The logic of interoperability

Australia’s acquisition of the F-35 Joint Strike Fighter

INTRODUCTION
Since 1918, Australia has joined the United States in every one of its major conflicts: World War Two, Korea, Vietnam, the Persian Gulf, Somalia, Afghanistan, and Iraq. Australia’s enduring commitment to the alliance has led to a renewed focus on joint operations. The new maxim within Australian defence circles is “interoperability.” Interoperability with the US military has become the keystone phrase for many issues relating to Australia’s procurement, strategy, and doctrine. Yet the other phrase used equally as often is “self-reliance.” Australian strategic planners simultaneously view the US as an indispensable and unreliable ally. Although Australia has always been at America’s side, Australia was disappointed by the unenthusiastic response of the US to the 1999 East Timor crisis. As such, the underlining logic of interoperability is to hedge between dependence and self-reliance.

Adam Lockyer is a lecturer in US politics and foreign policy at the United States Studies Centre at the University of Sydney. He has been a visiting fellow at the Center for Strategic and International Studies in Washington and was the Lowy Institute’s 2008 Thawley Scholarship winner. His work has appeared in The Australian Journal of International Affairs, Review of International Studies, and Civil Wars.
Firmly resting among these mixed strategic motives is the F-35 Joint Strike Fighter program. The Australian government’s decision to acquire up to 100 F-35 fighters is not only the most expensive and complicated military purchase in Australia’s history but is also Australia’s biggest step yet toward interoperability. Historically, the US has been Australia’s country of choice when searching for military equipment. Indeed, barring one exception, since 1960, every fighter purchased for the Royal Australian Air Force (RAAF) has been of American origin.¹ Yet the F-35 is the first Australian defence purchase with the explicitly stated intention of improving interoperability with the US.

Although within Australian Defence Force (ADF) circles, the concept of interoperability has primarily come to be associated with the operational level of analysis, there is a competing view of interoperability. This second definition concentrates on politico-strategic integration. It is based on the aim to mesh the worldviews, objectives, and national interests of close allies. In turn, “politico-strategic interoperability” aims to promote a greater division of labour between the nations in regard to procurement, training, and deployment. While “operational interoperability” implies a nation’s preparedness to respond to a broad spectrum of contingencies, “politico-strategic interoperability” results in a narrowing of the spectrum of contingencies that a nation prepares to respond to, with the knowledge that the nation’s partner is prepared to respond to the remaining contingencies.

This article holds that a more effective US-Australian alliance should attempt to shift the logic of interoperability from the operational to the politico-strategic level. Taking the F-35 as an example, I argue that Australia would never be fully self-reliant in a confrontation with a major regional power. Furthermore, Australia’s contribution of airpower to an American-led coalition involved in a major regional conflict would be, at best, token and strategically inconsequential. Hence, instead of pursuing high-end capabilities, such as the JSF, Australia should dedicate itself to preparing for low- and mid-range conflicts. This focus would ease the US burden of regional peacekeeping, internal security assistance, and stabilization operations in the Asia-Pacific region. In exchange, Australia would invite a greater American presence that might include naval and air assets. This approach would exploit each country’s competitive advantages and be the

¹ The exception was the Dassault Mirage IIIE, which was of French origin. Australia acquired this airframe in 1964 in a decision that had more to do with the F-4 Phantom II’s late entry into service than with intentionally breaking the mould.
best means of advancing the alliance-partnership into the 21st century. For this to occur, however, the US would have to take dramatic steps toward allaying Australia’s historically ingrained fears of abandonment.

In this article I discuss the logic of interoperability as expressed by Australia’s decision to acquire the F-35 JSF. In the first section I provide a historical overview of Australian strategic thinking, and how this thinking has led to the integration of interoperability as a keystone concept. I then examine the historical development of current Australian strategic thinking, in which the two persisting underpinnings of Australia’s defence posture are self-reliance and dependency on a security guarantor (i.e., Britain, followed by the US), and interoperability is a means of balancing these two currents. In the third section I follow Australia’s F-35 procurement process and argue that this is a case where operational interoperability is likely suboptimal for both Australia and the United States. I outline the alternative to operational interoperability—namely, the politico-strategic variety—and conclude by reiterating the advantages that politico-strategic interoperability represents for the US-Australian military partnership over the current operational conceptualization of interoperability.

