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BUYING AIR WARFARE DESTROYERS: A STRATEGIC DECISION

EXECUTIVE SUMMARY

The Air Warfare Destroyer [AWD] project is Australia's biggest proposed defence acquisition in decades. Cabinet has already chosen a company to build the ships. But before ministers go further and sign contracts, they should stop and ask two big questions which have not so far been properly considered. First, would AWDs do enough for Australia's defence to justify their cost, and what would we need to sacrifice to afford them? Second, are we buying them the right way? There are good reasons to think that the answer to both questions is no. The AWD's main purpose is to provide air defence for ADF amphibious operations in medium- to high-level conflicts. But such operations would not be a high priority for Australia. The forces we could deploy are small, and the risks they would face, even with AWDs, are daunting. And if it was necessary, amphibious operations could be better protected for air attack by proactive counter-air campaigns or fighter escorts. For coalition operations, AWDs would only add another option to a wide range of highly capable contributions we can already make, including submarines, maritime patrol aircraft, AEW&C and fighters. And AWDs would be marginal to any future development of ballistic missile defences for Australia. So AWDs would provide few important new military options. But their high price imposes big opportunity costs in the already-squeezed defence investment program. Unless Defence funding rises sharply, we can afford them only by cutting other major capabilities. The most likely trade-off is the JSF project; cutting that would have serious strategic costs. So ministers should not commit to buying the AWDs before they have reviewed the Defence Capability Plan as a whole to see the full implications for the ADF's overall capability. If ministers nonetheless decide to buy AWDs, they should look very carefully at how the project is being developed and managed. As they did with Navy's troubled Collins submarines and Seasprite helicopters, Defence is setting unique Australian requirements that will unnecessarily add to the cost and risk of the project. And they are experimenting with a new acquisition strategy that provides less competition and leaves more of the risk of the project in Defence's hands. A simpler and more competitive acquisition strategy would provide better value for money. The simplest and cheapest of all would be to buy overseas. There is no compelling strategic reason to buy AWDs, and even less to build them in Australia.

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BUYING AIR WARFARE DESTROYERS: A STRATEGIC DECISION**Due diligence**

On 30 May 2005 the Government chose ASC as the 'preferred shipbuilder' for a project to buy three new Air Warfare Destroyers [AWDs] for the Navy. This is a key step towards a final contract that will commit the government to spending at least \$6 billion on the ships, and perhaps as much again to operate and maintain them over thirty years or more of service. The stakes are high. This is by far the biggest, and probably the riskiest, defence equipment decision the Howard Government has faced. It would be Australia's most expensive defence contract since the ANZAC ships in 1990, and the riskiest since the Collins submarines.

So far public and political attention has focused on who would build the ships and where. But other, more important, questions need to be answered before the Government signs a contract. A big share of our national defence effort over many years will be irrevocably committed once a contract is signed. The strategic and political consequences of a bad decision would be with us all for a long time. And there is no rush: four FFGs are now undergoing major and expensive upgrades, and they should stay in service long after 2013, which was the original target date for the AWDs. There is plenty of time to consider this important and risky project more carefully.

Once they do so, ministers will find two big questions about the project. The first is whether they are satisfied that buying and operating three AWDs is the best way to invest at least \$6 billion, and huge through-life costs. Or could the money be better spent on other capabilities that would do more for Australia's strategic reach and weight? The second big question is whether Defence's acquisition strategy is workable. The strategy is based on three assumptions: we have unique requirements that

demand new and risky solutions; we need to build the ships here in Australia; and new and more complex partnering arrangements will work better than old-fashioned competitive tendering and fixed price contracts. None of these is self-evidently true.

The proposals being put to ministers on the AWD project over the next few months will take both these questions as already settled. But apparently on neither of them has the Cabinet seen comprehensive advice that weighs the full range of issues and options, and explores the true costs and risks. Before they sign up for the project ministers should want to be more fully informed, so that they can exercise the due diligence that a decision of this magnitude requires. This paper aims to provide an outline of the reasons why ministers should think carefully before signing.

