# Going down to the sea

## in big enough ships

### **Billy Ruffian** Oh the irony

One of the great ironies about strategic debate in Australia is that the modern Australian Defence Force (ADF) largely now argues instinctively from a joint perspective whereas much of the civilian defence bureaucracy, most academics, much of defence industry and many journalists are still often bogged down in the stove-piped, operating environment-based thinking that just assumes the Navy, Army and Air Force are only loosely related entities. This type of narrow thinking often addresses equipment procurement issues only from separate or loosely connected Navy, Army and Air Force perspectives, rather than the integrated models, perspectives and stances adopted by the modern ADF.

Recent criticism of the longstanding plan to finally re-equip the Navy with destroyers capable of providing an air defence umbrella for a deployed force—maritime, land or joint—has again highlighted this unfortunate trend. The great bulk of this criticism has centred on trying to argue the relative values and costs of capabilities based on one or other of the Services alone, rather than making a case for an integrated joint-Service and effects-based approach involving capabilities provided by two or all three Services.

A related aspect is that after a long period when advice from the government's professional military advisers was often sidelined, or not given appropriate weighting, by the public service dominated Defence bureaucracy, the last two to three years has seen the system move back towards some form of balance. Military professional advice is no longer excluded from, or diluted during, strategic policy making and capability development, but is increasingly weighed appropriately against complementary or competing advice from other quarters. This situation has not been accepted by those bureaucrats, both serving and retired, long accustomed to ignoring military professional considerations and monopolising advice to the government on strategic and other defence matters.

Some academic and quasi-academic input into defence debates also seem to reflect legacy protection imperatives concerning past bureaucratic decisions, rather than a truly objective stance and a forward-looking perspective. Renewed public debate on the project to re-equip the Navy with three new destroyers exemplifies several of these trends.

### A little background

It is intended that the new destroyers will be capable of providing sophisticated means of early warning, control and defence against air and missile attack across a wide area. A

frigate, in contrast, has an air-defence capability limited to point defence; that is they can only defend themselves or a vessel in relatively close proximity. In contrast, the new destroyers will be able to protect large areas containing multiple ships and, in some cases, areas of adjacent land. In particular, they will be able to protect and directly support land forces ashore during littoral and archipelagic operations. They will also have a much greater capacity to handle multiple, simultaneous aerial attacks against the forces they are protecting. These are important considerations based on recent, and (likely) future, ADF operational experiences in our region.

Just as importantly the new destroyers will be larger vessels capable of far more than the provision of a deployable area air-defence capability. The term Air Warfare Destroyers (AWD) is really a misnomer and the ships should be more accurately referred to as Future Surface Combatants or Sea Control Combatants. The ships will be a significant node in the ADF's developing network-centric warfare concept. They will enable a powerful fusion of air, surface and subsurface sensor and engagement data from units of all three Services, from remote sensors, and from imagery and other intelligence data ashore. Apart from employing this data, they will offer another option for command and control of a deployed joint force.

Given their anticipated size (6–8000 tonnes full load displacement), the intended anti-submarine and antishipping capabilities are expected to be significant. In short, these ships will reintroduce a significant seacontrol capability into the surface combatant force, and they will form the cornerstone on which future ADF littoral operations can be built.

### A little history

In the case of area air defence, the three ships planned will replace and modernise a capability the ADF possessed from the mid 1960s to 2001, when the last of the Charles. F. Adams class guided missile destroyers (DDG), HMAS Brisbane, was withdrawn from service because its engines had worn out. The decade-plus gap until the first of the three new ships comes on line in 2013–14 means a degree of strategic risk. This is especially so should the ADF be deployed outside the range of yet to be delivered land-based airborne early warning and control (AEW&C) aircraft and our land-based fighters. This would also be the situation should such aircraft be unavailable or outclassed, unless the area air defence capability could be provided by allies—as much of it was by the US and British navies during the initial stages of the 1999 East Timor crisis.

This at least 12-year gap is the result of fundamental political and institutional problems underlying capability development in Australia. If such a ship-based capability was still considered necessary, the first of the new ships should have been ready before at least the last of the old ships was scrapped. This effectively meant the decision to replace and modernise the capability provided by the three DDGs should have been made in the mid 1980s to early 1990s period. The then government, with little thought for the future and their long-term responsibilities, perpetually postponed such a decision in order to cut defence spending even further for essentially political purposes.