INTEROPERABILITY: TWO COMPETING DEFINITIONS

The origins of interoperability as a strategic concept lie in North America and Europe. Following the end of the Cold War, interoperability was at the centre of debates on the future of NATO. Over the course of the 1990s, it was decided that the focus of NATO should shift from territorial defence to multinational expeditionary missions in order for NATO to better respond to crises, such as the ones in Bosnia and Kosovo, and later, in Afghanistan and Libya. NATO would rely heavily on technology, mobility, and speed. This vision painted a portrait of the alliance partners acting outside of Europe, quickly confronting threats whenever and wherever they might arise; however, this new conceptualization of the alliance posed a new set of challenges. The capabilities gap between the US and its allies was considerable. Whereas the US had a long history of developing capabilities for mobile operations, the European militaries lacked full interoperability with the US and could only conduct limited joint or independent missions abroad. Nevertheless, the concept of interoperability became the guiding principle around which the future of NATO would be based.

In the context of post-Cold War American-European relations, interoperability became, for the most part, associated with combat systems and technology. The US Department of Defense Joint Staff’s definition
articulately expresses this approach to interoperability, viewing it as “[the] ability of systems, units, or forces to provide services to and accept services from other systems, units, or forces, and to use the services so exchanged to enable them to operate effectively together.”

In large part, this definition placed special emphasis on standardization in—as the military would put it—the Command, Control, Communication, Computers, and Intelligence (C4I) among allies. It also extended to include knowledge of each other’s operational and tactical doctrines and standardization in weapons and other expendable equipment.

From Europe, the concept of interoperability began to spread to Asia. In the Asian context, however, a subtle, but important, change took place. Instead of focusing on operational considerations, the use of “interoperability” came to be associated with shared political views and the ability of allies to respond to different sets of challenges. As Myron Hura pointed out, at “the highest level, interoperability issues center on harmonizing the world views, strategies, doctrines, and force structures of the United States and its allies.”

The underlining argument of the 2000 Armitage Report was that the US should rely more on Japan. The argument was to make Japan a “more equal partner” through “priority availability of U.S. defense technology...[and] a division of labor—apportioning analytical tasks according to the comparative advantages of each partner.” In Japan’s case, it was agreed that Tokyo would be responsible for securing its own airspace and sea lanes out 1,000 miles, while the American forces would concentrate their efforts further afield. This level of military cooperation was only achievable because of the extremely close political relationship and the trust each alliance partner placed in the other. In relation to Japan, interoperability meant substantial political and strategic integration.

Initially, the incoming administration of George W. Bush, whose objective was to pursue a more “humble” foreign policy, looked favourably

5 Ibid., 3, 4, and 5.
upon “politico-strategic interoperability.” The terrorist attacks of 11 September 2001, however, dramatically threw the weight of option toward the earlier operational approach. Politico-strategic interoperability vanished from Washington’s strategic outlook, as deep insecurity resulted in a push for a full spectrum of capabilities and the option of taking decisive action against all threats whenever and wherever they arise.

Canberra has overwhelmingly viewed interoperability with the US on the operational side, but also with a slight nod to shared political objectives and even cultural values. In 2006 the Australian parliament’s Joint Standing Committee on Foreign Affairs, Defence, and Trade stated that:

Interoperability with US forces and the ability to contribute to multinational coalitions are central themes in Australia’s policies, acquisition programs and training plans. Australia’s effective, high-end contributions to US-led coalition operations in Afghanistan and Iraq demonstrate the high degree of interoperability and the shared values that characterise the Australia-US relationship.

The latest push for improving interoperability in Canberra gained momentum following 9/11. Australia understood that it would once again be required to operate jointly with US forces on far-flung expeditionary operations, including Afghanistan. In October 2002, as part of an Australia-US ministerial meeting, the delegates agreed to a “review of Australia-US interoperability.” This meeting witnessed a melding of the minds, as both Washington and Canberra were squarely focused on promoting “operational interoperability.” A few areas were singled out for improvement, including information exchange, harmonization of some capability development, and cooperative science and technology experimentation. All of these areas are advanced by Australia’s acquisition of American high-end platforms, including its participation in the development of the Joint Strike Fighter.

7 “Inquiry into Australia’s Defence Relations with the United States,” report no. 130, Parliament, Joint Standing Committee on Foreign Affairs, Defence, and Trade, Canberra, 2006, ch. 3 and 31.
8 Ibid., 32.
AUSTRALIAN DEFENCE POLICY AND INTEROPERABILITY

The Second World War had a dramatic and enduring impact on the minds of Australian defence planners. For generations of Australian policymakers, the lessons of that war have been twofold. First, Australia was vulnerable to invasion from the north. A large country with a relatively small population, Australia felt exposed to its significantly more populous Asian neighbours. As a consequence, it required the continued support from a security guarantor. That is, a powerful friend that would come to its aid in a crisis. The second lesson was that security guarantors cannot always be relied on. Australia learned this through Britain’s abandonment of its far-flung and vulnerable colonies in favour of concentrating efforts on the defence of the British Isles. As the forces of Imperial Japan swept south through East and Southeast Asia, Australia scrambled to adjust as British forces focused on defeating Nazi Germany in Europe. These two contending lessons have produced an enduring security anxiety, not only in the circles of defence planners, but also in the wider Australian community.  