Are AWDs a good investment?

Air Warfare Destroyers are not *prima facie* a waste of money. They are highly capable warships, and several countries in the Asia-Pacific region are currently investing in them.¹ But are they the best investment for Australia? One might hope that this issue would have been addressed and settled before the project got down to choosing a shipbuilder, but it has not been. The idea of buying AWDs was first put to ministers during the preparation of the Defence White Paper in 2000.² In August that year the National Security Committee of Cabinet [NSC] directed – not on advice from Defence – that the White Paper should plan to preserve all of the current capabilities in the ADF for the next twenty years. Nothing was to be cut, and equipment that became obsolete was to be replaced. This approach had some merits, but it lost the chance to refocus defence resources on the most cost-effective mix of capabilities for Australia, taking account of new

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strategic circumstances, regional capabilities and technological developments.

A 'Baseline Force' program was developed to meet NSC's direction as the foundation of the White Paper's Defence Capability Plan [DCP]. It made provision to maintain, upgrade or replace all of the major platforms in the ADF. The only exception was the fleet of six FFGs: replacing them with six similar ships made no sense, because with eight ANZAC ships we had enough at that broad level of capability. But in keeping with the ministers' direction, the money to replace them had to be allocated to new warships. As a result, the DCP provided for a smaller number of more capable AWDs. At the time there was no analysis of the relative priority of AWDs – or any other kinds of ships - compared to other capabilities. It was always intended by ministers that such detailed analysis would be undertaken and considered before planned projects were implemented. This step is now overdue.

Opportunity costs

We need to start by setting the AWD proposal in the wider context of our future defence capability plans, so we can see the opportunity costs of buying AWDs. This has become increasingly critical for two reasons. First, the price of the AWDs has gone up. In 2000 ministers were told that three or even four AWDs could be bought for \$3.8 billion. The price has already risen to \$6 billion for three, and few observers believe it will stop there. This is a complex and high-tech project with big risks of cost blow-out. The price could be \$7 billion or even more when the contract is signed, and higher still before the last ship is delivered. All this price escalation makes an important difference. At the 2000 price estimate we could afford to buy AWDs without displacing other high priority projects. At today's much higher costs, the project threatens to

unbalance the government's overall plans for Australia's future defence capability.

Second, the Defence budget – and especially the investment program - is under increasing pressure. The Government has kept its promise that defence spending would grow at 3% per year in real terms from 2001-2011. But Defence has allowed costs to grow even faster, and the DCP no longer fits the budget projections. Mr Costello has recently hinted that real defence spending will continue to grow at 3% after 2011³, but a slowing economy could make further increases impossible. And even if the Treasurer's hints come true, the DCP is still likely to be under-funded. So if ministers decide to sign contracts for the AWDs now, they will need to be prepared either to increase Defence spending even more over the next ten years, or to cut or delay other major capabilities.

It is easy to see where those cuts would most likely fall. The biggest project in the DCP is the plan to buy about 100 Joint Strike Fighters [JSF] for \$16 billion or more, to replace our 71 F/A-18 fighters and around 25 F-111 bombers. This is probably the only project big enough to absorb the kind of cuts needed to fund the AWDs. As things stand, buying AWDs might mean we need to cut the JSF project to as few as 60 aircraft. Apparently this possibility is now being seriously considered within Defence. The cuts could be deeper if the JSF's price rises, and if delays require money to be diverted for further upgrades to the F-18s. So without big increases in Defence funding, buying the AWDs would risk major cuts to our air combat and strike capabilities.

