable US Navy ships to conduct 'distant blockade' operations.

Table 1: AirSea Battle mission and capability spectrum

Withstanding initial attack	Networking blinding	Missile suppression	Seizing the initiative
Land- and sea-based missile defence	Precision nodal attack, including penetrating strike, conventional prompt global strike, cruise missiles	Long-range strike, including new long-range bomber, cruise missiles, manned/unmanned combat aircraft, new stealthy penetrating ISR	Increasing carrier standoff and reach (multimission unmanned combat aerial system), cruise and ballistic missile attack
Dispersed basing	Offensive and defensive cyber operations	Precision guided munitions for fixed, mobile relocatable, and hardened / deeply buried targets	ASW
Hardening of selected bases (Guam, Japan)	Space control operations	Undersea capabilities (SSGNs/SSNs/missile pods supporting ISR missions)	Migration to undersea domain
Rapid base repair and regeneration	Hedging operations in space	New capabilities for boost and ascent phase missile attack (air-launched hit-to-kill munitions)	Air and missile defence
Increased range and geostrategic depth to reduce vulnerability of bases	Airborne hedging operations		Air-to-air refuelling

Source: Based on van Tol et al. (2010).

The CSBA report further assumes that China will initiate armed hostilities, that mutual nuclear deterrence will hold even during a prolonged Sino-US conventional war, that Australia and Japan will remain active US allies during the conflict, and that China will attempt to achieve a quick victory.

CHAPTER 2

Challenges

Critics of AirSea Battle focus on three key challenges: shrinking budgets, institutional hurdles and lack of strategic utility. This analysis suggests that while financial and institutional hurdles could be overcome, some of the strategic assumptions behind AirSea Battle are problematic.

Is AirSea Battle feasible?

In the face of a severe US economic crisis, defence budget cuts are inevitable. In 2011, Congress passed the Budget Control Act, which will reduce defence spending by roughly 6% from its planned level in the FY 2013 financial year and by about 10% from previously planned levels each year between FY 2014 and FY 2021. The Pentagon will need to save at least US\$487 billion over the next decade, and a possible 'sequestration' threatens to add at least another half a trillion dollars to that.

Not surprisingly, 'doomsday' scenarios for the US military abound and critics of the Obama administration already see AirSea Battle as dangerously underfunded (Blumenthal 2012). According to some studies, the Pentagon plans to spend roughly US\$267.9 billion on AirSea Battle programs between 2010 and 2016. Aircraft would account for over 60% of expenses, with the JSF alone projected to cost about US\$82 billion (Business Wire 2012). While the Pentagon has yet to provide details of the kinds of systems and numbers required to implement AirSea Battle, the missions outlined above allow the identification of key enablers:

- nuclear-powered attack submarines
- long-range precision strike capabilities, including a new long-range stealth bomber
- cyber, space and other ISR assets
- surface ships capable of ballistic and cruise missile defence
- offensive mining and anti-mining assets
- ASW capabilities
- 'passive defence' of key US and allied bases, such as hardening command centres, communication nodes and hangars, and runway repairs
- 'active defence' designed to destroy enemy aircraft and missiles, including through aircraft, missile, electronic warfare and cyber operations.

Undoubtedly, reduced defence spending will have an impact on some programs essential for AirSea Battle.

Undoubtedly, reduced defence spending will have an impact on some programs essential for AirSea Battle. Shipbuilding is one example: the US Navy has already had to adjust its shipbuilding plan for the next 30 years. It's lowered the long-term goal for the inventory of ships from 328 to between 310 and 316, reduced the number of ships to be purchased from 275 to 268, and announced that it will buy 17 more high-end combat ships and 24 fewer less-expensive support ships. Most likely, the number of destroyers will fall below the goal of about 90 after 2029; attack submarines will fall below the goal of about 48 between 2022 and 2034; and nuclear ballistic missile submarines will fall below the goal of 12 to 14 between 2029 and 2041 (US DoD 2012c). Moreover, there'll be delays in the construction and procurement of systems such as the second Ford-class aircraft carrier; the second America-class amphibious assault ship; the nuclear-powered Ohio-class submarine replacement, the SSBN (X); and the new Virginia-class nuclear-powered fast attack submarine (SSN).

However, delays in such high-end platform acquisitions are the norm rather than the exception. And a slight reduction in platforms won't significantly change the Sino-US naval balance of power in large parts of the Western Pacific for quite some time. The PLA Navy is unlikely to close the large qualitative gap between China and the US in areas such as undersea warfare and ASW (Cote 2011), and it's a long way from developing a serious blue-water navy. As former Defense Secretary Robert Gates has pointed out, it's important to keep in mind that 'as much as the US Navy has shrunk since the end of the Cold War, for example, in terms of tonnage, its battle fleet is still larger than the next 13 navies combined—and 11 of those 13 navies are US allies or partners' (US DoD 2009). The US Navy will thus be able to provide significant capability to an AirSea Battle framework. It's also increased spending on sea-based missile defence and dedicated more resources to less visible areas, such as applied research in future undersea warfare.

A second criticism is that the US military could end up with far fewer JSF combat aircraft, which are deemed a critical AirSea Battle capability. Partly for budgetary reasons, the Air Force has deferred the acquisition of the aircraft. Moreover, the number of F-35As (conventional take-off and landing) to be acquired by the Air Force until 2017 has been reduced from 203 to 166. The planned acquisition of short-range, tactical F-35Bs (short take-off and vertical landing) for the US Marines during the same time period is cut from 50 to 41. Finally, the carrier-based variant, the F-35C CV for the US Navy, has been reduced from 72 to 37 (Blumenthal 2012:329). However, these projections are only based on a four-year framework, and over the long run the services will probably have a significant number of JSFs in their inventories.

For geographical reasons, bases for the land-based F-35A in Northeast Asia will be rather limited and subject to Chinese air and missile attacks (placing a premium on hardening bases and runway repairs). Therefore, the carrier-based F-35C CV variant might be more relevant in an AirSea Battle context, particularly if the objective is not to achieve air superiority over mainland China. Moreover, long-range strategic bombers and submarine-launched cruise and ballistic missiles to target Chinese airfields and launching sites would be more critical, and the Air Force is currently investing in new KC-46A tanker aircraft for aerial refuelling and a next-generation long-range stealth bomber, strengthening conventional 'prompt global strike' capabilities, and new ISR and cyberspace activities. In the future, US forces could also use carrier- and land-based unmanned combat aerial vehicles, such as the newly developed X-47B.

It's essential to put the planned US budget cuts in perspective. Figure 3 shows that the significant growth in America's defence budget since 2001 has largely been the result of rising operational costs related to the wars in Iraq and Afghanistan.

\$800 billion \$700 billion Spending (2005 dollars) \$600 billion \$500 billion \$400 billion \$300 billion \$200 billion \$100 billion \$0 1962 1972 1982 1992 2002 2012 Year Personnel pay and housing Weapons/procurement Operations (e.g. war conduct) Research and development Nuclear programs Construction Other

Figure 3: US defence spending composition, 1962-2013 (2005 US\$)

Source: Plumer (2013).

With those wars coming to an end, some decline in defence spending is inevitable. But there's still a considerable gap in US defence spending vis-a-vis Asian countries, including China—and this doesn't even include allies' defence spending (Figure 4).

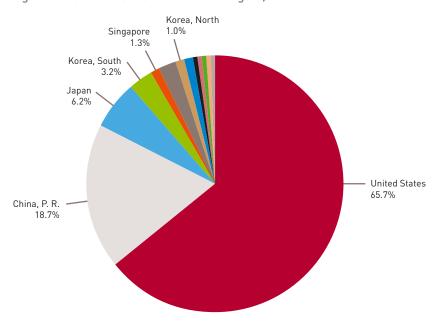


Figure 4: US and East Asian defence budgets, 2013

Source: Singer (2012).

Critics might say that the US has global responsibilities. But if the 'rebalance' to Asia is indeed a priority for Washington, more military assets and spending can be assigned to the region. Furthermore, even if sequestration were to occur, projected US defence spending between 2013 and 2021 would still be substantial (Table 2).

Table 2: Projected US defence spending, 2013–2021 (US\$ billion)

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21
President's FY13 DoD budget request	525.4	533.6	545.9	555.9	567.3	579.3	592.4	605.4	617.9
DoD budget under currently planned sequester	485.7	475.2	488.7	499.2	511.6	524.0	536.5	549.8	563.2

Based on Harrison (2013).

True, depending on whether the projections are in then-year dollars, US defence spending could well be flat over the next decade. Still, there would be enough money to spend on AirSea Battle capabilities, provided US lawmakers and the Pentagon prioritise defence acquisition accordingly.