Since the Second World War, this tension between self-reliance and dependency has been at the heart of Australian defence planning. A commitment to both self-reliance and the US alliance has been explicitly cited in every major defence review since 1972. In addition to being a source of friction, balancing dependency and self-reliance is also a paradox—the paradox being that without maintaining a policy of self-reliance, Australia fears that the US commitment to the alliance could wane. Washington may begin to resent Canberra’s free-riding behaviour. Viewed through this prism, Australia’s acquisition of expensive, high-end capabilities is, in part, about appearing to be a responsible junior partner. In Canberra’s strategic outlook, self-reliance and dependency merge to become different sides of the same coin.

Generals are always preparing to fight the last war

Although the Second World War gave birth to Australia’s enduring defence traditions, the East Timor crisis has shaped much of Australia’s recent strategic policymaking. The importance of East Timor to Australian strategic thinking cannot be understated. Its significance sprang from two sources: it was the first major international military operation that Australia led in its history; and East Timor reinforced many of Australia’s pre-existing beliefs about what it could and could not expect from its major allies. These two threads have intertwined to influence every major Australian defence statement, defence acquisition, and doctrinal development since 1999.

Between 1975 and September 1999, Australia maintained a constant policy of non-interference in East Timor. This position became untenable when, following the East Timor 30 August 1999 referendum on independence from Indonesia, militias swept across the territory, inflicting widespread, seemingly random violence. The Australian government had been quietly preparing for the possibility of an intervention since the referendum had been called and urgently began to put those plans into motion. In those plans, it was clear that Canberra had assumed that Washington would support any Australian-led intervention with American ground troops. Washington, however, maintained that the region was not critical to its national security. The US secretary of defense, William Cohen, dismissively ruled out American troops, stating that “it is not an area that we are prepared to commit forces.”

The US national security advisor, Sandy Berger, echoed this sentiment, commenting that “because we bombed Kosovo doesn’t mean we should bomb Dili.” Although the US did eventually provide political cover and some heavy lift capability for the mission, it was not prepared to provide ground troops.

The US decision not to commit ground forces to the East Timor crisis was met with shock and disappointment in Canberra. The Australian minister for defence, John Moore, recalled his conversation with Cohen:

I spoke to Bill Cohen, who I knew before...The answer from Cohen was “it is your baby.” I said that you need to help—it’s part of ANZUS. But he said it is all yours. I asked what he would do, and he said he’ll have to think about it. He said they would give us

13 Ibid.
intelligence, and he would get back to us. But he said precisely, “no troops.”

The Australian government felt betrayed. The prime minister, John Howard, lashed out, saying, “The Americans have broken their military ties [with Indonesia]. I understand that those military ties are worth $700,000 a year. I’d rather them publicly offer some troops and keep military ties, quite frankly.” The foreign minister, Alexander Downer, continued: “Here we aren’t talking about a peace enforcement exercise. We are not talking about going to war with Indonesia. We are talking about a peacekeeping exercise, and we would like to feel that the United States did have some peacekeepers in that exercise, and I’m confident that the United States will have some peacekeepers in that exercise.”

The leader of the opposition, Kim Beazley, supported the Howard government’s position: “There is growing frustration in this country that we should find ourselves so alone in what is basically a human rights issue on our doorstep.”

The general feeling of abandonment went far beyond Canberra. The political leadership was channelling wider public opinion. An editorial in a leading Australian newspaper captured the feeling of the wider community at the time:

Much has been made by our politicians of the value of the US-Australia alliance and its importance to our security. However, the first time we have asked for American assistance it has been found wanting.

This is in stark contrast with the support we gave it in the Vietnam conflict...and, more recently, our ready response to its request for participation in the Gulf War.

14 Quoted in David Connery, Crisis Policymaking: Australia and the East Timor Crisis of 1999 (Canberra: Australian National University Press, 2010), 92, 73, and fn113.
16 Ibid.
One must now entertain some doubts as to how readily assistance would be forthcoming from the US if Australia was under external threat.\textsuperscript{18}

The US did eventually make some important contributions to the mission. It sent unequivocal signals to Indonesia that any interference with the international intervention would result in Americans weighing into the conflict. In addition to political cover, Washington also supplied key capabilities, such as some strategic sealift and communications. Nevertheless, there remains a widely-held view in Australia that the US largely washed its hands of the mission, and that, as the British had discovered in the Falkland Islands war of 1982, Washington does not always provide the level of assistance that close allies expect. Australia in East Timor and Britain in the Falklands have both learned that the US is at once an indispensable and unreliable ally. For Australia, the logic of interoperability is nestled in these historical lessons.