That would be a very serious decision. The JSF will be the most important and most versatile platform in the ADF, central to almost every type of military operation in any medium- and high-level conflict, including air combat, strike, maritime interdiction

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and support for land operations. We will need plenty of them. There is nothing magic about the number 100, but in war, as Marshal Zhukhov said, quantity has a quality all its own. With fewer JSF, we would be less able to do concurrent air operations in different places – for example to deploy substantial air combat forces beyond our shores for coalition operations and still maintain an adequate air-combat capability here in Australia. It would reduce our ability to protect ships while launching air combat and strike operations elsewhere. It would reduce our ability to fight a long war and sustain air power after losses in combat and accidents. So if a decision to buy three AWDs means a big cut in JSF numbers, we would pay a big opportunity cost for them.

The other probable victim of cuts to pay for AWDs would be Army. Some people think we need a bigger Army and some think we need a more heavily armed one, but there is no debate that the Army needs more resources. Buying AWDs would put pressure on the Government's plans for Army, and jeopardise future important enhancements. Are they worth it?

What are AWDs for?

The main purpose of Air Warfare Destroyers is to defend themselves and other ships against aircraft launching anti-ship missiles like Harpoon and Exocet. Anti-ship missiles [ASMs] are, along with submarines, high-speed small craft and sea mines, among the most dangerous threats to surface ships today. And though ASMs can be launched by ships, submarines and from land, air-launched ASMs pose the major threat. This reflects a long-standing trend: for over a century, surface ships have become increasingly vulnerable to air, mine and submarine attack. Most of the capability of a modern surface warship today is focused on defending against these threats. As a result, the primary offensive roles in

maritime warfare around the world have been taken over by aircraft and submarines, which can fire the same weapons as major warships, but are much less vulnerable. Aircraft and submarines launching Harpoon missiles and torpedos are now the primary maritime-strike platforms, and the traditional naval task force of surface ships has little role in higher-level conflicts, except to protect other ships, such as aircraft carriers, from the same threats.

Warships remain useful in lower-level operations. Where the risk of air or submarine attack is not high, their capacity to stay in place for a long time, maintaining a presence and providing support, can be invaluable. Australia's FFGs and ANZAC ships are well-suited to these roles. Even in these roles, ships need some air and missile defence capacity in case a conflict escalates suddenly. For example, warships supporting INTERFET in East Timor in 1999 could have come under threat from Indonesian air attack. If that had happened our F/A-18s would quickly have cleared the skies, but in the meantime our ships would have been at risk. To guard against this kind of threat we are now spending a lot of money on major upgrades to the air and missile defences of the ANZACs and FFGs.

The FFG upgrade has run into serious problems, but once these projects are completed the FFGs and ANZACs will be fairly capable warships, with a good capacity to defend against a low to medium air threat. But neither class of ship would have the capacity to operate independently in, for example, a Taiwan Strait conflict. And they would be more of a liability than an asset to a coalition naval task force in that kind of fight. In the 1990s Defence looked at ways to fit a full-scale air warfare capability on the ANZAC ships, but it proved to be impractical. So if we want ships that can operate more independently in medium to high intensity conflicts, we need AWDs.

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When might we need to do that? According to Navy, the principal role of the AWDs would be to protect independent ADF amphibious operations in medium to high intensity conflicts.⁴ In recent years we have sensibly expanded our capacity for amphibious deployment and support in lower-level operations like INTERFET and RAMSI in Solomon Islands. In these kinds of operations, the threat of air attack is, at most, relatively modest, and could be handled by the upgraded capabilities of the ANZACs and FFGs backed by the ADF's wider air-defence capabilities. But in a more intense regional conflict, might Australia want to mount independent amphibious operations against a highly capable adversary?

There is really only one credible type of scenario. If in a conflict a hostile major power established bases somewhere like PNG, we would want to be able to dislodge them. An amphibious operation would be one way to do that. But there would most often be easier and cheaper operational options. It would be better to prevent the base being established - or if it was already established, to cut off its supplies - by air and sea interdiction. Or it could be destroyed by a sustained strike campaign. Amphibious operations would be a last resort.

