

ADF Capability

Introduction

- 5.1 The previous chapter argued for the need for a new Defence White Paper which would provide a greater focus on maritime strategy as the key to defending Australia and its interests. This chapter extends this debate to capability. Defence capabilities are the means by which Defence strategy is realised.
- 5.2 While the focus of the inquiry is on strategy it is essential to examine some of the broad Defence capabilities that might be influenced by the committee's conclusions in Chapter four. The following discussion of capability seeks to present an overview of some of the key capabilities that arose during the inquiry. It is not intended to present an alternative to the Defence Capability Plan or to provide exact numbers of a particular type of platform.
- 5.3 The final part of the chapter provides a range of observations about the maritime strategy capabilities. Each section provides an overview of some of the key objectives set out in the *2000 White Paper* and the key changes arising from the 2003 Defence Capability Review.
- 5.4 Following this is a review of the ADF's ability to interoperate with allies and, in particular, the US.

The Defence Capability Plan and funding measures

- 5.5 A key feature of the *2000 White Paper* was the provision of a 10 year costed plan, with long term goals to provide for capability. The Defence

Capability Plan (DCP), in particular, provided, 'for the first time, Defence funding commitments covering the whole of the coming decade matched to a planned set of capability enhancements.'¹ The *2000 White Paper* stated:

To fund the program of development for Australia's armed forces that is set out in the Defence Capability Plan, the Government estimates that defence spending will need to grow by an average of about three per cent per annum in real terms over the next decade.

The Government is committed to meeting this funding requirement, and it has directed Defence to plan within that budget.²

5.6 Professor Dibb suggested that the 'Defence Capability Plan is not deliverable at three per cent real growth.'³ Professor Dibb warned that budgetary pressures are becoming more serious with growing reliance on ageing platforms such as the F-111, high operational tempo and simultaneous deployments. He concluded that there was 'a coming train smash in the defence budget.'⁴

5.7 In relation to the DCP, the Australian Strategic Policy Institute (ASPI) had similar doubts about its achievability commenting that 'as it stands, the DCP is undeliverable, unaffordable, and uncertain.'⁵

5.8 On 7 November 2003 the Government released details of its Defence Capability Review (DCR). The DCR, however, did not contain detailed costings or set out clear measures for addressing claimed shortfalls in the capability plan. The Defence Minister stated:

We developed this project on a budget neutral basis, recognising that we're receiving that three per cent real increase per year. Because only seven years of the 10 years remain, we've taken it out an extra three years. So the new DCP when it's released will be for a 10-year block again basically starting from this year. And with the savings that we we're able to make and with some movement of projects that – and that's some of the detail that we're settling at the moment – it's obviously our view that we can achieve these outcomes within that budget.

Beyond that, there are other cost pressures. As I've said before there's no secret in that. There are some pressures on personnel

1 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 77.

2 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 117.

3 Professor Paul Dibb, *Transcript*, p. 49.

4 Professor Paul Dibb, *Transcript*, p. 49.

5 Australian Strategic Policy Institute, *Sinews of War, The Defence Budget in 2003 and How We Got There*, An ASPI Policy Report, 2003, p. 4.

costs, some pressures on logistics, some pressures on management of the Defence estate. And the like and each of those issues is being developed further through the whole of government budget process. So it's not – they are not affected by any decisions that we've made this week. And we are not having, we have separated them in terms of the process that we've adopted for update of the DCP.⁶

- 5.9 The *2000 White Paper* set out a series of capability objectives for land forces, air combat, maritime forces, strike and information capability. The summary of costs for all capability enhancements identified in the *2000 White Paper* is shown in Table 5.1.

Table 5.1 Capability Enhancements, Summary of Costs 2001-02 to 2010-11

Capability Grouping	Capital Expenditure	Personnel and Operating Costs	Total
Land Forces	\$3.9 billion	\$1.1 billion	\$5.0 billion
Air Combat	\$5.3 billion	\$0.3 billion	\$5.6 billion
Maritime Forces	\$1.8 billion	\$0.3 billion	\$2.1 billion
Strike	\$0.8 billion	\$0 billion	\$0.8 billion
Information Capability	\$1.9 billion	\$0.6 billion	\$2.5 billion
Total	\$13.7 billion	\$2.3 billion	\$16 billion

Source: Department of Defence, *Defence 2000, Our Future Defence Force, 2000*, p. 97.

- 5.10 In February 2003 the Government provided an update on the *2000 White Paper*. The purpose was to ensure current strategic developments were reflected and, in particular, the terrorist environment was addressed. The Government concluded that 'while the principles set out in the *Defence 2000 White Paper* remain sound, some rebalancing of capability and expenditure will be necessary to take account of changes in Australia's strategic environment.'⁷ The Defence Update noted that 'two matters—terrorism and the spread of Weapons of Mass Destruction, including terrorists—have emerged to new prominence and create renewed strategic uncertainty.'⁸
- 5.11 The Defence Update noted that for the present, 'the prospect of a conventional attack on Australian territory has diminished'. However, the Defence Update identified major challenges in our region:

Southeast Asia and the South Pacific face major challenges due to political weakness, decline in governance, difficulty in grappling

6 Minister for Defence, Senator the Hon Robert Hill, *Press Conference*, 7 November 2003, p. 4.

7 Department of Defence, *Australia's National Security, A Defence Update*, 2003, pp. 5-6.

8 Department of Defence, *Australia's National Security, A Defence Update*, 2003, p. 7.

with terrorism and the economic effects of terrorism. If these trends continue, there may be increased calls on the ADF for operations in Australia's immediate neighbourhood.⁹

- 5.12 In relation to capabilities, the Defence Update commented that 'these new circumstances indicate a need for some rebalancing of capabilities and priorities to take account of the new strategic environment, changes which will ensure a more flexible and mobile force, with sufficient levels of readiness and sustainability to achieve outcomes in the national interest.'¹⁰
- 5.13 The capability enhancements outlined in Table 5.1, and the enhancements detailed in the DCR are discussed in more detail in the following sections of this chapter.