One of the supporting reasons this occurred was because some politicians and key advisers in the Defence civilian bureaucracy were devotees of the contentious theory that modern air power was the panacea for most strategic dilemmas. Critics of such ideas have described this as a derivative of the 'silver bullet theory', where objectivity is lost in the pursuit of technical solutions alone to strategic problems that really require a balance of capabilities and forces to solve.

In 1999–2000 the US Navy withdrew four Kidd-class destroyers (configured for the air defence role) from service and was prepared to sell them to Australia (they have since been purchased by Taiwan). Although old, these ships remained capable and would have filled the gap for the decade or so until the new vessels came into service.

Project Sea 4000 seeks to provide the ADF with the maritime component of a comprehensive, layered area air defence capability. The design phase of the project will be undertaken in 2006–07 with the three new ships scheduled to enter service in 2013, 2015 and 2017 respectively. Tenders for their local construction closed in December 2004 and a decision is due to be made in April, with the preferred design selected around mid year.

The cost of the three ships, spread over a 12-year period is estimated to be in the range of \$A4.5 to 6 billion. This is not high for the effectiveness of the capability delivered, especially in comparison to other principal defence projects with similar timeframes such as the Joint Strike Fighter (JSF).

### **Recent criticism**

Any plan to provide the ADF with air-defence capabilities not centred on fighter aircraft is, of course, always likely to engender opposition from the industrial, academic and Service-zealot wings of the financially well-resourced 'air power lobby'. Given the actual and emotional investment involved with replacing the F/A-18 Hornet with a new generation of fighter aircraft (JSF), it is not surprising that at least some within the 'airpower lobby' see the cost of the new ships as a threat to their pet hobbyhorse, even though the cost of the ships pales in comparison with that of acquiring 80-100 JSFs at \$A12–15 billion.

Criticism of the plan to procure three new destroyers

was thus always inevitable. What has surprised many is its timing and the source of some of it has aroused much stronger feelings.

On 14 February this year the *Sydney Morning Herald* published an opinion article by Professor Hugh White, from the Strategic and Defence Studies Centre at ANU. He questioned why the new destroyers were necessary and posed the idea that land-based fighters alone could do the same job. The article was necessarily short, in word length, historical accuracy and argument, but it summarised common claims from the 'air power lobby'.

More importantly, the article completely ignored the principle of strategic redundancy, which, in summary, is that a country should not put all its eggs in one basket such as we did with the disastrous 'Singapore strategy', imposed on the country, against professional military advice, during the 1930s. In any crisis or conflict, a wide range of environmental, geographic, climatic, geostrategic and operational influences interact and change constantly. Maximising flexibility and adaptability in the configuration of the defence force necessarily means not being solely dependent on any one type of force element for the execution of defence strategy and its constituent operational tasks. In other words, a professional and commonsense approach would be for Australia to spread its area air defence effort across a range of mutually supporting capabilities, including ground-based, airborne and satellite surveillance and control systems, and a layered response provided by land-based fighters, destroyers armed with missiles, and land-based missiles.

Professor White's article also inferred that the decision to build the ships was taken merely to replace some of the Navy's existing frigates (rather than to replace a lost capability) and that the decision had not been the result of rigorous analysis of alternatives. This suggestion has puzzled many, first because it is not factually correct and second because White, a deputy secretary in the Department of Defence 1995–2000, was intimately involved with strategic policy matters, and was the drafter of the *Defence 2000* White Paper.

For example, in a ministerial press release during preparation of the White Paper (dated 24 May 2000), the then Minister for Defence, John Moore, noted:

'... the Defence Capability Committee has formally decided that the US Navy Kidd-class destroyers will not be acquired by the ADF [as an interim air warfare capability]. The DCC reached this decision on the basis that, in the present environment, they do not provide longer term value for money ... The Kidds were only one option for Navy's long term Air Warfare capability and they were closely examined. ... Although they will not be acquired, the examination of the Kidd option proved a useful exercise in exploring issues relevant to the acquisition of an effective Air Warfare capability ... a joint Defence and industry team has been established to determine the most effective way to acquire the capability for the ADF.'

