

## Preserving the knowledge edge

### Surveillance cooperation and the US–Australia alliance in Asia

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The US–Australia alliance is the bedrock of Australia’s defence policy. Successive governments have looked to the alliance for access to military technology, intelligence and training, as well as a promise of support against direct threats to Australia. Over the past 60 years, Australia has been a main beneficiary of America’s efforts to preserve a rules-based global order. However, Australia, the US and other regional allies today face a rapidly changing strategic environment in the Indo-Pacific. The American ‘rebalance’ to Asia represents recognition by the US that it needs to give greater priority to its management of the changing balance—an effort firmly endorsed by President Obama in his address at the University of Queensland. The military element of this effort is likely to be an impost on US resources at least as great as the combat operations in the Middle East.

It’s in Australia’s interest that US attention on Asia, and Washington’s increased political, economic and military engagement in the region, continue even as the US finds it more difficult to reduce its commitments in the Middle East. Through the ‘Force Posture Initiative’, Australia has therefore decided to open some of its bases and exercise areas in the



A Jindalee Operational Radar Network (JORN) transmitter site at sunset, Harts Range, Alice Springs. JORN is an over-the-horizon radar network that can monitor air and sea movements across 37,000 km<sup>2</sup>. Photo courtesy Department of Defence.

Northern Territory to rotations of US forces for training and regional engagement and has agreed to host new space surveillance sensors on its territory. In addition, Australia has contributed ADF forces to the new campaign against ISIS in Iraq.

So far, however, Australia hasn't made notable adjustments to the structure of its defence capabilities or their posture, potential deployment and interaction with other countries in the region to support the US rebalance. Indeed, suggestions of what such a structuring might mean vary widely, from possible contributions to 'AirSea Battle' against sophisticated anti-access and area-denial (A2/AD) systems<sup>1</sup> to a greater focus on stabilisation operations in failed states.<sup>2</sup> And yet, in either of those types of operation, understanding regional actors' capabilities, knowing what they're doing and having a better understanding of the overall theatre of operations are essential for success. For a long time, Australia has recognised the importance of ongoing intelligence, surveillance and reconnaissance (ISR) in its neighbourhood as the basis of a self-reliant capability for the defence of the nation. As Australia's strategic horizon expands to take account of strategic shifts in the Asia–Pacific, there's now a need to develop a joint US–Australian ISR system for shared as well as national objectives.

Much attention has been given to the ships, aircraft and people that will be redeployed to the Pacific to increase the US presence and create confidence in America's commitment. But additional platforms and military units are only a part of the military aspects of the rebalance. An essential component of the effort is developing an ability to understand just how the region's emerging powers are employing their new capabilities, whether on land or in, over or under the sea. At the same time, regional countries are also developing longer reaching and more persistent C4ISR (command, control, communications, computers, intelligence, surveillance and reconnaissance) systems of their own, ultimately to provide targeting for the new capabilities that they're acquiring. There's thus a hard competitive aspect to regional surveillance that, ultimately, will determine which countries will be best able to exploit their military capabilities in conflict. In this task, the US needs systematic support.

The capabilities that the US maintains in Asia and those of the ADF are in many ways complementary, as is their geographical distribution. Working together, the ADF and US forces can achieve a greater level of situational awareness that will help to achieve Australia's strategic objectives in relation to strengthening the US position in Asia and the global effectiveness of the alliance in general, as well as Australia's distinct interests in its neighbourhood. But some of the elements of Australia's defence capabilities that are most vital to the C4ISR effort of the US are not the most prominent in the ADF's order of battle.

To understand how and where other countries operate in as wide a region as the Indo-Pacific requires awareness over ever larger areas because their new capabilities have increasingly greater geographical reach and greater sophistication. Ironically, it has taken a civilian disaster—the disappearance of Malaysian Airlines Flight MH370—to put into stark focus the sheer difficulty of detecting a target that's not trying to be found. Knowing what's going on in the air, space, land, surface, subsurface and cyber domains will require surveillance efforts that are even more comprehensive, persistent and pervasive than in the past. This will stress even the world-leading capabilities of the Americans. It's not something that they can achieve alone, but it will be vital to the credibility of the rebalance to the Asia–Pacific and therefore of US global leadership, credibility and deterrence more broadly.