Conclusions

- 5.14 The Government's ability to adequately fund the DCP is critical to the ADF's long-term capability. The Government argues that its funding program for the DCP is achievable yet there are a range of groups that question this optimism. Professor Paul Dibb claims that the DCP is not deliverable at three per cent per annum growth and there is a coming 'train smash.' Similarly, ASPI claim that as it stands, the DCP is undeliverable, unaffordable, and uncertain.
- 5.15 The Government must dispel any concerns about the long term funding of the DCP.

Land forces

- 5.16 The key objective for land forces is to ensure that they have the capability to 'respond swiftly and effectively to any credible armed lodgement on Australian territory and provide forces for more likely types of operations in our immediate neighbourhood.'¹¹
- 5.17 The *2000 White Paper* was developed after and using the experiences gained through the East Timor operation of 1999. This and other overseas deployments possibly influenced some of the findings in the *2000 White Paper*. The *2000 White Paper*, for example, commented that Australia's land forces need to 'reflect a new balance between the demands of operations

9 Department of Defence, *Australia's National Security, A Defence Update*, 2003, p. 23.

10 Department of Defence, *Australia's National Security, A Defence Update*, 2003, p. 24.

11 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, pp. 79-79.

on Australian territory and the demands of deployments offshore, especially in our immediate neighbourhood.’¹²

- 5.18 In relation to heavy armour, the *2000 White Paper* commented that ‘we have decided against the development of heavy armoured forces suitable for contributions to coalition forces.’ The *2000 White Paper* concluded that ‘these forces would be expensive, and are most unlikely to be needed in defence of Australia or in our immediate region.’¹³ Operations in support of wider global interests have seen Australian forces involved in operations in Afghanistan and Iraq during 2002-2003.
- 5.19 The DCR of November 2003 indicated that the ageing Leopard 1 tank will be replaced with a modern main battle tank. The Government considered Abrams and contemporary versions of the Leopard and Challenger 2.¹⁴ On 10 March 2004 the Government announced the purchase of 59 United States refurbished M1A1 Abrams Integrated Management main battle tanks.¹⁵
- 5.20 Some of the key statements and objectives relating to land forces include:
- ‘the Government plans to structure the Army to ensure that we will be able to sustain a brigade deployed on operations for extended periods, and at the same time maintain at least a battalion group available for deployment elsewhere’;
 - ‘the Government has paid special attention to the capacity of our land forces to sustain operations once deployed. This has been a significant weakness of our land forces in the past. The Government believes that service personnel should not be required to serve on operations for longer than six to 12 months at a time, and they should be given a substantial period of recuperation before being deployed again;’
 - ‘the key to our sustainment capability in future will come from our Reserve forces. In line with the new emphasis on a small, high readiness army ready for deployment, the role of our reserve forces will undergo a major transition.’¹⁶
- 5.21 In relation to key capabilities for our land forces, the *2000 White Paper* noted the following key elements:

12 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 79.

13 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 79.

14 Senator the Hon Robert Hill, Minister for Defence, *Media Release*, Defence Capability Plan, 7 November 2003.

15 Minister for Defence, *Media Release*, M1 Abrams Chosen as Australian Army’s Replacement Tank, 10 March 2004; Senator the Hon Robert Hill, Press Conference, 10 March 2004.

16 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, pp. 80-82.

- two squadrons (around 20-24 aircraft) of Armed reconnaissance Helicopters planned to enter service from 2004-05;
 - an additional squadron of troop-lift helicopters to provide extra mobility for forces on operations. These helicopters are planned to enter service around 2007;
 - major upgrade of 350 of our MII3 Armoured Personnel Carrier fleet with the upgraded vehicles planned to enter service from around 2005;
 - new shoulder fired guided weapon for key elements of the force to attack armoured vehicles, bunkers and buildings. This weapon is planned to enter service around 2005;
 - improved body armour, weapons, night vision equipment and communications systems for all soldiers in deployable land forces;
 - new air defence missile systems to supplement the existing RBS-70 and replace the existing Rapier systems, giving comprehensive ground based air defence coverage to deployed forces;
 - twenty new 120mm mortar systems mounted in light armoured vehicles to improve mobile firepower planned to enter service.¹⁷
- 5.22 The *2000 White Paper* concluded that these and other capability developments 'constitute the most significant enhancements to Army's combat power in many years.'¹⁸
- 5.23 In relation to deployment and support for land forces, the *2000 White Paper* commented that 'Australia's amphibious lift capability is being substantially increased by the introduction into service of amphibious support ships, HMAS Manoora and Kanimbla.'¹⁹ These two ships and the HMAS Tobruk are planned for replacement in 2015 and 2010 respectively. The *2000 White Paper* concluded that 'Australia's recently expanded amphibious lift capability will be retained at its present level of three major ships.'
- 5.24 The DCR noted that 'the Army and Navy have advised that the deployment requirements of the *2000 White Paper* would require greater lift capacity than that envisaged in the current DCP.'²⁰The DCR stated:
- As a result, the Government proposes to enhance Navy's amphibious capability by replacing HMAS Tobruk with a larger amphibious vessel in 2010 and successively replacing the two

17 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, pp. 82-83.

18 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 83.

19 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 83.

20 Senator the Hon Robert Hill, Minister for Defence, *Media Release*, Defence Capability Plan, 7 November 2003.

LPA's HMA Ships *Manoora* and *Kanimbla* with a second larger amphibious ship and a sea lift ship.