A second institutional concern related to AirSea Battle is interservice rivalry. Given that it focuses heavily on the US Air Force and Navy, the Marines and the Army naturally see it as a threat to their own funding. An internal assessment by the US Marines concluded in 2012 that implementing the concept would be too expensive and strategically unsound. And the Army has been at pains to find a role within the concept. Moreover, a report by the Congressional Research Service noted that the Navy's focus on very expensive platforms such as the new class of aircraft carriers might be detrimental to comprehensive efforts to counter China's A2/AD challenge:

Particularly in a situation of constrained DoD resources, if enough funding is allocated to the Navy to permit the Navy in coming years to maintain a fleet of about 313 ships including 11 aircraft carriers, how much would other DoD programs need to be reduced, and what would be the operational implications of those program reductions in terms of DoD's overall approach to counter improved Chinese military forces and other missions? (O'Rourke 2012:51)

Despite agreeing in principle on the importance of AirSea Battle, the Navy and Air Force could therefore also compete for scarcer resources.

Overcoming institutional barriers to AirSea Battle won't be easy. Making the concept a political priority depends on political will in Congress and the White House. However, as China keeps modernising its military and extending its strategic reach into the Western Pacific, US strategic policymakers will most likely become even more alarmed about what they perceive as a Chinese quest for leadership in Asia. Furthermore, interservice rivalry could be minimised by assigning the US Marines and the Army a role in a broader strategy to defeat A2/AD threats. For example, MAGTFs such as the one in Darwin could play a role in securing critical maritime chokepoints in Southeast Asia. Consequently, in March 2012 both services developed their own doctrinal contribution to operating in an A2/AD environment (US Army and US Marine Corps 2012).

Does it make strategic sense?

America's regional allies and partners, including Australia, have become increasingly worried about Washington's will and capability to counter the PLA's growing capacity to project military power and to contest maritime space. They have much to gain from AirSea Battle's potential to strengthen conventional deterrence in response to China's growing military power. AirSea Battle is meant to signal US willingness and ability to project military power into these contested zones to defend allies and partners as a contribution to a new system of conventional deterrence vis-a-vis China. As Rod Lyon has pointed out in a recent ASPI study, deterrence in Asia has been 'played rather cautiously and intermittently' (Lyon 2012:23). In order not to jeopardise the option for deeper engagement with China, the US has mostly refrained from making explicit deterrence commitments, particularly regarding territorial disputes. It leaves as ambiguous the conditions under which it would use military force against Chinese aggression in a territorial or other conflict.

Arguably, such a posture of ambiguity has so far served two purposes. First, it's so far avoided making China the explicit adversary of US deterrent policy while leaving some uncertainty in the minds of Chinese decision-makers about the conditions under which the US would resort to force. Second, it's minimised the risk that allies might feel emboldened to take more risky actions in territorial disputes with China on the assumption that the US would come to their support, reducing the likelihood of the US's 'entrapment' in unwanted conflicts or a damaging loss of reputation in case of US non-intervention.

However, it's debatable whether this approach is still feasible in the face of a China that's increasingly testing the resolve of the US and its allies in maritime disputes. Beijing's 'probing' strategies in the South China Sea and the Sea of Japan—for example, in recent conflicts with the Philippines over the Scarborough Shoal and with Japan over the Senkaku/Diaoyu Islands—leave allies wondering about the conditions under which the US would defend their interests. A key challenge for US strategy is therefore how to address the potential credibility problem of American defence commitments if allies fear 'abandonment' in territorial conflicts with China where the US only has 'reputational' interests at stake. For example, some US commentators doubt whether Washington would defend Taiwan in the case of a Chinese attack (Dobbins 2012). And the Philippines might wonder whether the US would support it in the case of a military escalation in the West Philippine Sea.

AirSea Battle offers a partial solution to this dilemma. It signals America's willingness to stay engaged in the region through a strong military presence and if necessary to impose significant costs in response to conventional aggression by the PLA. Any Chinese political and military leadership needs to calculate the potential costs of a first strike against a US target, fixed or afloat. Would Beijing seriously believe the US would not retaliate after the PLA has struck (or even sunk) an American aircraft carrier or attacked US bases in Japan? Would the US back down after a Chinese strike on Guam? Possible, but highly unlikely.

... apart from protecting US economic interests in the Asia–Pacific, the credibility of US leadership in Asia significantly depends on the expectations of allies and partners that the US would come to their defence...

Critics might argue that the US has only 'reputational' interests in most Asia-Pacific conflicts and wouldn't 'trade Los Angeles for Taipei'. That could be true, but Chinese leaders would most likely also consider Thomas Schelling's famous dictum of the 'threat that leaves something to chance'. Indeed, apart from protecting US economic interests in the Asia-Pacific, the credibility of US leadership in Asia significantly depends on the expectations of allies and partners that the US would come to their defence in the event of a conflict with China. Failure to do so, for example in the case of Taiwan, would deal a devastating blow to the US's reputation and deterrence credibility. And contrary to conventional wisdom, states throughout history have often fought wars for fear of a loss of 'reputation' (Mercer 2010). Moreover, would China really attack an American city with nuclear weapons in the knowledge of almost guaranteed annihilation through US nuclear retaliation?

However, AirSea Battle focuses on the high end of the conflict spectrum. Yet, there are only a few scenarios in which the threat of a high-intensity conventional response against PLA aggression appears credible: a Chinese attempt to invade Taiwan, a PLA pre-emptive attack on allied territory or US bases, and a serious attack on US forces afloat. Most other military conflicts involving Chinese forces will probably involve much lower levels of escalation. In these cases, AirSea Battle faces a 'tripwire' problem. In a previous 'AirLand Battle' environment, the trigger was obvious: Soviet Forces advancing across well-defined land boundaries into Western Europe. Tripwires are much less clear in a mainly maritime environment in the Asia–Pacific, where 'red lines' are much more arbitrary.

Moreover, AirSea Battle's 'China dimension' has led to an image problem. As a military operational concept, it's supposed to contribute to a broader US grand strategy for dealing with China's strategic rise. As Sino-US rivalry has intensified, a number of American analysts have called for a military 'containment' strategy vis-a-vis China, and that's certainly the way Chinese analysts have interpreted the 'rebalance' and the AirSea Battle concept (Xiang 2012). So far, the Obama administration has emphasised that its China policy isn't based on containment but on 'selective engagement'. This is certainly true—a comprehensive diplomatic, economic and military containment of China is neither feasible nor desirable. And US China policy is much more nuanced than some Western observers are prepared to acknowledge.

However, the absence of a US grand strategy that outlines the central pillars for dealing with a rising China paves the way for speculation that AirSea Battle presupposes a future Sino-US strategic environment in which military containment is a distinct possibility—hence the frequent analogy between AirSea Battle and 'AirLand Battle'. But, as Doug Stuart has pointed out:

AirLand Battle was designed for a situation in which NATO and the Warsaw Pact were two scorpions in a bottle—prepared for all-out war at a moment's notice, pressed up against each other along the Fulda Gap and the North German Plain. Nothing comparable exists in the case of the US-China relationship, and both sides still seem to be committed to avoiding such an eventuality. (Stuart 2012:15)

AirSea Battle therefore lacks a guiding, overarching, grand strategic framework. It's focused on acquiring the military means to operate in contested zones but fails to identify the political ends of those operational aspirations. Asia-Pacific security experts, including ASPI, have called for the development of a US grand strategy for the Asia-Pacific in order to provide a clearer message to allies and potential adversaries about which greater political objectives America's 'strategic rebalance' is intended to serve (Jennings 2013). Such a document could, for example, clarify whether America would be satisfied with the re-establishment of the status quo ante after hostilities caused by a Chinese military provocation in the Western Pacific come to an end.

Another critical issue related to AirSea Battle is the relationship between military means and political ends in a major conventional war with China. Military strategy is all about using or threatening to use armed force to achieve political objectives. When it comes to planning the use of military force against China, there are no 'good' strategies. A military escalation between these two major powers would result in massive damage to the global economy and, even worse, could lead to nuclear escalation.

Consequently, any war-fighting strategy against China has to be guided by two major assumptions. First, China's growing nuclear arsenal imposes significant restrictions on US targeting options. The risk of nuclear escalation must be minimised because neither side will be able to 'win' a nuclear exchange. Second, limited military options necessitate modest political aims. As TX Hammes has written, there can't be a 'decisive victory' against China but only a 'stalemate which leads to a cessation of conflict and the return to some form of the status quo' (Hammes 2012).

AirSea Battle might face difficulties in meeting these criteria. First, there are potential problems with nuclear escalation control in AirSea Battle. As mentioned above, a critical assumption is that it wouldn't escalate into a nuclear confrontation because 'agreement not to use or threaten the use of nuclear weapons would appear to be in both parties' interests' (van Tol et al. 2010:50). Such thinking applies the logic of the so-called 'stability-instability paradox', which assumes that mutual nuclear deterrence between the US and China should be stable because of what's at stake, whereas confrontation at the conventional level is a distinct possibility.

However, such an outcome is far from certain. Nuclear stability in an AirSea Battle scenario critically depends on Chinese assumptions about the ability of its nuclear strike capability to remain unaffected by deep US strikes on Chinese territory as part of a 'blinding campaign'. Yet, while the PLA has made progress towards developing a secure nuclear second-strike capability, its command and control systems are still highly vulnerable to US superior conventional arsenals. American deep strikes on the Chinese mainland to destroy most of the PLA's land-based long-range weapons and their command and control nodes might thus be perceived by the Chinese leadership as an attempt to degrade their nuclear deterrent as well, and consequently increase the chances of Chinese nuclear pre-emption.