Every five years the Australian Department of Defence releases a white paper. These political documents spell out, in broad terms, the Australian government’s perceived key security challenges and its preferred responses. The 2009 white paper declared that Australia’s “most effective strategic posture continues to be a policy of self-reliance in the direct defence of Australia, as well as an ability to do more when required, consistent with our strategic interests and within the limits of our resources.”\textsuperscript{19} On the other hand, it argued, “Defence self-reliance means that Australia would only expect the United States to come to our aid in circumstances where we were under threat from a major power whose military capabilities were simply beyond our capacity to resist.”\textsuperscript{20} That is, Canberra expects that it will require US assistance in a conflict with a major regional power, such as

\textsuperscript{18} Editorial, “The US ties that don’t bind,” \textit{Sydney Morning Herald}, 10 September 1999. Tim Fischer, former deputy prime minister, also captured this widely held belief when he maintained that “the truth was that Washington could not have been weaker in its initial response to Australia’s request for assistance with East Timor during September 1999.” John E. Angevine, \textit{Mind the Capabilities Gap: How the Quest for High-End Capabilities Leaves the Australian Defence Force Vulnerable to Mission Failure} (Washington: Brookings, 2011), 17.

\textsuperscript{19} \textit{Defending Australia in the Asia Pacific Century: 2030}, Department of Defence, Canberra, 2009, 46.

\textsuperscript{20} Ibid.
China, India, or perhaps even Indonesia. These are precisely the scenarios to which the Australian government is currently preparing itself to respond.

CASE STUDY: THE F-35 JOINT STRIKE FIGHTER
By the mid-1990s, the Australian government was forced to begin contemplating replacing its ageing fleet of 26 F-111 long-range bombers and 71 F/A-18 Hornet fighters. It was a daunting prospect; it would be the most expensive military acquisition in the country’s history. Moreover, for three decades, the F-111 and F/A-18 had represented Australia’s air combat capability, and the list of admirers of these aircraft was long. In particular, the F-111 had assumed legendary status within the RAAF. The decision on the replacement was expected to come under extreme scrutiny.

In 2002, in a surprise move, the Howard government effectively cancelled the search for a new aircraft by buying into the development of the F-35 Joint Strike Fighter. On contributing US$150 million to the development phase, the minister for defence, Robert Hill, made clear that Australia had eyes only for the F-35: “Well if we want to go to the next generation of aircraft, this is really the only one... This is the only one within a reasonable budget, and probably the only one that would be available in any event, so it is very important to us, and we are not looking at any alternative.”21 For a long time thereafter, the F-35 enjoyed a sacred-cow status in the Department of Defence. “To question the F-35,” one military insider said, “is a dangerous career move.”22 Only recently have questions about the program begun to be voiced from within the Australian government.

Australia’s strategic rationale for acquiring new aircraft is to fill both the air superiority and long range strike roles. First, Australia requires new aircraft to replace its ageing F/A-18 Hornets, which are currently used primarily in the air superiority role. The Hornets’ main task is to maintain control over the airspace across northern Australia and its approaches. This is a challenging mission. Australia is the size of the continental US and has a coastline of 36,000 kilometres. To seize, control, and defend airspace requires airframes of both sufficient quality and quantity. Thus, it is believed that Australia requires at least the same number of the new aircraft as the number of Hornets it is replacing.

The second role of the Hornets is to conduct long range strike operations in place of the F-111. In 1963 the Australian government committed to

purchase 24 F-111C Aardvarks—a contentious choice. The decision was made to acquire the strike bomber while it was still on the drawing board. 23 The first prototype did not fly until the following year. In the early 1960s Indonesia was in the throes of an internal struggle against Communism, and there was a fear that Indonesia might be on course to become the Cuba of South-East Asia. If Indonesia turned Communist, then the possibility of Australia acquiring nuclear weapons was strong. The F-111 was to be the main delivery system. Carlo Kopp explained, “The F-111C, with the range to hit Jakarta flying from RAAF Learmonth in Western Australia, would have been the unstoppable nuclear delivery platform.” 24

But events move more quickly than platforms. By the time the F-111 entered RAAF service in 1968, the threat of a Communist takeover in Indonesia had passed. Nevertheless, for the next three decades, the F-111 remained Australia’s frontline deterrent. At the time of its retirement, the F-111’s range (roughly twice that of the F-35), payload (about half that of the B-52), and speed (twice the speed of sound at altitude), had not been equalled by any other tactical aircraft. It is almost certain that, had the United States Air Force replaced its own F-111s with a speciality aircraft to perform those same duties, then Australia would have been its first customer.