To help offset the costs of larger amphibious ships, the fleet oiler HMAS *Westralia* will be replaced through the acquisition of another operating but environmentally sustainable oiler which will be refitted in Australia. The substitute oiler, which is expected to be in service in 2006, is a less ambitious replacement than that envisaged by the *2000 White Paper*.²¹

- 5.25 Evidence to the inquiry supported the need for the ADF to have greater reach, sustainability, flexibility and real combat power. While Dr Dupont broadly supports this objective he argues that for much of the 1990s land forces were 'hollowed out.' Dr Dupont stated that in committing so much of the defence budget to the Navy and Air Force at the expense of the Army, the architects of our strategic doctrine pursued a policy that severely weakened the Army's capacity for force projection.²² Dr Dupont commented that 'a lot of the operations that I see taking place now—certainly in the last 10 years—and in the future are going to be focused on land operations with boots-on-the-ground capabilities.'²³
- 5.26 In contrast to Dr Dupont's concern about Army capability, Defence responded:
- I would not completely agree that Army has been denuded in any way. When I look at force projection, or power projection, Army is never going to be in a position where it projects force in isolation. In the environment in which we are operating, it needs maritime and air cover. Where our maritime strategy takes us is being in a position to be able to provide that holistic capability.²⁴
- 5.27 Future Directions International commented that because of the unpredictable strategic environment Australia needs 'to be able to project decisive combat capability over vast distances and therefore we need considerable reach and sustainability.'²⁵
- 5.28 Dr Michael Evans suggested that the best arrangement for the ADF would be a structure like the United States Marine Corps where 'you have good light infantry, organic aviation to support them, and a very useful navy with a couple of organic carriers'.²⁶ This view was supported by

21 Senator the Hon Robert Hill, Minister for Defence, *Media Release*, Defence Capability Plan, 7 November 2003.

22 Dr Alan Dupont, *Submission 19*, p. 1.

23 Dr Alan Dupont, *Transcript*, p. 139.

24 Mr Shane Carmody, *Transcript*, p. 313.

25 Mr Lee Cordner, Future Directions International, *Transcript*, p. 121.

26 Dr Michael Evans, *Transcript*, p. 63.

Commodore Alan Robertson who commented that 'power projection by Australia would see the need for the Australian Army to be reshaped on the lines of the US Marine Corps, trained in amphibious warfare, and organized into landing brigades.'²⁷

5.29 Brigadier Jim Wallace commented that the ADF should have force projection capabilities in the form of hard defence and armour supported by air warfare destroyers.²⁸

5.30 The need for amphibious capability and heavy lift was also supported. The Royal United Services Institute of Australia, NSW (RUSI) commented that Australia's 'amphibious operations capability is not that strong.'²⁹ Defence responded:

With respect to amphibious lift, in the Defence Capability Plan there are some projects to replace the current LPAs, or landing platform auxiliaries. They are the amphibious ships. The DCP lists at least three of those. However, we are working at the moment with the Army to define exactly what it is that they want us to lift. Although we have done some work with the Army, we want to know exactly what it is when they say that they want to lift a brigade, move a battalion or support a battalion. Does it mean light infantry? Does it mean light infantry plus artillery pieces? How far does it go? There is a little bit of work to do there. The DCP has these three ships at the moment. They are replacements for the current ships: *Tobruk*, which according to the DCP is due to be replaced in 2010, and the two current LPAs—*Manoora* and *Kanimbla*—which are to be replaced in 2014 and 2015. There is a band of funding in the DCP for that worth between \$1 billion and \$2 billion.³⁰

5.31 Mr Hugh White cautioned against amphibious operations and the related manoeuvre operations in the littoral environment (MOLE) concept. He commented that 'Australia's strategic objective ought to avoid having to undertake manoeuvre operations in a littoral environment if we possibly can, so I would still put a very high emphasis on the air and maritime denial task in the inner arc.'³¹

5.32 In relation to the size of the Army, some groups in evidence supported increasing the size of the Army from six to eight battalions. Mr Hugh White commented that 'the single area of greatest vulnerability, the area

27 Commodore Alan Robertson, *Transcript*, pp. 173-174.

28 Brigadier Jim Wallace, *Transcript*, p. 150.

29 Vice Admiral David Leach, RUSI, *Transcript*, p.220.

30 Department of Defence, Commodore Paul Greenfield, *Transcript*, p. 281.

31 Mr Hugh White, Director, ASPI, *Transcript*, p. 29.

where we are most likely to run out of the capability we need soonest, from the forces that were set out in the Defence Capability Plan, is in the availability of highly deployable light land force.’³² Mr White concluded that an ‘increase in the number of battalions, perhaps from six to eight, would be a very defensible step to take.’³³ Mr White estimated that the broad cost of a light infantry battalion, excluding costs like helicopters, would be about \$150 million per year.³⁴

- 5.33 Dr Dupont suggested that the Army could be increased in size by the addition of another brigade which is three battalions. He suggested that the establishment costs of this might be in the order of about \$500 million.³⁵
- 5.34 Professor Paul Dibb suggested that while there may be validity in addressing the capability and size of the Army, this should not be at the expense of ‘other elements of what is a carefully balanced, high-tech force structure that is vital for keeping the knowledge edge over the region.’³⁶
- 5.35 In relation to sustainment, the *2000 White Paper* states that the Government plans to structure the Army to ensure that we will be able to sustain a brigade deployed on operations for extended periods, and at the same time maintain at least a battalion group available for deployment elsewhere.’³⁷ The Army’s sustainability model was scrutinised during public hearings. The model is not due for completion until late 2004. Defence noted that it had developed a Combat Force Sustainment Model which would enable Army ‘using regular and some components of the reserves, to sustain a force of that nature and a concurrency force indefinitely.’³⁸

Conclusions

- 5.36 Land forces are an essential part of a modern maritime strategy. They require combat weight, flexibility, lift capacity and a sustainable personnel base which will achieve capability objectives. Evidence to the inquiry suggested that through the 1990s the Army was under resourced and not provided with sufficient capability for it to perform its functions. The *2000 White Paper* sought to rectify this but more is required.