AirSea Battle requires sophisticated mechanisms and mutual understanding to minimise the risk of Sino-US nuclear confrontation under conditions of major conventional war.

AirSea Battle thus raises the spectre of a series of miscalculations on both sides if Beijing perceives conventional attacks on its homeland as an attempt to disarm its nuclear strike capability, in which case it might be faced with a classical 'use them or lose them' dilemma. History is littered with examples of one side misjudging the 'red lines' of the other. The United Nations (with the US in the military lead) misinterpreted Chinese thinking during the Korean War and then moved forces close to Chinese territory, triggering a massive Chinese response. And Chinese strategists have already discussed the conditions under which Beijing's declaratory nuclear 'no first use' policy might no longer apply, including a major US attack with conventional weapons on Chinese territory. AirSea Battle requires sophisticated mechanisms and mutual understanding to minimise the risk of Sino-US nuclear confrontation under conditions of major conventional war.

Lastly, even if a nuclear escalation with China can be avoided, it's not clear that the US could achieve modest political objectives by striking targets in mainland China. Given China's geographical size, deep strikes into its territory require major military operations that include intrusion into Chinese airspace with long-range strike capabilities. It's hard to believe that under such conditions China could be coerced into accepting limited political objectives. According to Douglas MacGregor and Young Kim, AirSea Battle therefore might risk resembling a:

... 21st century equivalent of medieval siege warfare. Given China's size and depth, its authoritarian culture and supporting institutions of internal security, American air and naval strike forces are likely to run out of precision-guided munitions long before they run out of targets to attack or achieve conditions favorable for acceptable [conflict] termination. [MacGregor and Kim 2012]

In sum, while AirSea Battle is a step in adjusting US conventional deterrence strategy, it also raises some critical questions about the control of escalation and the achievability of modest political ends in the event of war. Therefore, it's worth considering alternative models.

What are the alternatives?

The alternatives also focus on maintaining America's military access in an A2/AD environment in order to deter China. However, they don't include direct strikes against mainland China. For example, TX Hammes (2012) has proposed a strategy of 'offshore control' that relies on three core elements:

- Denying China the use of the sea inside the first island chain, primarily by using attack submarines, mines and limited air strikes. This would play to the technological and operational strengths of the US Navy, particularly in the undersea domain.
- Defending the air and sea space of the first island chain to defend allies against Chinese attacks and coercion. This seeks to exploit China's geography by forcing the PLA to fight at longer ranges, while allowing the US and its allies to fight in an integrated air—sea defence framework over their own territories.
- Dominating the maritime periphery by intercepting Chinese merchant and energy shipping in the Malacca Strait and other maritime chokepoints. This makes use of the fact that it will be a long time before China will be able to project significant power to protect these sea lines of communication (SLOCs).

In a similar way, Kline and Hughes (2012:35–36) have called for a 'war at sea' strategy that would aim at denying China the use of the sea inside the first island chain by:

... distant interception of Chinese shipping, widespread submarine attacks and mining inside the first island chain, offensive attacks by a flotilla composed of small missile-carrying combatants to fight in the China seas and patrol vessels for maritime interdiction at straits and chokepoints, and Marine expeditionary forces positioned to hold the South China Sea islands at risk, with no intention of putting ground forces on China's mainland.

They argue that this strategy would provide American leaders with 'graduated options' short of escalatory strikes on the Chinese mainland, making it not only more credible but also more suitable for a grand strategy based on either 'co-operation, competition, confrontation, conflict short of war, or war'. Furthermore, the Naval Postgraduate School and the US Naval War College are reportedly working on a 'Mutually Denied Battlespace Strategy' that also refrains from initiating deep strikes on the Chinese mainland and instead uses US maritime superiority to deny Chinese warships access to their own waters and to deny Chinese commercial shipping access in the wider Pacific.

These proposals are more refinements of AirSea Battle than major alterations. And they're not risk-free, either. For example, if a key aim of AirSea Battle is to defend Taiwan, it's hard to see how that could be done without striking targets in mainland China to degrade the PLA's anti-ship and anti-air systems deployed along the coastline. And sea denial operations in the Taiwan Strait will be a formidable task, given the close proximity to mainland China and the significant modernisation of PLA capability to contest US ability to regain air superiority in the event of war.

Nor is it entirely clear how these alternatives could minimise the risk of escalation, as even a distant interception of vessels would most likely be seen by Beijing as an act of war and could trigger a massive military response. This comes back to a point made above: that there are no 'good' military options in a war with China, just 'least bad' ones. Nevertheless, strategies that focus on denial might be a better alternative for conflicts short of major war over Taiwan or Japan, such as maritime disputes in the South China Sea and elsewhere.

CHAPTER 3

Asian allies and partners

Allies such as Japan and Australia are seen as playing an active role in the AirSea Battle concept. Yet, because of its 'China dimension', AirSea Battle presents allies and partners with the classical dilemma of being caught between 'entrapment' and 'abandonment'.

On the one hand, they want to avoid becoming entrapped in Sino-US strategic rivalry. Signing up for AirSea Battle at a time when there still seems ample opportunity to incorporate China into a peaceful Asian security order could be detrimental to their interests. AirSea Battle could thus have a disruptive effect in US alliance relationships.

On the other hand, their suspicion about China's strategic trajectory has increased in recent years. As they experience a decline in military power relative to China, they want to avoid being abandoned by their US ally. Some elements of AirSea Battle could therefore become an organising principle for the US and its allies, streamlining strategy and force structure. Strengthening allies' and partners' sea denial capabilities to support an AirSea Battle framework could provide net value for US-led operations and would also be in line with those countries' strategic preferences and force restructuring trends.

Northeast Asia

Japan, South Korea and Taiwan are the key potential players in Northeast Asia when it comes to AirSea Battle. Japan and Taiwan are frontline states in a possible Sino-US conflict, while South Korea's geostrategic location and its hosting of US bases also give it a potentially important role. While all of them have sought to engage China in order to encourage its 'peaceful rise', fears about Beijing's trajectory have recently led to their increased reliance on the US as a means of external balancing. As a result, they might be more open to support an AirSea Battle framework, albeit to varying degrees.



Figure 5: Geostrategic situation in Northeast Asia

Japan

Proponents of AirSea Battle regard Japan as a key enabler. The CSBA report states that:

Japan offers a measure of strategic depth in its northern and eastern regions, while the geography of the Ryukyus island chain may prove particularly advantageous for ASW operations. Were Japan to cease being a US ally or opt to stay neutral in the event of a Sino-US clash, the ability to execute an 'AirSea Battle' concept would be made more difficult. Absent Japan's support, a successful defense of Taiwan or South Korea would be problematic, at best. (van Tol et al. 2010:14)

The expectation is that Japan's substantial air and naval forces would 'augment US forces in selected mission areas, to include submarine and air-based ASW, maritime ISR, maritime strike and ballistic missile defense' (van Tol et al. 2010:30). The report also proposes a range of joint US-Japan military activities to strengthen Japan's ability to play a key role in the concept:

- Harden selected bases, increase rapid runway repair capacities, and locate critical military assets and sites (e.g. key headquarters and operations sites) deep underground or within mountains.
- Fully integrate its ground- and sea-based air and missile defence systems and operations (including intelligence and early warning cooperation) with US forces stationed in and near Japan.
- Increase Japan's air and ballistic missile defences.

- Expand its inventory of fourth-generation fighters and procure fifth-generation fighters to protect its airspace and free up US fighters for offensive missions.
- Expand its undersea warfare and ASW capabilities, including its submarine fleet and unmanned underwater vehicles.
- Prepare plans in cooperation with the US Navy for establishing ASW barriers that take advantage of the geography of the Ryukyu island chain. (van Tol et al. 2010:93)

Can Japan live up to these expectations? Traditionally, it's been a close ally of the US, and the Japan Self-Defense Forces (JSDF) has a very high technological standard. However, constitutional restrictions on the use of Japan's military power have led to a largely defensive posture and a focus on providing niche capabilities to its American ally. Moreover, Japan has also pursued a policy of engagement towards China, not least because of growing trade relations.

... China's recent behaviour in maritime disputes is viewed in Japan as a 'creeping expansion' that probes US and allies' reactions to territorial disputes...

However, China's growing assertiveness has led Japan to abandon its concerns about entrapment. It 'seeks above all to prevent military abandonment by the US at this crucial juncture in Sino-Japanese relations' (Hughes 2012:219). Tokyo faces growing Chinese military capabilities across the East Sea, where future operational access for US forces could be limited or denied. Major US operating bases and facilities, such as air bases on Okinawa (Kadena AFB) and Iwakuni, and the naval base at Sasebo, are already within striking range of Chinese missiles and strike aircraft, as are many JSDF bases in western Japan. Moreover, China's recent behaviour in maritime disputes is viewed in Japan as a 'creeping expansion' that probes US and allies' reactions to territorial disputes in order to determine whether there is a lower ceiling of US deterrence commitment (Takahashi 2012:15–16). The current stand-off over the Senkaku/Diaoyu Islands, which are part of the Ryukyu island chain, has only increased the Japanese public's threat perceptions of China. Opinion polls show an all-time low in Japanese sentiment towards its bigger neighbour.