The 2000 White Paper itself noted that the new destroyers would need to be significantly larger and more capable than the ships they nominally replaced. Subsequently,

in 2002–03 the all-party defence subcommittee of the Parliamentary Joint Standing Committee on Foreign Affairs, Defence and Trade undertook an inquiry into Australia's maritime defence strategy. The inquiry was wide-ranging and took evidence from ADF experts, Defence officials (including the then Mr White) and, during public hearings, heard other views from academics, public-interest groups, professional experts and representatives from industry and commerce. The committee's June 2004 report, *Australia's Maritime Strategy*, recommended:

'The Government decision to purchase three air warfare destroyers for delivery by about 2013 is supported. The Department of Defence, however, should explain how adequate air protection will be provided to land and naval forces before the air warfare destroyers are delivered in 2013.'

### Carving a joint approach instead

The argument that the destroyers are unnecessary and should not be procured is invalid on a number of grounds. This is particularly so when it is alleged that one of the tasks expected of these ships, area air defence of a deployed force, can be provided entirely by land-based fighter aircraft.

- The protection of a continental-sized landmass and one of the largest EEZs in the world cannot be achieved with a navy possessing surface combatants no larger or more capable than frigates. The preservation of our sovereignty, especially the protection of our (largely seaborne) trade and interests, depends on an integrated maritime strategy employing elements of all three Services with the Navy and Air Force predominating. The application of maritime power requires the assertion of sea control. This function requires a particularly close partnership between the Navy and the Air Force to gain and maintain freedom of action of an area of sea, and the airspace above it, for our own purposes and, if required, deny its use to an adversary. Sea control on the scale required in the Australian context means at least some destroyers.
- Australia is not taking an unusual or divergent path in procuring a new generation of large destroyers for the provision of area air defence and sea control. Similar-sized, AWD-like ships are being brought into service by the navies of Britain, France, Spain, Italy, Netherlands, Norway Japan, South Korea and China. Australia is a medium-sized power with continental and maritime defence responsibilities greater than any other medium power. It is simply wrong to suggest these responsibilities can be met effectively with a navy possessing only frigate-sized surface combatants.
- The aversion of some critics to bigger ships seems more emotional than logical. Since the retirement of HMAS Brisbane the Navy's surface combatants comprise only frigates. The Oliver Hazard Perry class frigates (FFG) are a 1970s design with four of the six built in the early 1980s and the remaining two in the early 1990s. They have been hard run and are effectively in the later phases of their operational life. The Anzac-class frigates (FFH), although newer (they were constructed from the mid 1990s onwards), and now being fitted with Harpoon anti-ship mis-

- siles and eventually missile-armed SH-2G(A) Super Seasprite helicopters, currently have a single 127mm gun as their main offensive armament. All their other capabilities at present, including their anti-submarine warfare capacity, are essentially for self defence.
- A destroyer-sized vessel has greater sea-keeping abilities, especially in the Southern Ocean, greater survivability in combat and greater operational and logistic flexibility, range, endurance, speed and 'presence' than a frigate. Destroyers are multi-roled vessels capable of executing a wide range of peacetime and wartime naval tasks. The same cannot be said for frigates or for fighter aircraft. Even for diplomatic or implied force purposes, the actual or assumed 'presence' or deterrence to escalation of a powerful ship, with significant capability and endurance, cannot be duplicated by overflying combat aircraft. It also cannot be duplicated by the introduction of land forces without introducing considerable questions of national sovereignty.
- Attempted criticism through suggestions that the new destroyers are as big as World War II light cruisers is as misleading as it is irrelevant. Worldwide there is a trend back to larger maritime platforms as a result of improved countermeasures, a greater capacity to absorb battle damage (both of which reduce vulnerability), the introduction of truly networked task forces, and the significant financial savings to be made over the life of the vessel. Size is a plus not a minus.
- The larger hull of the new destroyers will provide far greater architectural and systems flexibility over the 30-year lifeof-type (LOT). While electronic systems tend to get smaller over time there are more of them, and weapon systems are generally as bulky as they always have been. New types of threat necessitating reconfiguration of vessels also emerge regularly. A larger hull with adequate margins for future growth allows significant technical changes to the configuration of the ship to be made over its LOT without them automatically necessitating changes, often expensive and time-consuming ones, to other systems on board. The same cannot be said for frigates where both the FFG and Anzacclass vessels are essentially full. In the former case, the combat system is being replaced during the current round of refits because the ships' architecture is insufficiently flexible to accommodate newer capability requirements and space needs to be freed up for other systems.
- The destroyers will enter service without the capability to fire anti-ballistic missile missiles. The larger hull does, however, offer much greater capacity and potential for theatre missile defence configurations in the future should this become necessary.
- Various scientific and professional experimentation, wargaming, exercises, desktop studies and operational research by the ADF, and the Defence Science and Technology Organisation, have consistently highlighted the need for complementary capabilities for the provision of persistent and area defence of joint forces against air and missile attack. The destroyers will be the critical maritime component of a network-enabled ADF air-warfare system and should not be considered in isolation.