32 Mr Hugh White, Director, ASPI, *Transcript*, p. 29.

33 Mr Hugh White, Director, ASPI, *Transcript*, p. 29.

34 Mr Hugh White, Director, ASPI, *Transcript*, p. 36.

35 Dr Alan Dupont, *Transcript*, p. 140.

36 Professor Paul Dibb, *Transcript*, p. 56.

37 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 80

38 Department of Defence, Lt-General Peter Leahy, *Transcript*, p. 25.

- 5.37 The November 2003 Defence Capability Review (DCR) has outlined a range of measures which seek to enhance the capability of the Australian Army. In particular, is the announcement that Australia's ageing Leopard 1 tanks will be replaced with modern main battle tanks (MBTs) such as the Leopard II or Abrams. On 10 March 2004 the Government announced that it would purchase 59 Abrams MBTs at a cost of \$550million. The committee notes that the US intends to replace most of its Abrams MBTs by 2025. In addition, there are reports that under the Objective Force and Future Combat Systems (FCS) program, the US is intending to introduce a 'light, high speed, network-centric system of systems of which the first 'unit of action' is due to be fielded in the December 2010 timeframe.'³⁹
- 5.38 The rationale given by Defence for the new tanks was to ensure that there was a combined arms approach to Army operations which encompasses infantry, armour, artillery engineers, and Army aviation in concert with other elements of the joint force. The combined arms approach is understood and there is clear evidence demonstrating that the use of armour as part of land operations increases effectiveness and helps reduces casualty rates.⁴⁰
- 5.39 The committee questions whether there is a need, in the future, for Australian MBTs to be involved in an Iraqi type conflict. Australia made an effective contribution with niche forces as part of the operations in Iraq and Afghanistan. If Australia could have sent a tank squadron to Iraq, it is not clear what this contribution would have made to the totality of that war.
- 5.40 The prospect of moving a squadron of tanks half way round the world also raises questions of logistics. The MBTs will, for as long as they remain effective, require heavy lift support. The DCR announced that the Navy will be provided with replacement amphibious vessels which the committee assumes will have the capacity to transport the new MBTs. The first of these ships will not come on line until 2010 with second being provided by about 2015. That means the ADF will have to transport the new MBTs with existing heavy lift ships.
- 5.41 Up to this point the committee does not see the need to use Australia's proposed MBT's in Iraqi type conflicts. However, the use of Australia's MBTs in warlike peacekeeping operations in the region could have merit. During the East Timor operation, for example, the Army's 1st Brigade (Armoured) was on standby in Darwin in the event that the Leopard 1s

39 *Jane's Defence Weekly*, 'Interview with Claude Bolton, Assistant Secretary of the US Army for Acquisition, Logistics and Technology', Vol. 40, Issue No. 15, 15 October 2003, p. 32.

40 Hall, Dr R. & Ross, Dr A. *Attacks on Prepared Defended Positions by Units of the First Australian Task Force, 1966-1971*.

were required. Fortunately they were not required but it is assumed that they would have performed the role required. The committee awaits advice from Defence about the circumstances and types of operations the new MBTs will be used for, and the logistics of moving the MBTs and operating them in complex terrain.

- 5.42 During the inquiry, a proposal was made to enlarge the Army by two to three battalions. The announced purchase of the MBTs will probably preclude an increase in the number of battalions. The committee, however, is more concerned that current land forces have their full personnel quota, personnel are adequately trained, and there is an effective sustainment model. The committee, as part of the report *From Phantom to Force*, identified shortfalls and hollowness in the Army's combat units and formations.⁴¹
- 5.43 The committee is still adamant that under strength units undermine Army capability and present a significant challenge for Army. This personnel challenge and the effectiveness of the Army sustainment model are critical. Army had not completed its sustainment model at the time this report was released. The committee will scrutinise the sustainment model as part of future Annual Report reviews.
- 5.44 Army sustainment is currently based on a two unit rotating model. This may prove viable for short term deployments, but for a long term deployment involving both a Brigade and a Battalion, the sustainment model could be compromised. Therefore, it is essential that Defence be able to demonstrate that its sustainment model could cope with the demands of an extended deployment consistent with guidance set out in the *2000 Defence White Paper*.
- 5.45 The Government has made a series of changes over the past few years to Reserve policy and, in particular, Army Reserves. The committee has consistently tried to track these changes and their impact. Given the importance of Army Reserves for the Regular Army and the Army sustainment model, a comprehensive statement on the role and function of Army Reserves is required. This statement should include information on, but not be limited to, Reserve:
- training;
 - effectiveness;
 - equipment and capabilities;
 - readiness;
 - transition to new functions;

41 Joint Standing Committee on Foreign Affairs, Defence and Trade, *From Phantom to Force, Towards a More Efficient and Effective Army*, August 2000, Chapter Six.

- blending with regular units; and
- detailed cost data.

Recommendation 3

- 5.46 **The Department of Defence should make a statement, subject to security requirements, outlining the Army sustainment model and providing the Parliament with reassurances that the model will be effective and will meet contingencies consistent with guidance provided in the 2000 Defence White Paper.**

Recommendation 4

- 5.47 **The Minister for Defence should make a statement outlining Army Reserves policy focusing on Reserve:**
- training;
 - effectiveness;
 - equipment and capabilities;
 - readiness;
 - transition to new functions;
 - blending with regular units; and
 - detailed cost data.

Air Combat and strike

Air superiority

- 5.48 One of Australia's key capabilities which, among other objectives, supports the defence of Australia is air superiority. The *2000 White Paper* states that 'control of the air over our territory and maritime approaches is critical to all other types of operation in the defence of Australia.'⁴² Australia seeks to achieve combat air control through its fleet of 71 ageing F/A-18A aircraft. The *2000 White Paper* stated:

42 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, pp. 84-85.