As a consequence of Japan's heightened perception of threat, Japan's 2012 National Defense Program Guidelines made the defence of the Nansei (Southwestern) Islands in Okinawa Prefecture a top priority. A new 'Dynamic Defense Force' concept aims at making the JSDF lighter, more technologically advanced, and equipped with power-projection capabilities. In this context, some Japanese defence experts expect the evolution of an 'Allied AirSea Battle' framework. For them, AirSea Battle will become the 'key' for moving Japan–US defence cooperation forwards. For example, Japanese air and naval forces could be a 'key enabler for enhancing the resiliency of US naval and amphibious operations' (Takahashi 2012).

To assess the JSDF's possible contribution, it's important to recognise that it's still very much defensively oriented. Take the Japan Maritime Self-Defense Force (JMSDF), for example. Despite commanding arguably the most sophisticated surface and subsurface arsenal in the Asia-Pacific (after the US), it's largely been organised into defensive 'escort flotillas' to contribute to a specific division-of-labour arrangement with the US Navy: while the US provides offensive firepower, the JMSDF has focused on defensive tasks such as minesweeping, ASW, and offensive submarine warfare. Essentially, the JMSDF could find it very difficult today to sustain operations against the PLA without US logistics support (Holmes 2012).

However, Japan is taking incremental steps to improve capabilities that could contribute to an allied AirSea Battle framework. One area is air and ballistic missile defence. Cooperation with the US to jointly develop the advanced SM-3 Block IIA interceptor missile continues. These weapons will be used on Japan's fleet of six Aegis destroyers, to which the JMSDF plans to add two more ships of the upgraded Atago class. In September 2012, US Defense Secretary Leon Panetta also announced that the US would deploy a second missile defence radar installation on Japanese soil.

Japan has developed a highly sophisticated and networked structure to detect and track hostile air and ballistic missile activities. The headquarters of the JSDF's Air Defence Command was moved to the headquarters of US Forces Japan at Yokota Air Base, giving it direct access to the US space-based missile detection system and other American missile defence assets. While North Korea's missile threat is one main driver behind this development, Japan has also employed such assets on Okinawa and other islands of the Ryukyu chain to strengthen its defences against PLA air, maritime and missile forces (Ball and Tanter 2012). This includes the deployment of mobile radar equipment closer to Taiwan (on Miyako, Yonaguni, Ishigaki and Iromote-jima) and upgrading ground-based radar sites on Miyako and Okinoerabu islands. To increase maritime operational awareness in those islands, Japan has introduced two new Kawasaki P-1 maritime patrol aircraft with a range of up to 8,000 kilometres. It recently also announced the deployment of Global Hawk unmanned, high-altitude, long-endurance surveillance aircraft by 2015.

When it comes to passive defences, Japanese and US defence experts have started to discuss the hardening of critical infrastructures such as Yokota Air Base. So far, US bases in Japan lack hardening to cope with potential PLA strikes with DF-3 or DF-21 ballistic missiles. It's quite possible that both sides will soon agree on concrete measures in this area.

Japan has also taken additional measures to defend disputed islands and to increase the coastal defence of its Southwestern Islands. It has forward deployed F-15J combat aircraft to Naha Air Base in Okinawa and is now considering permanently stationing jets on the Sakishima Islands, which are even closer to the Senkaku Islands. Furthermore, Tokyo has decided to procure 42 F-35 combat aircraft. Some have speculated that they could operate from Japan's helicopter-carrying destroyers if Tokyo opts for the F-35B short take-off and vertical landing variant, but there's no evidence of that as yet. A further question is whether the Japan Air Self-Defense Force would use its KC-767 tanker aircraft to refuel the F-35s in counter-air operations against China or to backfill for US fighters engaged in direct operations against the PLA Air Force.

In line with Japan's 2010 National Defense Program Guidelines, it's also developing a small amphibious force to be armed with surface-to-ship missiles for direct defence of some of the Ryukyu Islands. The JMSDF will acquire an additional Osumi-class amphibious assault ship for that purpose, and a new C-2 strategic transport aircraft will improve its still limited airlift capability. The first deployment of JSDF army units to Yonaguni Island is meant as a political message to China about Tokyo's commitment to island defence, with more to follow if necessary (Sayers 2013).

Finally, Japan is enhancing its ASW capabilities for operations in the waters around Japan in the face of China's submarine build-up. It's accelerated its own submarine replacement rate and will increase its fleet from 15 to 22–24 boats. With the new 4,200 tonne Soryu-class, the JMSDF now also commands Japan's first submarine with air-independent propulsion, which gives it a significant capability for long-range deepwater operations. Moreover, it's taken two new Hyuga-class 19,000-ton helicopter-carrying destroyers into service. Carrying up to 11 antisubmarine helicopters, they're comparable to light aircraft carriers and are also equipped with bow sonar, torpedo tubes and the 'Shin-Asroc' rocket-based torpedo. Japan plans to build two even larger 27,000-ton helicopter carriers, each able to carry up to 14 helicopters. These ships are intended to be the core of four helicopter/destroyer groups operating in defence of Japanese islands in the East China Sea (Till 2012:92). Thirty undersea SOSUS (sound surveillance system) arrays connected to 14 shore stations give Japan a significant capability to track Chinese submarines transiting from the East China Sea to the wider Pacific Ocean.

... so far Japan aims to only incrementally strengthen its sea and air denial capabilities and hasn't decided on a comprehensive offensive military build-up.

Nevertheless, so far Japan aims to only incrementally strengthen its sea and air denial capabilities and hasn't decided on a comprehensive offensive military build-up. Budget limitations and a continued reliance on a US military presence make for a modest course—slowly increasing island-defence capabilities while retaining some blue-water capabilities based on its current fleet of 44 destroyers to protect Japan's SLOCs. Indeed, Japan has yet to decide whether to respond to China's rapid maritime build-up by developing a fully fledged 'area-denial' capability (Sayers 2013), but it's laying the foundations and would be technically well equipped to do so if required.

Japan's defence planning has thus started to shift towards complementarity in a possible 'Allied AirSea Battle' concept. Militarily, it's increasingly well placed to 'plug and play' in a future Sino-US conflict. And, given Japan's geostrategic interest in maintaining the status quo in Taiwan, it's highly likely that Tokyo would become an active ally if the US goes to war with China over the island. Therefore, it will be paying close attention to whether the Pentagon makes the programmatic and budgetary shifts necessary to move AirSea Battle forward and to underwrite the 'rebalance' in general. There's little doubt that Tokyo has a major interest in the success of AirSea Battle.

South Korea

The AirSea Battle concept is more problematic for the Republic of Korea (ROK) because of Seoul's competing strategic concerns. Since 1953, the ROK's core strategic priority has been to deter and defeat a potential North Korean invasion. Moreover, unlike Japan, South Korea remains more ambivalent about the Chinese threat. While China's behaviour in the 2010 crises on the Korean Peninsula did much to annoy South Korea, by its attempts to shield North Korea from international criticism, a friendly relationship with Beijing is still regarded as beneficial for Seoul's long-term political goal of peaceful unification of the peninsula. AirSea Battle raises the risk of South Korea being drawn into an unwanted conflict with China, and its own territory could come under attack during the first stage in a sequence of Chinese attacks directed against US forces, particularly in US hubs at Osan and Pyeongtaek.

However, in recent years South Korea has become more worried about the potential for Chinese dominance in Northeast Asia. Its concerns include issues such as China's assertions about the historical origins of the Goguryeo Kingdom in the northern part of the peninsula, Beijing's apparent reluctance to pressure the North to halt its nuclear weapons program, and signs of a growing Chinese economic dominance over South Korea. Moreover, both sides clashed over the Socotra Rock (also known as leodo or Suyan) in 2006, and there were violent clashes between trawlers over fishing grounds in 2010 and 2011, as well as tensions over SLOCs.

The ROK also needs to plan to deal with a possible collapse of North Korea. It will need sufficient capabilities to deploy north to meet a PLA southward intervention to secure North Korea's nuclear weapons, and to deal with a Chinese occupation of some parts of the north. The PLA could also move to complicate US and ROK naval operations in such an event by conducting maritime access-denial operations in the Yellow Sea (Bennett and Lind 2011).

South Korea's current *Defense Reform 2020* plan is still centred on deterring a North Korean invasion. However, some elements of the plan can also be seen as a response to China's military rise. In general, there's a move away from land forces towards the ROK Air Force and the ROK Navy. The key goal is to create a more

technologically advanced military with an increased expeditionary capability. The ROK Air Force is acquiring up to 60 F-15K fighter aircraft and the Boeing 737 AEW&C aircraft, and looks to develop a new fifth-generation multi-role combat aircraft, the KX fighter. However, the greatest changes have been made in the maritime domain. The ROK Navy has acquired Aegis air-defence systems for its three new Sejong-class destroyers, multipurpose Chungmugong-class destroyers, and the first of four 18,000-ton high-speed amphibious landing ships carrying up to 10 helicopters. It also plans to increase its fleet of diesel-electric Type 214 submarines (based on a German design) from nine to 15. The ROK Navy is thus emerging as a serious blue-water navy in Northeast Asia (Koda 2010), and its capabilities could in principle be used in an AirSea Battle context. Finally, South Korea was able to renegotiate a 2001 agreement with the US on its high-velocity missiles, which now have the range to reach targets across North Korea.