One key reason is that, even with current expansion plans, our amphibious capabilities are very small. The key limitation to our amphibious capability is not the lack of AWDs but the small scale of the land forces we could actually put ashore. According to Navy, the maximum amphibious force we could deploy and sustain is only about 2000 relatively lightly armed troops⁵. Such a force could achieve little against the kind of opponent who would be capable of mounting a serious air threat to our fleet.

Another key reason is that amphibious landings against capable adversaries are perhaps the most complex and risky kind of military operation. Air attack is not the only threat the force would face. Submarines, mines and small fast attack craft also pose very serious threats. Submarines, for example, are becoming increasingly common in our region, and our ability to counter them is low. It would be extremely risky to mount an amphibious operation in the face of hostile submarines. So even after a heavy investment in AWDs, it would remain likely that other threats would preclude amphibious operations.

Amphibious operations are therefore an unlikely option for Australia in medium- to high-level contingencies in our own region. However, if in the last resort there was no better alternative, we could provide protection from air attack without AWDs. The best way would be to neutralise enemy air capability before our amphibious force came within range, by a proactive counter-air and strike campaign. In any major conflict in Australia's neighbourhood, establishing control of the air by destroying adversary air forces would be among our highest operational priorities. Once that had been done, adequate air defence for amphibious forces could be provided by the air defence capabilities on our current ships.

Of course, one can think of scenarios in which we could not neutralise the air threat in this way. For example, we might want to deploy forces by sea during a time of tension, when surprise air attack was possible, but before conflict had broken out. In that case air defence could be provided by fighters flying combat air patrols, supported by air-to-air refuelling tankers and airborne early warning aircraft. This would be cumbersome and expensive, but possible in most scenarios. It might require additional air-air refuelling aircraft, which would be

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useful in many other scenarios, and much cheaper than AWDs.

The Navy will argue that they cannot be sure the air force would show up when they were needed. It retains a visceral reluctance to depend on the RAAF for air defence. This, more than anything else, drives Navy's ambitions to have AWDs. There may have been some basis for such concerns when the three services operated quite separate command structures. But all ADF operations are now under joint command. All operational priorities across all three services are considered on their merits in achieving the overall campaign objectives. If the command system is working, RAAF fighters would be made available to protect amphibious forces, if that were a high-priority task. If the command system cannot be relied on to make such judgements correctly, we need to fix the command system, rather than buy more ships. And if we judge now that amphibious operations would not have the priority to command air support from fighters in a conflict, they probably do not have the priority to justify investing in AWDs now.

All this suggests that amphibious operations in higher-level operations are not a top priority for the ADF, and that if they were necessary they could be defended from air attack without AWDs. In any medium to high-level regional conflict, Australia's key operational priority would be to establish control of the air. That is why the 2000 White Paper said 'Air Combat is the most important single capability for the defence of Australia.'⁶ So it makes better sense to keep priority focused on our aircraft-based air-defence and strike capabilities. Investments in the essential capabilities for these operations – especially JSF, AEW&C, AAR and precision weapons – would be more important to our security in a wider range of scenarios than amphibious capabilities. So it does not make sense

to invest \$6 billion or more in AWDs to support amphibious operations, if the opportunity cost is a cut in Australia's front-line combat air power. Likewise it hardly makes sense to buy AWDs at the expense of the land forces that they are intended to escort and protect. Investing in AWDs at the expense of our air and land forces would limit our ability to undertake high-priority operations in all kinds of conflict, without much enhancing our ability to undertake lower -priority operations.

Coalition operations

Our discussion so far has focused on the capabilities we need for independent operations in our own neighbourhood: the government says that such operations remain our highest priority. But proponents of AWDs often argue that these capabilities are worth buying because they could contribute to US-led coalition operations beyond our immediate region. As we have seen, without AWDs Australia has no capacity to send operationally useful warships to a US naval task force in a medium to high-level conflict. But we do have many other capabilities we could contribute which would be just as valuable as AWDs, if not more so. These include our Collins class submarines, P-3C Orion Maritime Patrol Aircraft, the new Wedgetail AEW&C aircraft, air to air refuelling tankers, and F-18 fighters or their JSF replacements. So it's hard to argue that we need to spend \$6 billion or more for AWDs just to provide another option to the long list we already have.