The Government believes that Australia must have the ability to protect itself from air attack, and control our air approaches to ensure that we can operate effectively against any hostile forces approaching Australia. The Government's aim is to maintain the air-combat capability at a level at least comparable qualitatively to any in the region, and with a sufficient margin of superiority to provide an acceptable likelihood of success in combat. These forces should be large enough to provide a high level of confidence that we could defeat any credible air attack on Australia or in our approaches, and capable to provide options to deploy an air-combat capability to support a regional coalition.⁴³

- 5.49 There are a number of challenges to achieving these goals. First, the *2000 White Paper* identified the threat of emerging air combat capabilities that will 'over the coming decade' outclass the F/A-18 Hornet. The *2000 White Paper* commented that the F/A-18 is expected to reach its service life between 2012 and 2015. Second, is the ageing of the 707 air-to-air refuelling aircraft which are close to their effective life. In addressing these challenges, the *2000 White Paper* stated in relation to key initiatives:
- ...we will proceed now to acquire four Airborne Early Warning and Control (AEW&C) aircraft, with the possibility of acquiring a further three aircraft later in the decade. The AEW&C will make a major contribution to many aspects of air combat capability, significantly multiplying the combat power of the upgraded F/A-18 fleet;
 - ...we have scheduled a major project to replace and upgrade our AAR capability. This project will acquire up to five new-generation AAR aircraft, which would have the capacity to refuel not only our F/A-18 aircraft but also our F-111 and AEW&C aircraft over a wide area of operations. These aircraft will also provide a substantial air cargo capability, and are planned to enter service around 2006;
 - ...the Government will examine options for acquiring new combat aircraft to follow the F/A-18 and potentially also the F-111. Provision has been made in the Defence Capability Plan for a project to acquire up to 100 new combat aircraft to replace both the F/A-18 and F-111 fleets. Acquisition is planned to start in 2006-07, with the first aircraft entering service in 2012.⁴⁴
- 5.50 The DCR confirmed that the Air Force plans for the 'Joint Strike Fighter (JSF) aircraft, new Airborne Early Warning and Control (AEW&C) aircraft

43 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 85.

44 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, pp. 86-87.

are in production and air-to-air refuelling aircraft are out to tender.⁴⁵ It should be noted that a final decision to purchase the JSF has not been made and is not due until 2006. Further reference to the JSF is made in the knowledge that the Government will not make its final decision on the replacement aircraft for the F/A-18A and the F-111 until 2006. The decision by Australia to be part of the System Design and Development phase of the JSF has ended the competitive tender element phase 1A of Air 6000 which is the procurement replacement program for the F/A-18 and F-111 aircraft. The committee has previously examined Australia's participation in the JSF project as part of its *Review of the Defence Annual Report 2001-02*.

- 5.51 Australia's F/A-18As were the most capable fighter aircraft when they were introduced in the 1980s. However, this is no longer the case and other countries in the region are acquiring more capable fighter aircraft. In particular, the acquisition by regional countries of Russian made Sukhoi Su-27 and Su-30s (NATO designation Flanker).
- 5.52 The Su-27 has a large combat radius, excellent radar which provides for a formidable Beyond Visual Range (BVR) missile combat capability. It has advanced R-73 family dogfight missiles and Helmet Mounted Sight and 'is exceptionally potent in close-in air combat.'⁴⁶ The nearest Western equivalent to the Su-27 is the US F-15A/C. The Su-27 is considered more than a match for lightweight fighters such as the F/A-18A Hornet. Some of the countries that are acquiring Russian made Sukhoi aircraft are shown in Table 5.2.
- 5.53 The Su-30, which is a derivative of the Su-27, is an advanced strike fighter incorporating increased fuel capacity and thrust vectoring engines. It is reported that 'US Air Force and aerospace industry officials concede that the Su-30MK has consistently beaten the F-15C in classified simulations.'⁴⁷
- 5.54 The purchase by countries in the region of platforms such as the Su30 take on less significance if they are not network centric and supported by force multipliers such as AEW&C and air-to-air refuellers. In addition, pilot skill must be factored into any assessment of competing capabilities. In view of the importance of force multipliers, some countries in the region, as shown in Table 5.2, are intending to purchase AEW&C and air-to-air refuellers thus multiplying the capability of their fighter and strike

45 Senator the Hon Robert Hill, Minister for Defence, *Media Release*, Defence Capability Plan, 7 November 2003.

46 Kopp, C., Submission to the Joint Committee of Public Accounts and Audit Review of Auditor-General's Report, 1999-2000, Third Quarter, Auditor-General Report No. 40, 1999-2000, *Tactical Fighter Operations*, p. 25.

47 *Asia-Pacific Defence Reporter*, 'Malaysia's air power capabilities to soar with Su-30MK/Super Hornet purchases, February 2003, p. 27.

aircraft. It should also be noted that in addition to the growing numbers of Su-27 and Su-30 aircraft in the region, there has also been a proliferation of Russian supersonic and subsonic air, sub and ship launched cruise missiles, and launch platforms such as Tu-142M Bear and Tu-22M-3 Backfire bombers which translate into significant power projection weapons.⁴⁸

Table 5.2 Regional projected air-combat and strike capability

Country	Projected air combat and strike capability
India	By 2014, the Indian Air Force is expected to deploy around 180 Sukhoi Su-30MKI long range strike fighters. ⁴⁹ India recently took delivery of its first Ilyushin Il-78MKI tankers equipped with three-point UPAZ hose/drogue systems. India has also ordered the Israeli Phalcon phased array AEW&C package, fitted to refurbished Russian Beriev A-50I (Il-78) airframes. ⁵⁰
China	By 2015 the People's Republic of China is expected to deploy around 250-300 Sukhoi Su-27SK/J-11 long range fighters. By 2010 the PRC's Air Force will deploy around 60 Sukhoi Su-30MKK long range strike fighters. ⁵¹ China has ordered the Russian A-50E AEW&C system. To date, China's only aerial refuelling capability resides in a small number of modified Tu-16/H-6B Badgers. ⁵²
Indonesia	Indonesia aims to field around 50 Sukhois by the end of this decade. ⁵³
Malaysia	Malaysia operates 18 MiG-29N Fulcrums, eight F/A-18Ds, and 16 legacy Northrop F-5E/Fs. A recent order has been placed for 15 Su-30MKMs. ⁵⁴
Singapore	Singapore's fighter fleet is a mix of 50 F-16A-D, 50 rebuilt MDC A-4SU Skyhawks, 18 TA-4SU trainers, a fleet of around 60 legacy Northrop F-5 variants. Singapore is intending to buy 20 new strike fighters. In contention for this role are the Boeing F-15T, Eurofighter Typhoon and Dassault Rafale. Singapore is currently the only nation in the region with an AEW&C capability operating four Grumman E-2C Hawkeye aircraft. Singapore has recently acquired a fleet of four KC-135R Pacer Crag Stratotankers. ⁵⁵