- Australia is never going to be able to afford a large number of modern fighter and AEW&C aircraft. With each generation of fighter introduced the numbers bought are smaller, often by significant amounts. Modern precision weaponry has brought an increase in the roles and tasks of fighters without necessarily reducing operational workload per aircraft and pilot. Australian military history is replete with numerous examples where land-based fighters have been required for higher priority tasking elsewhere, were out of range or endurance, or were not able to obtain access to suitable bases, and have thus not been available at all or in sufficient numbers to protect maritime task forces or ground-force operations. It would be an unacceptable operational and moral risk at best, probably even folly, to configure the ADF so our entire area air-defence effort in all circumstances was invested solely in land-based fighter
- Destroyers of the size and type envisaged, on the other hand, will provide the operational (and in some cases strategic) flexibility to provide a high level of autonomous area air control and defence, against aircraft and missiles, 24 hours a day even in the absence of continuous land-based air support.
- Destroyers of the size and type envisaged offer significantly greater flexibility and mission versatility in meeting out-of-region tasking and the interoperability with allies this generally involves. The likelihood of such tasking was highlighted in the *Defence 2000* White Paper, reaffirmed in the 2003 *Defence Update on Australia's National Security*, and agreed in the 2004 Parliamentary Joint Committee report, *Australia's Maritime Strategy*.
- Destroyers would allow a self-contained Australian task force comprising destroyers, frigates and amphibious ships to operate independently of allies when required. At the moment, for example, during higher intensity operations, our frigates must plug in to US and British task forces where the command and control, area surveillance and air-defence capacity to cover them is provided by US or British destroyers. Improved interoperability with allies is also a major tenet of defence policy. The reverse side of this interoperability coin is that destroyers are far more interoperable with allies, both technically and operationally, than smaller vessels. Destroyers therefore give us greater strategic flexibility in choosing when and where we join coalition operations, they free us from going cap in hand to allies at times, and they allow us to undertake a share of leading major task forces.
- Finally, destroyers of the size and type envisaged maximise Australian self-reliance and offer Australian governments the ability to exercise a range of diplomatic and strategic influences, ranging from the benign to the coercive, without challenging another country's sovereignty or perceptions of their of interests in the way that the deployment of land forces or over-flying combat aircraft do.

### Thinking big and flexibly

The new destroyers, while necessarily having a strong air warfare bias, will not only be used for area air defence. They

will be the Navy's primary surface combatants and will deliver a range of capability options to the ADF in the configuration and deployment of balanced forces. They will be capable of rapid deployment and sustained joint and/or combined operations in the execution of our strategy and the pursuit of our national interests. While capable of operations at the high end of the conflict spectrum their utility over the full spectrum of maritime and joint operations, from diplomacy to combat, will be a significant capability multiplier for the whole ADF. These multi-role destroyers will be the mainstay of our seabased strike and air-control capabilities, as well as providing significant command and control, anti-submarine warfare, surface warfare and electronic warfare capabilities.

Many critics of the destroyers are perhaps more motivated by what the ships will be able to do rather than any genuine belief that they cannot fulfil the purposes assigned or that other force elements alone might do it better. These ships pose an obvious deterrent to potential adversaries and, ironically, a real threat to those prone to pushing single-issue hobbyhorses. •

Billy Ruffian is a pseudonym for a retired ADF officer, and may or may not be based on the 74-gun ship of the line, HMS Bellerophon, which was part of Nelson's command during several major sea control operations.

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