South Korea at this point seems to be more concerned about entrapment when it comes to AirSea Battle.

Still, South Korea at this point seems to be more concerned about entrapment when it comes to AirSea Battle. Those concerns might explain why the South Korean Defence Ministry has publicly stated that the new maritime base on the southern resort island of Jeju, situated between Japan and China, would lack the capabilities to host US forces—despite the fact that the new installation could be home to more than 20 ROK warships. Domestically, the base is subject to major criticism, and some fear an escalation of tensions with China and a destabilising arms race. Furthermore, Seoul will probably oppose any move by the US to include South Korea and Japan more closely in a Northeast Asian AirSea Battle architecture because of its continuing concern about getting too close to Tokyo militarily.

As the US military shifts its focus towards China and meeting the A2/AD challenge in the air and maritime domains, resource constraints could see US land forces—including those on the peninsula—take a back seat. As a result, South Korea has to assume greater responsibility for its own defence against the North Korean threat. This will not only bind South Korean resources but might also exacerbate its fears about US abandonment. On balance, given the risks for South Korea inherent in the changing American stance, and public and political sentiment about a greater US military footprint, it seems unlikely that Seoul will openly throw its support behind the AirSea Battle concept. However, should relations between the ROK and China deteriorate dramatically, the ROK Navy, in particular, could play a part alongside the US Navy and other advanced maritime forces in an AirSea Battle framework.

Taiwan

Arguably, a potential Sino-US war over Taiwan is at the heart of AirSea Battle in the Western Pacific. The possibility of a military escalation at this point seems rather remote, given that the current Taiwanese Government shows no inclination towards promoting *de jure* independence from mainland China. However, Taiwan is the centrepiece of Chinese A2/AD strategy, and unification with what Beijing sees as a renegade province is still high on China's political agenda. While the US certainly does not have an interest in a major war with China over the island, the 1978 Taiwan Relations Act amounts to a *de facto* commitment to defend Taiwan if the Chinese attempt to conquer the island by force. And, contrary to conventional wisdom, there are also geostrategic reasons why the US has an interest in defending Taiwan, such as avoiding damage to US leadership credibility (particularly in Japan) and tying up Chinese resources that could otherwise be used for military activities beyond the Taiwan Strait (Bernkopf Tucker and Glaser 2011).

China has gradually changed the military balance in the Taiwan Strait, not least by deploying more than 1,000 DF-11 and DF-15 short-range ballistic missiles opposite Taiwan. Through the deployment of fourth-generation aircraft, the PLA Air Force is also achieving air superiority over the area, partly because the US has been reluctant to provide the Taiwanese Air Force with more sophisticated combat aircraft. And the PLA Navy is acquiring a qualitative and quantitative edge over Taiwan in destroyers and submarines that would allow it to blockade Taiwan and pose severe challenges for US forces intervening in the Taiwan Strait.

However, Taiwan is moving towards a more asymmetric defence posture aimed at denying PLA forces the approaches to the island. This includes a focus on hardening critical infrastructure such as airfields and ports to survive PLA missile bombardments, as well as investments in mines, fast missile boats, attack helicopters and special forces. The Taiwanese Navy also plans to acquire six new indigenously built minehunting ships over the next 12 years to counter a possible PLA blockade. In combination with Taiwan's air-to-air, naval-to-naval and ground-to-ground defensive interdiction weapons systems, this strategy could hold off a Chinese first strike long enough to draw US forces into the conflict. Given the inherent difficulties of large-scale amphibious invasions, Taiwan wouldn't be an easy target for the PLA. Moreover, Taiwan is reportedly working on a new supersonic offensive surface-to-surface missile that could reach China's central and southern regions, including Shanghai, thereby retaining a 'punishment' capability against Chinese cities in response to a PLA attack. In November 2012, Taiwan also test-fired a new supersonic anti-ship missile, the Hsiung Feng III, which could be used against a future Chinese aircraft carrier and other surface vessels.

As a potential major battleground in a Sino-US confrontation, Taiwan has a great interest in strengthening capabilities relevant to the AirSea Battle concept. Apart from its contributions to air and maritime denial assets, Taiwan could contribute to US situational awareness in the air, space, sea and cyber domains. For example, its new long-range early warning system, provided by the US, is said to share data with the US. Moreover, some US experts have argued that the ROC Navy has a 'firm grasp of the unique undersea geography and hydrological environment of the Western Pacific Ocean', and that maintaining Taiwan's capacity to interdict 'single points of failure' in the PLA's A2/AD system could 'relieve the US of part of its heavy operational burden and reduce risks of escalation' (Stokes and Hsiao 2012). For those US strategists, Taiwan is a key partner in AirSea Battle.

That said, much depends on whether the US will really be willing to provide Taiwan with more state-of-the-art military equipment required to counter China's military build-up. The Obama administration has partly acceded to Taiwan's requests and in 2011 released a US\$6.4 billion arms package that included sea denial capabilities such as Black Hawk UH-60 helicopters, Harpoon anti-ship missiles, PAC-3 air defence missiles, Osprey-class minehunting ships, and upgrades for Taiwan's command, control, communications, computing, intelligence, surveillance and reconnaissance (C4ISR) systems. But it hasn't agreed to provide Taiwan with the much wanted, advanced F-16 C/D fighter aircraft, for fear of antagonising China. Moreover, the administration has yet to deliver on a pledge made during the Bush presidency to provide Taiwan with new diesel-electric submarines—a difficult promise to keep, because the US doesn't build them and other nations (such as Australia, Germany, South Korea or Japan) would be reluctant to sell them.

Southeast Asia

In the AirSea Battle context, Southeast Asia becomes more prominent in US strategic thinking. This is partly because of the potential for a 'distant blockade' to cut China off from its SLOCs by controlling strategic chokepoints in the Malacca and Lombok straits. The US could use its allies' and partners' geographical position and advantages in hydrography to establish antisubmarine barriers along the Ryukyus and across the Luzon Strait through the Philippine islands and southern exits from the South China Sea (van Tol et al. 2010:72). This means that it needs access to bases and facilities for logistics and maintenance, particularly in Singapore, the Philippines and Vietnam.

Still, both the US and its Southeast Asian allies and partners will probably be cautious when it comes to AirSea Battle. Washington certainly has an interest in increasing defence cooperation and rotational access to geostrategically important locations in the region, and has made it clear that it has a major interest in the peaceful resolution of territorial conflicts in the South China Sea. Nevertheless, the US is also very careful not to become 'entrapped' in maritime boundary disputes in the area.

The potential for AirSea Battle initiatives in Southeast Asia is much more limited than in Northeast Asia. Most Southeast Asian countries will probably be reluctant to support a concept that could rapidly lead to major escalation, particularly since their maritime territorial disputes with China don't warrant a major war. Instead, they could be more interested in supporting alternative strategies based on sea denial in case China becomes more assertive in the South China Sea.

Philippines

Washington hasn't clarified whether its 1952 Mutual Defense Treaty with the Philippines would apply in the event of a territorial conflict between Manila and Beijing. This ambiguity could affect the degree of support for AirSea Battle that the US can expect from Southeast Asian countries, which have generally welcomed America's pivot as a hedge against Chinese assertiveness in territorial conflicts in the South China Sea but which also want to keep their strategic options open.

Therefore, we should be cautious about predicting how much the US will be able to use Southeast Asia in the AirSea Battle context. Some US commentators have talked about the 'geostrategic return' of the Philippines and argued that Washington should support Manila to develop its own set of A2/AD capabilities to counter China's growing power projection capabilities in the seas west of the Philippines. This could include the provision of defensive systems such as maritime surveillance aircraft, anti-ship missiles, air defence systems and Predator unmanned aerial vehicles (UAVs) (Thomas and Foster 2012).

That would be easier said than done. Arguably, China's assertiveness in the South China Sea and the related stand-off over the disputed Scarborough Shoal has led Manila to seek (in the words of Philippines Defense Secretary Voltaire Gazmin) a 'minimum credible defence' from its US ally. However, particularly because of its trade dependence on China, the government is also careful not to move too close to Washington. Moreover, money is scarce and its navy and air force are in a very poor state. The result is that Manila has taken embryonic steps to modernise basic capabilities for air and maritime operations. To revitalise its practically non-existent air defence, the government decided to buy 12 T/A-50 light attack fighters from South Korea, but only after concluding that the maintenance costs of 12 ex-US F-16 C/D combat aircraft would be too high. The maritime domain doesn't look much better. The new flagships of the Philippines Navy are two 1960s ex-US Coast Guard Hamilton-class cutters. While it also aims to acquire two ex-Italian Maestrale-class frigates, which would be the navy's first modern, missile-armed, ASW-capable ships, it will take years to operate such more advanced systems.