5.55 Appendix E provides comparative data for a range of air combat aircraft including the JSF F-35, F/A-18A HUG, Su-27K/30MK, F-111 and the F/22A Raptor. Defence maintains that, for example, with the full introduction of the JSF Australia will have air superiority in the region

48 Dr C Kopp, Joint Committee of Public Accounts and Audit, Review of Auditor-General's reports, third and fourth quarters 1999-2000, *Transcript*, pp. 111-112.

49 Kopp, Dr C. '2014: The Regional Balance of Air Power', *Asia Pacific Defence Reporter*, February 2004, p. 22.

50 Kopp, Dr C. '2014: The Regional Balance of Air Power', p. 22.

51 Kopp, Dr C., Submission to the Joint Committee of Public Accounts and Audit Review of Auditor-General's Report, 1999-2000, Third Quarter, p. 13. *Jane's Defence Weekly*, 'India receives first Su-30MKIs', 24 July 2002, Issue No. 4, p. 26.

52 Kopp, Dr C. '2014: The Regional Balance of Air Power', p. 22.

53 Kopp, Dr C. '2014: The Regional Balance of Air Power', p. 25.

54 Kopp, Dr C. '2014: The Regional Balance of Air Power', p. 24.

55 Kopp, Dr C. '2014: The Regional Balance of Air Power', p. 24.

given known capabilities. The JSF has stealth capabilities, advanced sensors and network centric capabilities which will provide effective beyond visual range combat capabilities.

5.56 'Strike power' is about Australia's capabilities that enable it to attack hostile forces in their territory, in forward operating bases or in the approaches to Australia. This is the Air Force's key contribution to Australia's maritime strategy. Australia's key strike weapon is the F-111. The *2000 White Paper* commented that the 'Government's aim in the development of our strike capability to contribute to the defence of Australia by attacking military targets within a wide radius of Australia, against credible levels of air defences, at an acceptably low level of risk to aircraft and crew.'⁵⁶

5.57 The *2000 White Paper* concluded that the Government has 'considered the future of our strike capability after the F-111 leaves service, expected to be between 2015 and 2020.'⁵⁷ The DCR revised down this projected in-service termination date to 2010. The DCR stated:

In such circumstances, the Air Force has advised that by 2010 – with full introduction of the AEW&C aircraft, the new air-to-air refuellers, completion of the F/A-18 Hornet upgrade programs including the bombs improvement program and the successful integration of a stand-off strike weapon on the F/A-18s and AP-3C – the F-111 could be withdrawn from service. In other words, by that time the Air Force will have a strong and effective land and maritime strike capability. This will enable withdrawing the F111 a few years earlier than envisaged in the *White Paper*.⁵⁸

5.58 Defence noted that its studies suggest that beyond 2010, the F-111 'will be a very high cost platform to maintain and there's also a risk of losing the capability altogether through ageing aircraft factors.'⁵⁹ The committee, as part of its review of the 2002-03 Defence Annual Report, conducted a public hearing on 4 June 2004 which examined in detail the Government's decision to retire early the F-111 and the implications arising from this decision. More information about this matter can be found in the committee's report entitled *Review of the 2002-03 Defence Annual Report*, and a separate committee statement which will comment on the evidence received at the 4 June 2004 hearing.

56 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 92.

57 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 93.

58 Senator the Hon Robert Hill, Minister for Defence, *Media Release*, Defence Capability Plan, 7 November 2003.

59 Air Marshal Angus Houston, Chief of Air Force, Department of Defence, *Press Conference*, 7 November 2003.

- 5.59 In regard to alternative strike capability, Future Directions International commented that 'Australia should have some sort of cruise missile capability, for example, perhaps to replace the F-111s in due course.'⁶⁰

Conclusions

- 5.60 Air combat and strike capability are a critical part of a modern maritime strategy. In relation to air combat, Australia's objective is to achieve air superiority in the region. Defence claims that with the introduction of force multipliers such as airborne early warning and control aircraft (AEW&C), and air-to-air refuellers (AAR) the F/A-18As, with upgrades, will remain competitive until the introduction of the Joint Strike Fighter (F-35) should it be selected in 2006. Notwithstanding this, Defence should carefully monitor the adequacy of its air superiority as Russian made fighters, such as the Sukhoi Su-30, proliferate in the region.
- 5.61 At the same time, Defence claimed, during the release of the DCR, that AEW&C and AAR will give the F/A-18s a strike capability together with the AP-3C Orion. That is, the F/A-18 and possibly the AP-3C will perform the current function of the F-111 when it is retired in 2010 instead of between 2015 and 2020 which was stated in the *2000 White Paper*. The committee has concerns about the viability of this option and it was further examined at a public hearing on 4 June 2004 as part of the committee review of the 2002-03 Defence Annual report. The issues arising from this hearing will be the subject of a further report to the Parliament.
- 5.62 As part of the 2004-05 Budget, the Government announced that it intends to purchase an additional two AEW&Cs. A total of six AEW&Cs could provide the capability to mount separate combat air patrols (CAP), at the same time, over distant regions such as the Pilbara, Timor Sea and Darwin. A CAP consist of from two to four fighter aircraft.
- 5.63 On 16 April 2004 the Minister for Defence announced that five new generation AARs will be acquired. This number could be inadequate to meet combat scenarios covering the Pilbara, Timor Sea and Darwin. Some reports have suggested that at least 12 to 16 heavy tankers would be required.⁶¹
- 5.64 The committee, therefore, recommends that the Government review the number of AAR aircraft that it will need to mount effective combat