Nor is there a compelling argument for Australia to develop greater amphibious capabilities specifically to contribute to coalition amphibious operations. The US maintains an entire service, the Marine Corps, dedicated to this function. It is hard to imagine scenarios in which an Australian amphibious capability would make a decisive

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contribution in this field. And we have a lot of other things to contribute.

Ballistic missile defence

Finally, some have suggested that AWDs would provide a basis for developing a ballistic missile defence [BMD] capability sometime in the future. The Aegis system that the government has already announced will be fitted to the AWDs does have the capacity to detect and track medium range ballistic missiles, and the ships could at a later stage be fitted with the SM3 missile capable of shooting them down. But the capability they could provide would be little use for defending most of Australia from ballistic missiles. Unlike Japan or South Korea, geography dictates that most of our continent could only be targeted by longer-range missiles which the Aegis-SM3 system would not be capable of targeting.

So the BMD capability we might develop on the AWDs would mainly provide missile defence for Australian forces deployed overseas. That might be useful in some circumstances. But it seems unlikely we would deploy forces against a ballistic-missile-capable adversary except as part of a US-led coalition, in which case it would be reasonable to rely on the US for BMD, as we have in the past. If in future we did decide to buy a missile defence system to defend parts of Australia or deployed forces abroad, it would probably make more sense to buy a land-based system, which would be less vulnerable to mines, submarines and air attack, as well as being more flexible and cheaper.

Priorities and alternatives

There is no doubt that AWDs are capable platforms which would enhance the overall capability of the ADF and contribute to our ability to undertake some kinds of operations in some circumstances. But there are few circumstances in which they would

make a decisive difference. So it is hard to see a strategic argument for spending \$6 billion or more on three AWDs, at the price of cutting back our air combat and strike capability, or curtailing the development of our land forces. Even if Defence spending were boosted enough to cover both the JSF and the AWDs projects, it is far from obvious the AWDs would be the best way to spend the extra money. First priority is much more likely to go to expanding our land forces.

Where would a decision not to buy AWDs leave the future of our Navy fleet? What should we buy instead? There are two points to be made here. First, there is not much need to rush. It makes sense to keep the FFGs in service longer than Navy plans, in order to recoup the investment in their current upgrades. That would also allow time to look at some new options for future warships. The designs and system elements now being considered for the AWDs represent relatively old technologies. In the US, new technologies are being developed for the next generation of combat ships, including the DDG 21 and Littoral Combat Ship projects. Innovative Australian companies are playing a part in some of these developments. Such projects could offer significantly better capabilities than the current generation of AWDs, with technologies which will stay at the forefront for much longer. We would be better off waiting until those projects have matured before choosing a replacement for the FFGs. A few years' delay would also ease the financial squeeze, by avoiding a direct clash between the FFG replacement and the JSF programs.

Second, we should consider whether we need to replace the FFGs with another class of warship at all. We have seen that the key roles for surface ships today are in lower-level contingencies. The eight ANZAC ships provide an excellent capability for these situations. So rather than buying more

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conventional warships, it might be better to buy more ships that can move troops and supplies around our region in lower-level contingencies – ships like HMA Ships *Tobruk*, *Manoora* and *Kanimbla*. These are the busiest ships in the Navy, in strong demand for lower-level amphibious operations ranging from INTERFET and RAMSI to Tsunami relief. These capabilities should have a high priority. But, in a separate project, Defence is now planning to replace these three ships with much larger ones – well over twice the size – including two designed for medium to high-level amphibious assaults, and one roll-on roll-off supply ship.