The US has offered to provide a new land-based radar to increase Manila's maritime awareness, both sides have increased joint exercises such as the Balikatan multiservice combined military exercise, and there's been a brief deployment of US P-3 Orion maritime patrol aircraft. Nevertheless, for the US, the Philippines' key value in AirSea Battle is in providing rotational access for US forces. While Manila has categorically excluded a permanent American presence, the two countries have started negotiations for such rotations. US naval forces and marines could thus potentially use Philippines facilities to stage operations into the South China Sea.

Singapore

In a more contested strategic environment, Singapore has become more important for the US as a partner. Typically, it remains tight-lipped about its commitments to US strategic posture, but it seems to have judged an increased American military presence to be in its interest. Whether the Singaporean political and military leadership accepts the AirSea Battle concept is unclear, but Singaporean officials have offered to permanently host up to four US littoral combat ships at Changi Naval Base, two more than originally envisaged by the US Navy.

... Singapore has the military capabilities to play a supporting role in an AirSea Battle context.

Undoubtedly, Singapore has the military capabilities to play a supporting role in an AirSea Battle context. It has acquired six new Formidable-class frigates armed with Harpoon anti-ship missiles and French Aster-15 air defence missiles. It's also upgraded its submarine fleet from four to six with the addition of two Swedish Vastergotland-class submarines with air-independent propulsion systems for extended submerged endurance. Singapore fields Southeast Asia's most advanced air force, with 74 F-16 and 24 new-build F-15 strike fighters, supplemented with nine air-to-air refuelling aircraft and Gulfstream G550 AEW&C aircraft. It is also participating in the JSF program. These capabilities would allow Singapore to make an important contribution to specific AirSea Battle missions, such as a distant blockade of China in the Malacca Strait.

However, the Singaporean Government would probably think twice before committing to an operational concept that could see it involved in a major war with China. In fact, Singapore's been quite careful to avoid the impression of moving too close to the US, and it wouldn't automatically support a US push for a much tougher stance against China. In the event of Sino-US conflict over Taiwan or the Philippines, it's not clear whether Singapore would allow the use of its naval base to resupply US carrier battlegroups or as a staging point for US littoral combat ships (Huxley 2012).

Vietnam

There's been much speculation about Vietnam's rising strategic trajectory and its potential role in a new US Southeast Asia strategy. Like the Philippines, it's a frontline state in the South China Sea, and it has maritime territorial disputes with China. It also aims to strengthen its naval capabilities through the acquisition of six Kilo-class diesel-electric submarines and Svetlyak-class fast-attack craft from Russia. Hanoi is reportedly also working with Moscow on the joint development of the SS-N-25 anti-ship missile and a mini-UAV. In November 2012, it signed a deal with a Swedish company, Unmanned Systems Group, for the joint development of a medium-range UAV. The Vietnamese Navy has acquired two Gepard-class frigates from Russia, has signed a contract for two additional ships in an ASW version, and is negotiating a contract to purchase four Sigma-class corvettes from the Netherlands. To improve maritime surveillance, Vietnam has also procured six DHC-6 Twin Otter aircraft from Canada. Its air force is acquiring at least 20 Russian Su-30 Mk2 multi-role combat aircraft. In combination with its SU-27s, this acquisition would enable Vietnam to increase its naval strike capability.

However, there are reasons to be cautious about Vietnam's willingness and ability to play a key role in a future AirSea Battle framework. While it's entered into a formal military-to-military relationship with the US and is interested in US defence equipment, Vietnam's grand strategic approach appears to be to cautiously play the

US and China off against each other (Thayer 2012). It will be reluctant to move too close to the US, particularly because its land border with China makes it extremely vulnerable in case of a military conflict. Moreover, disagreements over human rights will put limitations on US–Vietnamese defence cooperation.

Indonesia

Indonesia's geostrategic location makes it ideally placed to play a role in AirSea Battle when it comes to a 'distant blockade'. During his visit in November 2011, Obama and his Indonesian counterpart Yudhoyono reconfirmed their commitment to their 'comprehensive partnership'. Indonesia is also starting to increase its maritime and air capabilities, even if from a very low base and mainly to protect parts of its vast archipelago. It's also concerned with a scenario of Chinese domination of the South China Sea. At the same time, however, in line with its policy of non-alignment, Jakarta is keen on avoiding to be seen as too close to the US. Moreover, it aims to have mutually beneficial relations with Beijing, including through practical defence cooperation. Indonesian support for AirSea Battle thus seems to be rather questionable at this point.

CHAPTER 4

Australia and AirSea Battle

Any Australian Government will need to weigh the pros and cons of signing up to the AirSea Battle concept, if and when our US ally asks us to make a contribution. A number of strategic considerations should inform Australia's position:

- First, Australia has a major interest in strengthening US and allied deterrence in the face of China's growing military power. As the Gillard government has stressed, Australia also benefits from a continued strong US military presence in Asia as a hedge against unwanted strategic developments. AirSea Battle can play a vital role in strengthening US and allied conventional deterrence in a more contested Asia–Pacific strategic environment. Deterring the PLA from military aggression requires thinking about how and when to use armed force to maintain a stable and favourable security order. In these circumstances, the government should welcome US thinking about AirSea Battle as a critical element of the American 'rebalance' and provide a tailored but constructive response.
- Second, our geostrategic location means that Australia isn't a frontline state in an AirSea Battle context
 (unlike Japan, Taiwan and South Korea). Consequently, our biggest value for the US comes from our being a
 reliable political ally, providing strategic depth and potentially making some selected yet noteworthy military
 contributions if need be. Contrary to conventional wisdom, the US is probably not expecting Australia to make
 major new strategic commitments to the Asian theatre beyond our immediate neighbourhood, so we could
 fulfil our alliance commitments without officially signing up to AirSea Battle or developing new capabilities
 specifically designed for such a context.
- Third, it's difficult to see what the Australian Government could gain from publicly endorsing AirSea Battle at this time. The concept risks making the Chinese military an enemy at a time when American, Australian and allied grand strategy is still aimed at integrating Beijing in a cooperative Asian security order. While the concept could make sense in a Cold War-type Asia-Pacific strategic environment, endorsing the concept now would unnecessarily complicate our relationship with China. It would signal to China that the ADF is now actively preparing for a potential conflict with the PLA.
- Fourth, at the practical military level, the ADF could benefit from participating in AirSea Battle related
 activities. Over time, the new operational concept is likely to lead to changes in the tactics, techniques and
 procedures of US Pacific forces, and new doctrinal developments such as this have often been drivers of
 technological innovation in the US military. Given that Australia has an interest in maintaining significant
 interoperability between the ADF and US forces and has benefited much from US military technology transfer,
 we have an interest in closely following AirSea Battle developments at the military level. But that doesn't
 mean that the ADF has to mirror the operational concept.

In sum, the Australian Government should adopt a pragmatic approach to AirSea Battle, offering selective military support to our US ally.

Australia's possible contribution

What could and should Australia contribute to AirSea Battle? Supporters of the concept have argued that we should consider a full range of activities to support our American ally (van Tol et al. 2010, Babbage 2011, Rehman 2011). Suggestions include:

- making Australia a major logistical hub for American long-range strike aircraft, carrier strike groups and nuclear submarines
- jointly developing new capabilities with the US and Japan, such as long-range strike and a next-generation anti-ship ballistic missile,
- forward deployment to protect allied bases in Northeast Asia and to contribute to ASW operations in Southeast Asia and Oceania
- conducting amphibious strike operations in the Southeast Asian and South Pacific archipelagos
- contributing to a 'distant blockade' of Chinese ships through operations in the eastern Indian Ocean and Southeast Asia.

Such thinking is very much in line with the previous Australian government of Prime Minister Kevin Rudd whose defence policy could have potentially made us a significant participant in a US AirSea Battle framework. For example, in his 2008 RSL speech Rudd emphasised the need to boost military capabilities to make Australia a serious maritime power in the face of a more contested Asian strategic environment. Moreover, the 2009 Defence White Paper (DWP) was not only explicit in terms of Australia's uneasiness with China's strategic trajectory. It also laid out an ambitious plan to enhance the ADF's power projection capabilities, including the development of much more capable submarines able to conduct strategic strike (Commonwealth of Australia 2009).

The government of Julia Gillard has welcomed America's 'pivot' to Asia and has invited a US Marine Air-Ground Task Force (MAGTF) to rotate through Darwin as a signal of diplomatic support for our ally. At the same time, however, it has toned down its rhetoric vis-a-vis China and the next DWP is expected to follow this line. Further, the force structure set out in the 2009 DWP is out of sync with new fiscal realities. Any future government will face tough force structure decisions after the next parliamentary elections and it remains to be seen how much of the 2009 DWP ambitions will survive. The government will therefore have an interest in making some contributions to an allied AirSea Battle framework while avoiding overambitious commitments.

The US is probably most interested in Australia providing greater 'strategic depth'...