60 Mr Lee Cordner, Future Directions International, *Transcript*, p. 124.

61 Kopp, C. Submission to the Joint Committee of Public Accounts and Audit, *Report 382*, June 2001, p. 8.

- operations. The committee is of the view that Defence may require more AARs than has currently been planned.
- 5.65 In relation to the possible use of AP-3C Orions as platforms for the use of stand-off strike weapons, the committee would caution against their use in all but the most benign of combat situations. They should not be used in theatres where they would be prey to a range of combat aircraft.
- 5.66 The first delivery of the proposed F-35 to Australia is planned to commence from 2012. There is, however, continued speculation within parts of the defence community that the delivery date of the JSF will be closer to 2017.⁶² At the same time, there is concern that the F/A-18s may not reach their service life between 2012-2015. If there is any validity to these concerns, then it raises the possibility that Defence will need to invest in significant upgrades to existing platforms to extend their life or purchase or lease an interim aircraft.
- 5.67 The purchase or lease of an interim aircraft, off the shelf, poses a range of variables for Defence. If Australia did make such a choice, the cost could be excessive which ultimately could affect later purchase of the F-35 when they finally become available.
- 5.68 The major concern is that Defence's strategy for replacing the F/A-18 and F-111 are appearing less coherent. If the scenarios painted by the committee do come to realisation and, in particular, the JSF is not delivered until 2017 then Australia may not have air superiority or an adequate strike capability until then. The committee hopes that its reservations are unfounded but they cannot be ignored. There is also proliferation of cruise missiles which pose a significant threat, for example, to our Northwest shelf gas fields. Both China and India have cruise missile capability.
- 5.69 In conclusion, the committee recommends that the Government continues to examine air combat capabilities in the region, the cost of ongoing upgrades to the F/A-18 versus its fatigue and ageing, and then by 2006 make a statement about whether a transition fighter will be acquired prior to delivery of the F-35. The crucial challenge for Defence will be to determine as early as possible the likely delay in delivery of the F-35. Next they will need to determine whether it is more cost effective, and there is no capability loss, in extending the life of the current platforms versus the leasing of an interim aircraft. What ever the case, the Government should provide clear evidence that its solution will not result in a capability gap in what is the most important single capability for the defence of Australia.

62 Caldwell, P. 'Defence Update, Defence Capability Plan', *Australian Aviation*, November 2003, p. 61.

- 5.70 The Government is not required to commit to the purchase of the F-35 until 2006. The Government should give consideration to purchasing some short take-off and vertical landing aircraft (STOVL).
- 5.71 In addition, the committee recommends that the Government by 2006 make a statement clarifying Australia's strike capability in the light of its decision to retire early the F-111.

Recommendation 5

- 5.72 **The committee recommends that the Department of Defence review the number of air-to-air refuelling (AAR) aircraft that it will need to mount effective operations. The committee is of the view that Defence may require more AARs than has currently been planned.**

Recommendation 6

- 5.73 **The committee recommends that the Department of Defence continues to examine air combat capabilities in the region and the cost of ongoing upgrades to the F/A-18A versus its fatigue and ageing. If the F-35 will not be available by 2012 then the Government should give cost details of prolonging the lifespan of the F/A-18A, and provide details on the range of options to maintain air superiority in the region.**

Recommendation 7

- 5.74 **The committee recommends that the Minister for Defence by 2006 make a statement clarifying Australia's strike capability in the light of its decision to retire early the F-111.**

Maritime forces

- 5.75 Australia's maritime forces give it the capability to 'deny an opponent the use of our maritime approaches, and allow us the freedom to operate at sea ourselves.'⁶³ The *2000 White Paper* commented that 'in our maritime strategic environment, the ability to operate freely in our surrounding

63 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 88.

oceans, and to deny them to others, is critical to the defence of Australia, and to our capacity to contribute effectively to the security of our immediate neighbourhood.'⁶⁴

5.76 Australia's maritime forces consist of:

- a surface fleet including helicopters, support ships and amphibious lift;
- submarines;
- maritime patrol aircraft; and
- mine counter measure units.

5.77 The *2000 White Paper* also points out that our maritime forces draw on the capabilities provided through our F/A-18s and F-111s.⁶⁵ The key capability goal 'for our maritime forces is to maintain an assured capability to detect and attack any major surface ships, and to impose substantial constraints on hostile submarines operations, in our extended maritime approaches.'⁶⁶

5.78 In considering the major challenges to the goal of the maritime forces, the *2000 White Paper* identified the 'adequacy of ships' defences against the more capable anti-ship missiles that are proliferating in our region.'⁶⁷ The *2000 White Paper* indicated that a 'project now under way will provide such defences for the guided missile frigates (FFGs), but the ANZACs do not have adequate defences and have other significant deficiencies in their combat capabilities.'⁶⁸ The Government announced in late 2003 that it plans to upgrade the ANZAC ships with a reasonable level of anti-ship missile defences. In addition, when the FFGs are paid off from about 2013, they will be replaced 'by a new class of at least three air-defence capable ships.'⁶⁹

5.79 The DCR confirmed that the Government will continue with its decision to purchase three new air warfare destroyers because their combat systems are planned to have the capability to track large numbers of aircraft at extended range and, in combination with modern air warfare missiles, simultaneously destroy multiple aircraft at ranges in excess of 150 kilometres. This capability will significantly increase the protection from air attack of troops being transported and deployed.. In addition, the DCR commented that the 'anti-ship missile defence projects currently being implemented will be complemented by the introduction of SM2 missiles to

64 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 88.