This makes little sense, for the same reason that buying AWDs to support high-level amphibious operations makes little sense. We do not need bigger amphibious platforms for high-level conflicts, but we do need more of them for low-level contingencies. So it would make better sense to cancel both the AWD and the big amphibious ship projects, and instead buy a larger number of smaller amphibious ships. For example we could get three conventional, highly capable amphibious ships of around 12,000 tons, and three Australian-designed and -built high-speed catamarans of the kind that were so useful in East Timor. A fleet like this would very substantially increase our ability to deploy and support forces around our region in the most likely contingencies.

We are looking here at two different visions of the future of our Navy. One would see us move towards a fleet of eight ANZACs, three AWDs, and three very big amphibious ships. This fleet would be optimised for the remote contingency of high-level amphibious operations, but would still provide only a modest and marginal capability. The other would see us move to a fleet of six amphibious ships and eight ANZACs. Later perhaps they could be supplemented by a new class of higher technology

craft like the Littoral Combat Ship. This would be a more flexible fleet, with significantly more capacity for the kind of lower-level operations in which ships make the biggest contribution. And it would be much cheaper, leaving money to fully develop our air combat, strike and land forces – a more capable and flexible force overall.

A decision to buy AWDs will affect the entire balance of the government's investment program in defence capabilities, and the costs of crewing and running them will take a major slice of the operating and personell budgets for decades to come. Before committing these resources, ministers should review the overall Defence Capability Plan so that they understand exactly the implications of the decision for the ADF's overall capability.

Buying a warship

If ministers decide that the strategic value of the AWDs does justify their price tag and opportunity costs, they should look very hard at the way Defence plans to buy them. According to those plans, the AWDs are to be built to a design and specification which will be unique in a number of critical ways. They are to be built in Australia by an Australian-led company or consortium. They are to be built very quickly – on a time-scale that looks frankly unrealistic, and which mandates rushed approaches to complex questions. And they are to be built under arrangements that move away from the 'fixed-price' contracts which have been used in the past to a more flexible but uncertain arrangement under which the Commonwealth seems likely to carry more of the risks of non-performance by its contractors than it has in the past.

All of these aspects of Defence's acquisition strategy significantly increase the risk that the AWD project

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would go badly wrong for the Commonwealth. The AWDs would be by far the most complex naval project undertaken by Australia since the Collins Class submarine project, and they carry many of the same kinds of risk that caused such problems in the Collins.

Uniquely Australian

One key source of risk is the development of a unique Australian design. Defence seems to think that we have unique requirements for our AWD, which require a unique combination of sensors and weapons, and probably also extensive changes to the design of the ship itself. Combining elements from diverse sources into a single, seamless, integrated system is a huge, complex, costly and risky task, driven by a process which often sets such requirements without rigorous cost-benefit analysis. This is probably the single most risky aspect of the whole project.⁷

It is not a new problem. The biggest problems in the Collins, the Seasprite naval helicopters and the current FFG upgrade project have arisen from the undisciplined setting of unrealistic 'requirements' for unique combat systems. These drove the projects to try to develop combat systems which went beyond both our genuine needs and the limits of what was technically feasible. Before agreeing to Defence's acquisition plan for the AWDs, ministers will want to get clear answers about exactly why we need to go this route. A number of countries have built successful modern AWD combat systems. Do we need to go to the cost and risk of developing another one, or could we buy someone else's?

The virtues of simple competition

Second, Defence is proposing a new and very different approach to contracting for these ships. After disastrous experiences with the old Government-owned dockyards, where an absence of

clear commercial incentives produced massive inefficiencies, successive Australian governments have rebuilt Australia's naval shipbuilding industry on the basis of open competition for fixed-price contracts. Notwithstanding problems with Collins, this approach has delivered good results in big and complex projects including the ANZAC ships and the very successful and high-tech minehunter project. But for the AWDs, Defence is proposing to do something very different. It is moving away from the model of open competition to a much more complex and less openly competitive arrangement, which threatens to lose the advantages of the old system, without fixing the faults which caused problems with the submarines.