The US is probably most interested in Australia providing greater 'strategic depth', allowing it to move some of its troops and assets further away from Chinese missile range, thereby reducing the impact of any pre-emptive Chinese moves and complicating PLA military planning. Australia has long hosted joint command, control and intelligence facilities that play an important part in American operations, as well as providing US forces with access to military facilities and training areas. In the future, the MAGTF presence in Darwin in combination with the rotation of US Air Force assets (such as strategic bombers and tanker aircraft) through RAAF Base Tindal could become a key factor in US AirSea Battle planning. Australia could also serve as a logistical hub, arsenal and repair centre for US forces. A less visible but useful contribution could be in the area of space surveillance, which could be used to monitor and track Chinese activities in this area. One of the few practical outcomes of

the last AUSMIN talks was the decision to relocate a US C-Band space surveillance radar to Western Australia in 2014 in order to increase coverage of space objects over the southern hemisphere.

Upgrading HMAS *Sterling* in Western Australia to potentially host US nuclear submarines and even carrier strike groups is probably only a long-term prospect. The Gillard government has stated that such a development is unlikely in the near future, given the significant financial costs involved, and the US has apparently not yet put this option on the table. The same goes for a possible upgrade of airfields on the Cocos Islands, remote atolls not far from Indonesia, which could potentially host US military aircraft. Apart from the budgetary implications, such a development would send a strong signal to China and the region about Australia's commitment to emerging US war-fighting doctrine. Yet, if the Asia–Pacific environment becomes much more contested, providing even greater strategic depth is certainly a future option for Australian governments and one that would be welcomed by our US ally.

Ross Babbage has suggested that Australia consider the joint development with the US of a long-range stealth bomber that could be used to strike targets in China (Babbage 2011). Such an option, however, seems neither realistic nor strategically sensible. It's unlikely that the US would have an interest in foreign participation in such a high-value program, particularly since it will be nuclear capable. Politically, such a move would signal to China that Australia is planning to actively participate in deep strikes against its territory, making Australia a very likely target of Chinese planners. It would also probably be a significant financial drain.

It's also questionable whether any Australian Government would have an interest in deploying the ADF's new air warfare destroyer, equipped with the Aegis combat system to potentially defend against ballistic missiles, to a Northeast or Southeast Asian theatre in the event of war. Operationally, those capabilities would be much better used in defending critical assets closer to home, and they could only make a symbolic contribution to US-led operations in Northeast Asia. Moreover, the air warfare destroyers are being acquired partly to protect the two new amphibious assault ships (landing helicopter docks), which certainly won't operate in an area close to China.

As for the ADF and amphibious strike operations in the Indonesian archipelago and the South Pacific, such a contribution also seems to be a stretch too far. First up, it isn't clear why China would aim to copy Japan's World War II Pacific islands campaign—which is used by some as the justification for an Australian amphibious 'island hopping' capability (Rehman 2011). Second, this thinking assumes that Australia will basically remodel our land forces into an amphibious force, which is a rather unlikely prospect. Indeed, current ADF planning is to deploy up to 2,200 troops on the two new landing helicopter docks, but such a small amphibious force would be of questionable operational value against any serious military contender. Furthermore, modelling shows that it will require almost the entire ADF to support and defend that force, given its vulnerability to anti-ship missiles, mines and wake-homing torpedoes. Most likely, we'll end up cutting the 'strike' out of our modest amphibious capacity.

This is not to argue against landing helicopter docks per se, but the future of our amphibious force is riddled with many uncertainties. Unless a decision is made to significantly reconfigure our land forces into much larger forces optimised for special operations and amphibious strikes and backed by more sealift capacity to move them—at the expense of other core Army capabilities—the amphibious element risks becoming a questionable 'one-shot' force. And it's not clear at this point how Australia could contribute to amphibious strikes in an AirSea Battle context.

The last possible Australian contribution would be in conducting 'peripheral' operations, such as intercepting Chinese merchant shipping through a 'distant blockade', destroying PLA military assets operating in the area, or both.

The last possible Australian contribution would be in conducting 'peripheral' operations, such as intercepting Chinese merchant shipping through a 'distant blockade', destroying PLA military assets operating in the area, or both. Such operations have a number of potential benefits. First, they exploit China's 'Malacca dilemma': roughly 80% of China's 3.3 million barrels of crude oil per day passes through the Malacca Strait, and an interdiction by US, Australian or Indian forces during a crisis could pose a serious threat to China's economic lifeline. For the foreseeable future, the PLA won't be able to project enough military power to protect its vital shipping lanes in our part of the world. If it attempted to, it would almost certainly face defeat. Second, proponents argue that this option would be potentially less escalatory in a war with China because it could avoid direct force-on-force engagement.

The following options for ADF contributions to peripheral campaigns are thinkable:

- disruptive submarine campaigns launched from the western seaboard
- air interdiction staged from Australian bases, including the Cocos Islands
- naval interdiction of Chinese ships
- strikes at taskforces returning from the Indian Ocean
- breaking China's 'String of Pearls' and supporting US bases in the Indian Ocean region.

Because this area of operation is much closer to home, Australia could certainly provide a number of important capabilities to this mission spectrum, including JSF combat aircraft, ASW capabilities, a new class of highly capable diesel–electric submarines, and long-range maritime surveillance in form of the new P-8 Poseidon and possibly long-range, high-altitude UAVs. Australian forces could also provide some protection for the US base on Diego Garcia to relieve US assets for strike operations in the Indian Ocean.

There would be operational and political limitations on Australian submarine operations in the Indian Ocean. Diesel-electric submarines are not suited for the eastern Indian Ocean and for well-known reasons the RAN won't acquire nuclear-powered Virginia-class SSNs. Even more importantly, the interdiction of Chinese shipping would see Australia in direct conflict with Beijing. Even using a maritime 'embargo' as a measure short of war would probably be seen by China as an act of war, as an embargo would threaten its economic growth and be seen as an intolerable breach of its sovereignty.

Of course, in an AirSea Battle context, the assumption is that we're already at war, and peripheral operations are just one element in a broader campaign. But implementing a distant blockade is far easier said than done. Boarding and capturing ships is a complex undertaking, as is finding suitable marshalling areas. Moreover, merchant ship crews are often multinational, raising the prospects of diplomatic conflicts with other countries. For example, only about 10% of China's energy tankers are currently sailing under the People's Republic of China flag, making the identification and interception of the other 90% quite a problematic task. In extremis, sinking an uncooperative vessel (for example, a supertanker) would create major environmental damage and threats to the civilian crew. Finally, China could always try to circumvent the blockade by using alternative transport

routes. Studies have also concluded that an energy blockade of China would be extremely damaging for the global economy and would probably fail to reach the political objective of coercing China to giving in to our demands (Collins and Murray 2008).

The 'least worst' option

This brings us back to our starting point: there are no good options for fighting a war with China. Based on the analysis set out here, a working assumption for the Australian Government should be that in Asia the AirSea Battle concept will probably only be triggered in a Sino-US war over Taiwan or Japan. Given the ADF's modest capacity, Australia's military contribution would likely be in a supportive role. That means providing niche capabilities and 'backfilling' for US assets engaged in direct attacks against the PLA. Apart from those capabilities discussed above, the US would probably see great value in Australia providing tanker aircraft, AEW&C aircraft and electronic warfare assets (such as the RAAF's Super Hornet Growler version). These are high-value assets for any American force operating in an A2/AD environment, but limiting our contribution to them would allow the ADF to focus on defensive operations and refrain from active strike operations against the PLA. Such a contribution would also be commensurate with Australia's limited defence resources, our geostrategic circumstances and our strategic interest in avoiding direct combat operations against China.

In the final analysis, the Australian Government would be able to make a noteworthy contribution to a US AirSea Battle framework independent of any public commitment to a concept that's still in its early stages and that seems designed for a strategic environment in Asia which is yet to fully materialise.

RECOMMENDATIONS

A strong US military posture in Asia to provide deterrence and reassurance is in Australia's strategic interest. As America 'rebalances' towards the Asia-Pacific region, Australian governments might be asked to formulate a position on AirSea Battle. In principle, the Australian Government should acknowledge AirSea Battle thinking as an important contribution to adjusting US deterrent strategy in Asia. Yet, given the uncertainties and potential shortfalls surrounding the concept the government's response should be tailored but constructive. The next steps to consider for government could include the following:

- The government should seek a detailed, classified briefing from its US ally about the specifics of AirSea Battle. This would demystify the concept. It would also give us a better idea of what is expected of Australia and provide an opportunity to discuss critical issues such as the relationship between AirSea Battle and escalation control.
- The government should encourage the release of a declassified version of AirSea Battle. This would end speculation among allied and partner countries, and would also send a clearer message towards potential adversaries such as China.
- The government should reinforce calls on our American ally to develop an Asia-Pacific strategy to provide an
 overarching grand strategic context for AirSea Battle. There is no working around the fact that the concept
 has an image problem and that left unaddressed this could become a liability for future cooperation. The US
 should provide a clear message on how it intends to deal with China's growing military power and what role
 AirSea Battle will play.
- There is no need for the government or Defence to publicly endorse AirSea Battle. The US itself is still in the process of determining the specifics of implementing the concept. Most of our Asian partners are also sitting on the fence awaiting further US clarification on the scope of AirSea Battle. At this point of time we also don't have an interest in signalling to China that the ADF is preparing for a future military conflict with the PLA. In the (unlikely) event of a war with China, Australia could not only provide the US with greater strategic depth but also contribute ADF military niche capabilities without having officially signed up for AirSea Battle.
- The US MAGTF and US Air Force elements rotating through our bases in the north could in the future play
 a role in an AirSea Battle context. The Australian Government should seek discussions with our US ally
 about how these forces would be used in the event of conflict. We will also need to consider the implications
 for Australia, including a possible integration of the ADF into a Southeast Asian AirSea battle framework
 operating alongside US forces.
- AirSea Battle aims at a new level of technological and doctrinal integration of US forces. In the interest
 of maintaining a sufficient degree of interoperability with American forces, the ADF needs to anticipate
 the possible implications of AirSea Battle in this area. It should therefore seek to cooperate in AirSea
 Battle related activities including war gaming, particularly through close interaction with US Pacific
 Command. Moreover, the ADF should think through the doctrinal implications of AirSea Battle for future
 coalition operations.