Australia's geography, its relationship with the US and its own technical and human resources could together be an essential element in the necessary response. Australia should sustain and extend its contribution to the global American C4ISR system in the areas where Australia can add most value, and where Australia will be able to gain most from being able to access the data that flows across it. This will be likely to prove more important to regional deterrence and stability than the acquisition of more visible Australian strategic weight, such as ships, aircraft and vehicles, no matter how advanced or versatile such new platforms may be. The continuing advance of technology means that such support will need to evolve constantly. The key criterion that must be kept in mind will be the value to the US that the Australian contribution would represent, whether in continuing awareness efforts, or, in the last event, war fighting.

Australia will thus need to be ever alert as to where it can make a unique contribution to the US effort, and one that makes a real difference. As in the past, this will often be a matter of exploiting Australia's geographical position—which was the reason that the US constructed the 'joint facilities' in Australia during the Cold War. But Australia's contribution will be greatest if it can use

its own intellectual capital and national innovation to develop its own systems, optimised to exploit these unique geographical advantages, as contributions to the joint C4ISR network. Therefore, it's essential that Australia maintain and extend its efforts in national activities that contribute to its own understanding of our region—of which the Jindalee over-the-horizon radar (JORN) is a prime example.

Cooperation with the US then also becomes complementary to fulfilling Australia's own national requirements. Some surveillance capabilities can't be provided by leveraging directly from the alliance effort, but have to be developed through a national effort instead. Again, JORN is a prime example. And, in turn, closer integration with allied systems will help maximise the effectiveness of Australia's own national surveillance effort, whether in the air, surface or subsurface domains.

At the moment, the ADF conducts maritime surveillance through Operation Resolute (for border protection), Operation Solania (in the Southwest Pacific) and Operation Gateway (in the northern Indian Ocean and South China Sea). In addition to supporting maritime surveillance, JORN and other sensors maintain situational awareness in the air domain. Moving towards an integrated Australian–US C4ISR effort would see ongoing commitments to these operations increased, integrated with similar US efforts, and expanded to include the subsea, surface, air, space and cyber domains. A properly managed national ISR effort, in the alliance context, also has the potential to allow Australia to provide a lead to the emerging efforts of other regional partners to improve their own awareness. In the short and medium terms, this is likely to be confined to less sensitive areas, such as collective maritime security against lower intensity, non-state threats, but it will be an important element in the development of a cooperative approach and may lead to much greater things in the future.

Acting alone, Australia couldn't possibly achieve the level of awareness that the evolving strategic environment demands. In alliance, it has the resources to 'fill the gaps' that remain in the US's coverage of the region. This is why the C4ISR relationship with the US in the Indo-Pacific provides such a critical benefit to both members in the alliance. US–Australian C4ISR cooperation will be essential to the success of the US rebalance, but also to Australia's own immediate security in a strategic environment in which more and more countries operate high-technology platforms that once used to be the preserve of Australia and its allies.

If Australia were to structure its forces for the alliance, it should make the ability to contribute to US operations in the Indo-Pacific theatre, in peacetime as well as in war, a key priority. Essential to this is the ability of the ADF to be a seamless part of an allied regional C4ISR system that cannot just detect but also target at long distances.

There'll be significant financial costs to achieve the required level of close interoperability with the US C4ISR system and to provide the force structure required for an ongoing commitment. There'll also be opportunity costs in achieving training priorities and the ongoing rates of effort that will be needed to sustain the Australian contribution.

With the Wedgetail, Super Hornet, Growler, Joint Strike Fighter and P-8, the future RAAF will already be well positioned, but less so the rest of the ADF. Priorities for force structure adjustments to support a greater Australian contribution include:

- additional regional surface, air and space surveillance (including through JORN) linked with US systems
- intelligence collection and analysis capabilities focused on the Indo-Pacific
- cyber capabilities
- communications and combat systems with effective data fusion and sharing mechanisms on air and surface platforms, including Wedgetail, the air warfare destroyer and the future frigate, that fully integrate with US networks
- submarines and subsurface sensors whose communications enable them to make a contribution to intelligence gathering and theatre-wide antisubmarine warfare.

## Notes

- 1 Benjamin Scheer, *Planning the unthinkable war: AirSea Battle and its implications for Australia*, ASPI, Canberra, 2013.
- 2 John E Angevine, *Mind the capabilities gap: how the quest for high-end capabilities leaves the Australian Defence Force vulnerable to mission failure*, Brookings Institution, Washington DC, 2011.

## Acronyms and abbreviations

ADF	Australian Defence Force
C4ISR	command, control, communications, computers, intelligence, surveillance and reconnaissance
ISR	intelligence, surveillance and reconnaissance
JORN	Jindalee Operational Radar Network

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