Interoperability and the Joint Strike Fighter
There were high risks in choosing the right aircraft to replace the F-18 and F-111. The speed with which the Howard government committed to the program is therefore surprising. There were several reasons why the coalition was so confident in its decision. First and foremost, the F-35 was the only fighter in the pipeline that could reasonably fulfil Australia’s need for a “fifth generation” fighter. Even if Canberra could convince Congress to release the F-22 Raptor for international sale, the Raptor was primarily an air-superiority fighter and was not expected to possess adequate ground strike capabilities. As other contributors to this issue of the journal point out, most leading European nations were looking to join the F-35 consortium rather than develop their own aircraft. As such, the F-35 was the only choice

23 Indeed, when defending the decision to purchase the F-35 off the drawing board and the seemingly endless technical difficulties, Australian advocates will compare the process with the F-111’s early acquisition stages; in contrast, critics will tend to compare it to the Collins Class submarine fiasco.
if Australia wanted to remain technologically ahead of its immediate Asian neighbours.

The added benefit of interoperability should not be overlooked. The F-35 is frequently pointed to by the government in Canberra as a prime example of an attempt to improve interoperability with the US. As early as 2003, for example, a deputy secretary for the Department of Defence, Shane Carmody, told a meeting of the Joint Standing Committee on Foreign Affairs that at the Australia and US ministerial meeting, known as AUSMIN, held in Washington on 29 October 2002, the ministers agreed “that we would work a bit harder on interoperability. Again trying to slice and dice that, from my perspective there are issues of strategic interoperability—strategic decisions we make, such as the Joint Strike Fighter, and being involved strategically as a long-term strategic ally of the United States.” 25 Indeed, at times, it has been suggested that the mere participation in the development program is a sign of the strength of the relationship. Jeffrey Lantis and Andrew Charlton, for instance, argued that ties “have been strengthened through increased intelligence and technology-sharing following September 11, 2001, and Australian participation in the multibillion-dollar Joint Strike Fighter program.” 26

The F-35 fits neatly into Australia’s conception of operational interoperability. First, the F-35 allows Canberra a sense of independence and self-reliance. Australia has traditionally had a significant technological advantage over its closest Asian neighbours. Recently, however, this status has met with increasing competition. From 2010 onward, Australia’s neighbours will begin to receive the latest versions of the Sukhoi Su-27/30 family of aircraft from the Russian Federation. These aircraft will not only outmatch Australia’s current inventory of F/A-18 Hornets but will be able to perform comparably with everything but the latest “fifth generation” of fighter aircraft, such as the F-35. Hence the F-35 will allow Australia to leap ahead of its neighbours and regain its position as the regional leader in airpower, providing Canberra with a sense that it could be self-reliant in a direct confrontation with a regional player.

Second, it is expected that the F-35 will allow Australia to contribute to a US-led coalition in the region or beyond. Australia has had difficulty in


deploying its aircraft on coalition missions because it has not adequately kept pace with US military upgrades. After falling behind, the RAAF has had difficulty catching up in key areas. In some areas, this discrepancy makes coalition operations difficult, but in other areas—such as aircraft identification systems—it makes joint operations extremely risky. Australia expects that the purchase of the F-35 will reset this imbalance and make coalition fighting more accessible. Overall, therefore, the purchase of the F-35 neatly dovetails with Australia’s perception of interoperability, where both self-reliance and dependence are in balance.

The potential emergence of the quantitative capabilities gap

As technology has advanced, military platforms have progressively become more expensive. Nowhere is that trend more evident than in airpower. The costs for new aircraft have increased exponentially. Estimates vary considerably on the final cost of each F-35, but it is predicted that Australia will pay around US$134.5 million each for the first batch delivered.\(^27\) Allowing for inflation, this is roughly three times what Australia paid for each F-111C and 220 times the cost of each P-51 Mustang in 1945. Typically, however, performance and technology advances have allowed nations to acquire fewer, more capable aircraft than they are replacing. But, in a break from the past, most countries intend to purchase around the same number of F-35s as the number of aircraft they already have in service. Australia is no exception; although the F-35 is three times as expensive as the aircraft it will replace, Australia does not believe the F-35 can perform the necessary roles with one-third the numbers of pre-existing aircraft.

The headache for the Department of Defence is threefold. First, as discussed above, the department believes it requires 100 F-35s in order not to suffer a decrease in combat capability. Second, the Australian government is currently reducing its defence spending. In 2013, for instance, the defence budget will fall in real terms by 10.5 percent.\(^28\) The 2012 national budget cut $5.5 billion from defence spending over four years. These constraints place increasing financial pressures on all areas of defence, but procurement

\(^{27}\) Andrea Shalal-Esa, “U.S. sees lifetime cost of F-35 fighter at $1.45 trillion,” Reuters, 29 March 2012. It is hoped that the cost will drop for later deliveries. Some estimate that costs might drop as low as $75 million per aircraft, but most estimates hold the cost above $100 million. See David Watt, The Joint Strike Fighter: Overview and Status (Canberra: Parliamentary Library Information Service, 2012), 8–9.