REFERENCES

Babbage R 2011. 'Australia's strategic edge in 2030', Kokoda Papers, no. 15.

Ball D, Tanter R 2012. 'The transformation of the JASDF's intelligence and surveillance capabilities for air and missile defence', *Security Challenges*, 8(2):19–56.

Bennett BW, Lind J 2011. 'North Korean collapse: military missions and requirements', *International Security*, 36[2]:84–119.

Bernkopf Tucker N, Glaser B 2011. 'Should the United States abandon Taiwan?', Washington Quarterly, 34(4):23–37.

Blumenthal, D 2012. 'The US response to China's military modernization', in Tellis AJ, Travis T (eds), *Strategic Asia 2012–2013: China's military challenge* (pp. 309–339), National Bureau for Asian Research, Seattle.

Business Wire 2012. Research and markets: air—sea battle concepts, key programs, and forecast, 23 February.

Collins GB, Murray SM 2008. 'No oil for the lamps of China?', Naval War College Review, 61(2):79–95.

Commonwealth of Australia 2009, Defending Australia in the Asia Pacific Century: Defence Force 2030, Canberra.

Cote OR Jr 2011. Assessing the undersea balance between the US and China, SSP working paper, MIT, Cambridge, Massachusetts.

Dobbins J 2012. 'War with China', Survival, 54(4):7-24.

Greenert J 2012. 'Sea change: the Navy pivots to Asia', Foreign Policy, 14 November.

Hammes TX 2012. 'Strategy for an unthinkable conflict', The Diplomat, July 27.

Harrison T 2013. 'What the fiscal cliff deal means for Defense', *CSBA Backgrounder*, Center for Strategic and Budgetary Assessment, Washington DC.

Holmes JR 2012. 'Japan's Cold War navy, The Diplomat, 15 October.

Hughes CW 2012. 'China's military modernization: US allies and partners in Northeast Asia', in Tellis AJ, Travis T (eds), *Strategic Asia 2012–2013: China's military challenge* (pp. 197–239), National Bureau for Asian Research, Seattle.

Huxley T 2012, 'Singapore and the US: not quite allies', The Strategist, 30 July.

Jennings P 2013. 'The US rebalance to the Asia-Pacific: an Australian perspective', Asia Policy, 15:38-44.

Kline JE, Hughes WP Jr 2012. 'Between peace and the air–sea battle: a war at sea strategy', *Naval War College Review*, 65(4):35–40.

Koda Y 2010. 'The emerging Republic of Korea Navy', Naval War College Review, 63(2):13-34.

Lyon R 2012, *Strategic contours: the rise of Asia and Australian strategic policy*, Australian Strategic Policy Institute, Canberra.

MacGregor D, Kim JY 2012, 'AirSea Battle: something is missing', *Armed Forces Journal*, available from http://www.armedforcesjournal.com/2012/04/9772607.

Mercer J 2010. Reputation and international politics, Cornell University Press, Ithaca, New York.

O'Rourke R 2012. China naval modernization: implications for US Navy capabilities—background and issues for Congress, Congressional Research Service, Washington DC, 10 December.

Plumer B 2013. 'America's staggering defense budget, in charts', Washington Post, 7 January.

Rehman I 2011. From down under to top center: Australia, the United States, and this century's special relationship, Transatlantic Academy, Washington DC.

Sayers E 2013. 'Coastal defense in Japan's southwestern islands: force posture options for securing Japan's southern flank', *Futuregram* 13–001, Project 2049 Institute.

Singer P 2012, 'A case study: East Asia', *Time Magazine*, 26 September.

Stokes M, Hsiao R 2012, 'Taiwan's role in Air-Sea Battle', Project 2049, 16 April.

Stuart D 2012. 'San Francisco 2.0: Military aspects of the US pivot toward Asia', Asian Affairs, 39(4):1-16.

Takahashi S 2012. Counter A2/AD in Japan–US defense cooperation: toward 'Allied Air–Sea Battle', Project 2049 Institute, 31 March.

Thayer CA 2012, 'Vietnam's security outlook', NIDS Joint Research Series, 7:69-88.

Thomas J, Foster H 2012. 'The geostrategic return of the Philippines', *CSBA Highlight*, Center for Strategic and Budgetary Assessment, 18 April.

Till J 2012. 'Asia's naval expansion: an arms race in the making?' *Adelphi Series*, 432–433, International Institute for Strategic Studies, London.

US Army, US Marine Corps 2012. Gaining and maintaining access: an Army-Marine Corps concept, March.

US DoD (US Department of Defense) 2009. 'Speech by Secretary of Defense Robert M Gates to Naval War College', Newport, Rhode Island, 17 April.

US DoD (US Department of Defense) 2012a. *Military and security developments involving the People's Republic of China*, Washington DC.

US DoD (US Department of Defense) 2012b. Joint Operational Access Concept (JAOC), Version 1.0, Washington DC.

US DoD (US Department of Defense) 2012c, Annual report to Congress on Long-Range Plan for Construction of Naval Vessels for FY 2013, Washington DC.

van Tol J, Gunzinger M, Krepinevich AF, Thomas J 2010. *AirSea Battle: a point-of-departure operational concept*, Center for Strategic and Budgetary Assessment, Washington DC

Xiang L 2012, 'China and the "pivot", Survival, 54(4):113–128.

ACRONYMS AND ABBREVIATIONS

A2/AD anti-access/area-denial
ADF Australian Defence Force

AEW&C airborne early warning and control

ASW antisubmarine warfare

CSBA Center for Strategic and Budgetary Assessment

DoD Department of Defense (US)

DWP Defence White Paper

ISR intelligence, surveillance and reconnaissance

JMSDF Japan Maritime Self-Defense Force

JSDF Japan Self-Defense Forces

JSF Joint Strike Fighter

MAGTF Marine Air-Ground Task Force
PLA People's Liberation Army

ROK Republic of Korea

SLOCs sea lines of communication

SSBN ship, submersible, ballistic, nuclear (ballistic missile submarine)
SSGN ship, submersible, guided missile, nuclear (cruise missile submarine)

SSK hunter-killer conventional submarine

SSN ship, submersible, nuclear (fast attack submarine)

UAV unmanned aerial vehicle

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Planning the unthinkable war 'AirSea Battle' and its implications for Australia

As part of America's 'rebalance' towards the Asia-Pacific region, Australia's most important ally has developed an 'AirSea Battle' concept that aims to deter and, if necessary, to defeat the Chinese military in a future conflict. The aim is to reassure its Asian allies and partners, including Australia, about the credibility of the US defence commitment at a time when China's growing 'anti-access/area-denial' (A2/AD) capability is gradually eroding America's maritime dominance in the Western Pacific. While officially AirSea Battle isn't targeted against any specific country, the US military's increased focus on China has given it much prominence in the strategic community. And some US policymakers consider Australia a key ally in operationalising the concept. We certainly have a major interest in the emergence of a credible US war-fighting strategy as a deterrent against a China that's increasingly flexing its military muscles. However, we also need to think through the potential implications of AirSea Battle and our practical military contributions. After all, this is about a potential military escalation with a major nuclear power.

There are no 'good' military options for fighting a war against China, only 'least bad' ones. Seen through this lens, AirSea Battle has the potential to provide for US-Sino deterrence stability by signalling American resolve and capability to resist major Chinese attempts to change the status quo in East Asia by military means. Australia should welcome it as such. At the same time, AirSea Battle can't provide a panacea for lower level maritime conflicts and it seems partially disconnected from broader US China strategy. Further, Asian allies would benefit from more detailed explanations about the concept's concrete implementation. Also, unlike Japan, South Korea and Taiwan, Australia is not a 'frontline state' in an AirSea Battle context. Any future Australian government will be able to make a noteworthy contribution to an AirSea Battle framework independent of any public commitment to a concept that's still in its early stages and that seems designed for a strategic environment in Asia which is yet to emerge.