Under the old contracting model a number of companies were then given a chance to bid as the prime contractor. Bidders would make their own decisions about the most cost-effective way to meet Defence's requirements. The winner signed a fixed-price contract with – at least in theory – clear penalties for delays and performance shortfalls. The prime contractor would be responsible for the performance of all his sub-contractors.

This approach has three advantages. First, the responsibility for delivering the final product is absolutely clear. It lies with the prime contractor, who has himself chosen the subsystems which will need to come together to produce the complete system, and who is clearly committed to making it work. Second, it provides a fixed price, and it gives a high level of confidence that that price will be good value because it has been hammered out in the stringent environment of a competitive tender process. Third, it imposes real discipline on Defence not to keep changing specifications as the project proceeds.

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For the AWDs, Defence is working in a very different way. It is in effect running three separate competitions: one to choose a company to build the ship (won by ASC), one to select a company to engineer the combat system (won by Raytheon), and – later – one to select a ship design. The fourth element in the jigsaw – the company that will provide the Aegis combat system – has already been chosen with no competition at all. The successful companies will be brought together into a kind of *ad hoc* association, led by Defence itself, to deliver the ships.

Supporters of this approach claim a number of advantages over the old model. First, it takes less time to get to contract, because a number of different decisions can be taken in parallel instead of in sequence. This is probably true. But being quicker to contract does not necessarily mean that the ships will be in service sooner, if the result of the parallel decision-making is a less well-developed project which runs into bigger problems once construction is under way. This is the risk we are running now.

Second, supporters claim that the new acquisition strategy makes it easier to change specifications as technology evolves over the life of the project. If that is true, it is not necessarily an advantage. In a project where the requirements already appear undisciplined, an arrangement that encourages Navy to keep changing its mind and upping the specifications is likely to lead to delays and cost overruns which will more than offset any improvement to the final delivered capability. Long experience shows the best projects are those which have clearly specified capability outcomes which are set down at the start and delivered at the end. For example the complex, high-tech and highly innovative Wedgetail AEW&C project has (so far at

least, touch wood) run very well. That project has been run the old way, with a single prime contractor and a fixed price contract. Such contracts can accommodate important technological changes, but also maintain discipline on all concerned.

Third, the new approach is said to be more realistic in its allocation of risk in the project. The old fixed-price model supposedly shifted all the risk in the project to the prime contractor, who was alone responsible for delivering the contracted capability at the contracted price. Proponents of the new acquisition strategy argue that in reality the Commonwealth could never shift all the risk to its supplier. As the Collins project showed, when a big project goes bad, the Commonwealth's interests mean it has to help fix the problems and get the equipment delivered, rather than simply to bankrupt the supplier. The new model provides a mechanism for the Commonwealth to share both the pains and the gains that may occur through the life of the project. (Indeed its advocates call it a 'painshare-gainshare' arrangement.) But in the process it does change the balance of incentives working on the contractors, and the burden of risks to the Commonwealth.

Under the old fixed-price contracts, the executives of the prime contractor knew that they would have to wear any cost overruns which did not threaten the overall financial viability of their companies. So even though it was true that risk could not be transferred completely to the contractor, the incentives on the contractor were nonetheless very strong to contain costs, because their company would wear any overruns which did not threaten the viability of the project. Under the new arrangements, those incentives are very much reduced.

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Moreover, under the proposed new arrangement prices will be set in a much less competitive environment. None of the three concurrent competitions proposed by Defence is being conducted against rigorous prices. For example ASC has been chosen to build the ships before the government has decided which ship it wants to build. That means they did not bid to build a particular ship for a particular price. They were chosen on the basis of quotes for hourly costs for different types of work looking ahead ten years or more. Once a ship design is chosen they will then come back to the government in a non-competitive environment and say how much it will cost to build that ship. It would be very surprising if the starting price is not a good deal higher than would have been reached by competing bids under the old model.