will be particularly scrutinized with projects being cut, delayed, or spread over a longer time frame. Finally, the F-35 program is currently experiencing alarming cost and time slippages. The most concerning comparison of the F-35 program is to the development of the F-22 Raptor. The F-22 is typically pointed to as an exemplar of runaway costs; and the F-35 program has already surpassed the F-22 in costs at a comparable point in the aircraft’s development. The F-35’s initial sticker price was $55 million, which has now climbed to above $130 million. The F-22’s unit cost was eventually delivered at just below 200 percent of its baseline projections.29 The F-35 is on track to match, or even surpass, the F-22 program’s cost inflations.

Another concern for Australia is time slippages. Australia has committed to purchase 14 aircraft, to be delivered in 2014 at the cost of $3.2 billion. The delivery of these aircraft in 2014 is now increasingly looking unlikely. Upon receiving these aircraft, Australia had planned to purchase most of its aircraft starting in 2015—later in the production circle. This plan would have decreased the cost of subsequent airframes; however, the production line in 2015 will not be as mature as previously projected. Indeed, according to a leaked version of the 2013 white paper, the Australian government now anticipates that just two F-35s will be delivered by 2020.30 To purchase additional aircraft before then, Australia would have to pay a premium—if the aircraft are even available. Australia has already retired its F-111, and the F-18’s lifespan is unlikely to reach 2020. As a result, time slippages are going to create a significant capabilities gap between aircraft. The decision will be to either purchase the F-35 on schedule and pay the premium (and buy fewer), or acquire a “stop gap” aircraft, such as the F/A-18F Block II Super Hornet, and then buy fewer F-35s. It seems that the Australian government is heading towards the latter solution. In 2006 Australia hastily announced its purchase of 24 Super Hornets.31 The purchase was intended to help fill the void created by the retirement of the F-111. The Super Hornet entered RAAF service in October 2011.

In late 2011 the minister for defence, Stephen Smith, explained Australia’s concerns on the F-35 time slippages and its relationship with

the Super Hornet decision. While standing alongside his host—Canada’s defence minister, Peter MacKay—Smith said:

Our position on Joint Strike Fighters I’ll restate. We’ve committed ourselves to 14. The White Paper or the Defence Capability Plan talks in terms of ultimately a number up to or around 100, but we’ve committed to 14. Any further over and that we’ll make on a deliberative basis.

I’ve made the point before we are very concerned about rubbing up against our schedule. So we’ll do an exhaustive risk assessment in the course of next year and make a judgment next year about whether we need any transition capability and the obvious—whilst we’ve made no decision on this, the obvious possibility for us is more Super Hornets.32

In Australia’s case, it is almost certain that each new Super Hornet will ultimately mean fewer JSFs. To date, Canberra has made the best of the difficult situation. In 2012 Canberra announced that it would invest an additional $1.5 billion to have half of its 24 Super Hornets converted into Growler platforms. The Growler Electronic Warfare kit will allow the Super Hornets to jam the communications and surveillance capacity of an enemy. The vision is for the Growler Super Hornets to work in conjunction with the F-35 to allow the latter to more efficiently penetrate enemy airspace. The US, however, has been disappointed with the performance of its current Growler fleet and has sped up development of its next generation of electronic jamming systems. The next generation of pods will be developed principally for the JSF.

The financial and practical difficulties that Australia has faced in its procurement of the F-35 are not unique. Australia is currently struggling to maintain the depth and scope of many high-end platforms. Budgetary constraints are also having an impact on the Royal Australian Navy’s plans for additional Hobart Class Air Warfare Destroyers and 12 replacement submarines and on the army’s vision to “harden” by acquiring self-propelled artillery and additional armour assets. There is an increasing call for Australia to restructure its defence forces to a less ambitious model. Mark

Thomson, Australia’s leading defence economist, concludes that rather than “seeking a role in the evolving balance between the great powers of the Asia Pacific, [Australia needs] to focus on realistic tasks that are achievable within a realistic budget... Every day of big planning but small spending, risks incoherent decisions that we’ll have to live with for years. Now is the time to sort out the wreckage of the 2009 white paper.”

AN ALTERNATIVE TO “OPERATIONAL” INTEROPERABILITY

Australia is not the only nation that is struggling to keep pace with the sticker price of high-end military equipment, such as the F-35 JSF. Indeed, the US military itself is coming under increasing budgetary pressures and will be reduced over the coming decade. In 2011, the US government cut defence spending by $450 billion. In addition, up to a further $600 billion may be cut over the coming decade. These combined cuts represent a 20 percent reduction in US defence spending. In a November 2011 letter to Congress, Leon Panetta, the defense secretary, detailed the “devastating” effects of a 20 percent reduction in defence spending: the smallest ground force since 1940, a fleet of fewer than 230 ships—the smallest number since 1915, and the smallest tactical fighter force in the history of the air force. In a sign of things to come, the US has already decreased its orders for the F-35 by 15 percent from 2,866 to 2,457.

Spiralling costs and shrinking budgets may limit the number of F-35 JSF that Australia and the US will be able to acquire. Australia may not be able to buy the requisite number of F-35s to defend its airspace and provide a deterrent to its neighbours, and the US may have to reallocate resources to compensate for reduced numbers. The overall result may well be that both nations find themselves with less capacity to respond to all contingencies than they had before the current round of defence acquisitions.

Nations are entering an era when they will not be able to respond to the full-spectrum of contingencies because the ability to afford a defence force that is capable of responding to the full spectrum is coming to an end. Although, over the long term, advances in unmanned vehicles and robotics might decrease costs, in the immediate future, all nations will be forced to make hard choices about what threats they want to prepare for. Under these

33 Mark Thomson, “If budget cuts portend smaller ambitions, let’s spell them out in next white paper,” Weekend Australia, 26 May 2012.
circumstances, alliances will become more important, as nations come to depend on others more frequently and more deeply.

There is thus a strong strategic rationale for the US-Australia partnership to shift the concept of interoperability from the operational to the politico-strategic level. Under this formulation, the United States and Australia would each more deeply coordinate efforts and specialize in different areas, while relying on the other to respond to those contingencies outside their individual specialities. For its part, Australia would move to specialize in low- and mid-level contingencies. The conventional threat to Australia’s territorial integrity, sovereignty, or vital strategic interests is low, and will remain low for the foreseeable future. Even if a 21st century version of the “Great Game” is played out in Asia, Australia is not Belgium. Graced by geographic positioning, Australia is not on the way to, or from, anywhere. In contrast, the US is best placed to continue to prepare for large-scale operations against regional powers, while leaving lower-level operations to its regional friends and allies, like Australia.

Australia has a long history of lower-level operations, such as peacekeeping, peace monitoring, and counterinsurgency. Defence 2009 confirms that responding to weak states and irregular threats will continue to be the dominant form of action the ADF will take in the region. These are the conflicts on which Australia has traditionally focused. From the Boer War, through to South Vietnam, Bougainville, Cambodia, Somalia, East Timor, Solomon Islands, Iraq, and Afghanistan, Australia has responded effectively to small to middle-level contingencies. Its high-end platforms, on the other hand, have rarely been used. The F-111s, for instance, were never used in combat, and the Hornets have only seen limited operation experience in Iraq. Similarly, the F-35 JSF is unlikely to ever be used in combat. As John Angevine has argued,

these expensive systems will be too small in number to support higher-end operations independently. The lack of a full spectrum of capabilities will weaken the ADF’s capability to build regional partnerships and formulate flexible options to secure Asia-Pacific security and stability. In order to use the ADF’s more likely “low-end” contingencies, Australian defense planners will have to resort to expensive and time-consuming ad hoc restructuring.35

By attempting in vain to prepare for high-end operations, Australia will only limit its ability to respond to the contingencies it is most likely to face over the coming decades.

An emphasis on self-reliance and high-end capabilities causes two additional problems for Australia. First, it can send a negative message to the region—one of mistrust and fear. A greater emphasis on regional joint operations and land forces communicates Australia’s intention and need to work cooperatively with its neighbours and positively contribute to the region’s stability. Second, by focusing on high-end contingencies, Australia has made itself more reliant on the US across the board. It will be more reliant on Washington to assist in low- and medium-level security challenges, while also likely requiring US assistance if engaged in a serious conflict with a major regional power. In either case, even after extending its budget beyond what it can probably afford, Australia will be more of a liability than an asset to the US.

For its part, the US has lost all appetite for low-level operations. Over a decade of continuous war in Afghanistan and Iraq has left Washington with no stomach for peace-building, peacekeeping, counterinsurgency, or stabilization missions. Speaking at a West Point graduation ceremony in 2011, US Defense Secretary Robert Gates reminded graduands of General Douglas MacArthur’s famous statement in 1949 that “anyone who commits the American Army in the Asian mainland should have his head examined.” Gates added, “In my opinion, any future defense secretary who advises the president to again send a big American land army into Asia or into the Middle East or Africa should ‘have his head examined.’” He continued that “The odds of repeating another Afghanistan or Iraq—in invading, pacifying, and administering a large third-world country—may be low.” Nevertheless, these kinds of operations will continue to be necessary; and who will conduct them, if not the US? It is likely that the US will expect allies, such as Australia and members of NATO allies, to lead the way on lower-level operations in their particular neighbourhoods.