Gentlemen's agreements

Finally, without a prime contractor responsible for assembling the whole project, Defence will inevitably end up carrying the greatest responsibility for making it work. It will function in effect as the chairman of a committee of the different companies to sort out problems as they arise. That will be tough. For example the relationship between Lockheed Martin, who will supply the Aegis system, and Raytheon who will integrate it into the rest of the ship, will be complex and potentially explosive. Much will depend on the ability of Defence to manage these highly complex relationships and not end up carrying the can when things go wrong. One would be forgiven for having one's doubts. Defence is not necessarily very good at making gentlemen's agreements work.

The advantages which are claimed for this approach do not seem to offset these significantly increased risks, especially in a project that already carries very high technical risks to start with. And nor do they address the very real problems that have arisen with

projects like the Collins, Seasprite and FFG upgrade projects. In different ways each of those projects had things in common with the AWD proposals: highly ambitious requirements calling for complex system-integration tasks; complicated and potentially disputatious relationships between local firms and their US high-technology partners; insufficient control of contract change proposals; and a lack of clear responsibility for the delivery of the final product. Ministers will be taking a real risk if they sign off on this approach without much closer consideration.

In reviewing the acquisition strategy, ministers might want to go back to basics and ask whether we need to build the ships here at all. If we really need AWDs, the quickest, safest and cheapest approach would, without question, be to buy them direct from overseas. There is no compelling strategic reason to build them here. The argument usually given is that unless we build the ships we won't be able to maintain and repair them. But why should that be so? After all, we maintain and repair all kinds of aircraft without building them here. For many years we maintained and upgraded our old British-built Oberon-Class submarines here. And we have maintained and upgraded earlier classes of overseas-built warships, including the recently retired DDGs. There is no compelling reason why the current generation of warships should be any different. In reality, the imperative to build warships in Australia is political rather than strategic. But responding to political pressure to build warships in Australia can carry high strategic costs, if it means we end up buying ships we do not really need, and paying more for them than we need to. These are the twin risks we face in the AWD project.

BUYING AIR WARFARE DESTROYERS: A STRATEGIC DECISION

A parting shot from Jackie Fisher

Usually cabinet ministers do not get involved in the ins and outs of defence capability decisions. But once or twice a decade a choice comes along that is so big that it has implications for the whole shape and balance of our defence forces. And these decisions – like the carrier decision of twenty-five years ago – are not ones that Defence itself is usually very well-placed to take. They involve such large questions of institutional direction – indeed of institutional identity – that normal decision-making processes seize up, and the issue is propelled forward by its own momentum.

The AWD decision is one of these. That is why it is so important for ministers to take a careful look, and make their own decisions about the issues canvassed in this paper. As they do so, they might want to recall the words of the redoubtable Admiral Jacky Fisher, architect of the Edwardian Royal Navy. One hundred years ago he warned of the dangers of buying ships which are ‘merely a symbol of the power of a nation, not a concrete embodiment of it’⁸.

¹ Massimo Annati. The Asian DDG Race. *Military Technology* Vol XXVIII, Issue 11, 2004 p. 31

² Commonwealth of Australia. *Defence 2000: Our Future Defence Force*. Canberra, 2000 p. 90 para 8.60

³ Lincoln Wright. *Sunday Sun Herald* May 1, 2005 p. 4

⁴ RAN Sea Power Centre. Air Warfare Destroyers and Combat Operations from the Sea. *Semaphore* Issue 5, April 2005

⁵ Ibid

⁶ Commonwealth of Australia. *Defence 2000: Our Future Defence Force*. Canberra, 2000 p. 84 para 8.37

⁷ Press reporting suggests that some of these problems are already becoming apparent. Geoffrey Barker, Costs Salvo to Warship, *Australian Financial Review* 20 May 2005 p. 20.

⁸ Quoted in Paul Kennedy, *The Rise and Fall of British Naval Mastery*. Third Ed. New York, Fontana, 1991 p. 257

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