The US continues to possess a significant competitive advantage in high-end military operations. Whereas Australia plans on purchasing 100 F-35 Joint Strike Fighters, the United States is seeking 2,443 airframes across the Air Force, Navy, and Marines. These planes come with a price tag of $385 billion. The Government Accountability Office (GAO) has estimated

that operation and maintenance costs will add another $650 billion to this figure. In other words, the US will spend $1 trillion on the F-35, which is more than Australia’s entire yearly GDP ($924 billion).37 Within a decade, the US will have: 15 and 20 times the number of aircraft as China and Russia, respectively, and America’s planes will continue to be far superior to those of its global rivals. Clearly, Washington has traditionally been far more confident in focusing on high-end contingencies that can bring America’s unmatched potential in technology and conventional military capabilities to bear.

Towards a 21st century alliance

There are many advantages for both Australia and the US to moving from an operational to a politico-strategic conceptualization of interoperability. As the price tag for military equipment, personnel, and training increase, and available budgets decrease, Australia and the US have to decide on defence priorities and adjust their efforts accordingly. In the coming decades, defence technologies will increase in sophistication and price. The education and training, and thus salaries, for the personnel needed to operate and maintain such weapons and equipment will proportionally increase. We may be witnessing a significant strategic shift, where even the wealthiest nations in the world will no longer be able to afford to prepare for all contingencies. Partnerships will become increasingly important.

Nevertheless, the path from operational to politico-strategic interoperability is littered with problems. Australia and the US are among the closest of partners. Their foremost challenge will be to increase their faith in each other’s support during times of crisis. As discussed above, Australia views the US as an indispensable but also an unreliable ally, and the US remains committed to being able to respond to a full spectrum of contingencies, in large part because of the belief that it cannot, or should not, have to rely on other nations.

Australia and the US should explicitly state that they agree that each will take responsibility for different types of contingencies. This responsibility might take on the form of a redrafting of the ANZUS treaty to clarify what each nation can expect from the other in various situations. Alternatively, and more likely, it might take the form of a joint defence white paper that outlines each nation’s vision for the alliance over the coming decades. Actions

will then follow words; Australia will feel confident enough to emphasize the
defence acquisitions, doctrines, and deployments that aim at the low- and
mid-range spectrum of military operations in its immediate region. The US
might then station additional high-end assets in Australia in the pursuit of
joint strategic objectives.

The F-35 JSF would be directly affected by any move from operational
to politico-strategic interoperability. Australia would reduce the size of its
fleet—for example, from four squadrons to two. In exchange, it would
redirect resources to the pursuit of capabilities better suited to low-end
contingencies, such as transport helicopters and surveillance unmanned
aerial devices (UAVs). The US might then compensate for such a move
by agreeing to permanently station two squadrons of US Air Force F-35s
in Australia. These squadrons would work jointly with the RAAF’s F-35s
squadrons. At the very least, as Hugh White has stated, “The government
needs to do something no one has done in this entire process, and that is to
make a serious judgement about what it wants air power to do in the period
from 2020 to 2040.”38

CONCLUSION
Australia’s current pursuit of operational interoperability sends two
seemingly contradictory messages—first, that Australia expects to fight
alongside the US in any future conflict in its own defence, on expeditionary
missions within the region, or in global security operations; second, that
interoperability is not integration. Although Australia has sent its own forces
to fight alongside the US in every major American conflict since the Great
War, it worries that this level of loyalty might not always be reciprocated.
Australia has therefore maintained a position of self-reliance in all of its
defence decisions. Using the F-35 program as an example, I have argued
that this logic of interoperability is becoming increasingly untenable. The
burgeoning cost of acquiring, maintaining, and staffing military equipment
has placed the preparation for the full spectrum of military contingencies
out of reach for even the wealthiest of nations. Although the F-35 represents
the largest and most expensive defence acquisition in Australia’s history,
questions remain regarding whether there will be a quantitative gap in
Australia’s defence. That is, whether Australia will be able to afford enough
aircraft to adequately perform all of the duties expected of it. Furthermore,
Australia’s airpower contribution to any major American-led military

operation will remain only token. Hence Australia’s current position is not adequately fulfilling either the objective of self-reliance or that of significant coalition contribution.

This article has submitted that the logic of interoperability should be shifted upwards from the operational to the politico-strategic level. In practice, that means a greater division of labour between Australia and the US. Australia would agree to specialize in low- and mid-level contingencies (such as peace and stability operations), while the US would continue to prepare for high-level conflicts with regional powers. Australia would then be able to recapitalize resources from unaffordable and excessive air and sea capabilities, such as the F-35, into ground and amphibious forces, to deal with the more likely scenarios confronting the nation and the region. This approach would play to each nation’s competitive advantage and make the relationship better reflect the challenges that will confront both over the coming decades.