65 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 88.

66 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 88.

67 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 89.

68 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 89.

69 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 90.

four of the Navy's guided missile frigates (FFGs).⁷⁰ The DCR noted a 'strong preference is to build the air warfare destroyers in Australia, which will provide significant work for Australia's shipbuilding industry.'

- 5.80 In relation to submarines, the *2000 White Paper* commented that the 'Government plans to bring all six Collins class submarines to a high level of capability by major improvements to both the platform and combat systems.'⁷¹
- 5.81 In relation to maritime surveillance, the DCR noted that 'the Air Force has plans for the acquisition of Global Hawk unmanned aerial vehicles and a replacement for the AP-3C under the further maritime patrol and response capability.'⁷²
- 5.82 Evidence to the inquiry supported the need for platforms capable of enhanced surveillance and deployment through the region to defend Australia's interests.⁷³ In particular, the Air Warfare Destroyer was considered essential by a range of groups. Dr Michael Evans commented that 'the air warfare destroyers are very important for us because we lack organic naval aviation to give our forces cover.'⁷⁴ Similarly, the Australian Centre for Maritime Studies stated:

If you are going to send 900 soldiers offshore you really have to provide for their air protection 24 hours a day and the only way that you can really do that is by having air defence capable vessels. That is where the destroyer fits into things. I believe that there is an enormous shortcoming in the concept of intervention if you cannot provide that, because it would just be too horrific to comprehend that a simple aircraft could take out and seriously damage one of those ships with all those people on it.⁷⁵

- 5.83 The Navy League of Australia noted that while the air warfare destroyers were already in the DCP, they were concerned that they would not become available until between 2013 and 2015. In view of this, the League proposed that 'Australia should obtain from the United States by way of loan or lease ships able to provide the necessary capability.'⁷⁶

70 Senator the Hon Robert Hill, Minister for Defence, *Media Release*, Defence Capability Plan, 7 November 2003.

71 Department of Defence, *Defence 2000, Our Future Defence Force*, 2000, p. 90.

72 Senator the Hon Robert Hill, Minister for Defence, *Media Release*, Defence Capability Plan, 7 November 2003.

73 Dr Alan Ryan, *Transcript*, p. 67.

74 Dr Michael Evans, *Transcript*, p. 61.

75 Mr Harold Adams, Australian Centre for Maritime Studies, *Transcript*, p. 112.

76 Commander Graham Harris, Navy League of Australia, *Transcript*, p. 256.

5.84 During the hearings the significant capabilities provided by aircraft carriers was discussed. Dr Michael Evans noted that if the ADF was operating in the archipelago to the north, it would be desirable to have some type of 'organic air cover.' He suggested that the solution is naval platforms capable of launching aircraft, and for refit requirements a number of these would be required.⁷⁷ Dr John Reeve discussed the merits of having an aircraft carrier but noted the significant cost impediments to acquiring them. Dr Reeve stated:

Various states in our region have carriers. Obviously the Americans have very powerful carrier forces. Various states in our region, broadly speaking from the Indian Ocean to the Pacific, have acquired carriers or have indicated their interest in acquiring aircraft carriers. In an armchair sense, in an academic sense, that is an absolutely invaluable asset—an aircraft carrier—in having a true maritime strategy. The question is resources. I am not a procurement specialist or a financial specialist but I very much doubt whether this country could afford a modern fixed-wing strike carrier.⁷⁸

5.85 On the latter point of cost, Mr Alastair Cooper noted the power of aircraft carriers but concluded that Australia would 'forgo too much to be able to have an aircraft carrier as they are currently conceived.'⁷⁹

Conclusions

5.86 As part of the inquiry, the key maritime capabilities that were examined include amphibious lift, the protection and capability provided through the provision of air warfare destroyers, and the capability provided through an aircraft carrier. In addition, while the role of the Collins Class submarines was not discussed in detail, the committee fully supports the ongoing role provided through submarine capability.

5.87 The proposed acquisition of three air warfare destroyers is fully supported. These will provide a high level of protection against air attack and ensure Australian forces are adequately protected. The only concern is that the air warfare destroyers will not become available until about 2013. The Government should explain what alternative type of area protection it will provide particularly for disembarking land forces.

5.88 In the previous conclusions, the committee suggested that if the Government, in 2006, confirms the decision to purchase the F-35, it should

77 Dr Michael Evans, *Transcript*, p. 62.

78 Dr John Reeve, *Transcript*, p. 105.

79 Mr Alastair Cooper, *Transcript*, p. 188.

consider purchasing some short take-off and vertical landing aircraft (STOVL). This could provide the ADF with some organic air cover while it is engaged in regional operations. It is assumed that the F-35 STOVL version will be able to meet its design specifications. The committee is aware of reports that the STOVL version is subject to weight problems.

- 5.89 In relation to maritime surveillance, the impending use of uninhabited air vehicles (UAVs) such as Global Hawk is fully supported. This type of capability offers real advances in efficiency and surveillance time.

Recommendation 8

- 5.90 **The Government's 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.

Recommendation 9

- 5.91 **If in 2006 the Government confirms that it will purchase the Joint Strike Fighter (F-35) then it should consider purchasing some short take-off and vertical landing (STOVL) F-35 variants for the provision of organic air cover as part of regional operations.**

Interoperability and niche operations

- 5.92 The ADF, as part of a variety of coalition operations, is increasingly asked to operate with the defence forces of other nations. When the ADF operates with key allies such as the US there are advantages in having levels of interoperability. This matter was examined as part of the inquiry. Dr Alan Ryan explained that 'interoperability' was the ability to exchange services and products and to conduct operations on a perfectly integrated scale.⁸⁰
- 5.93 Achieving interoperability can be a significant challenge not just between the forces of different countries but sometimes between forces of the same

80 Dr Alan Ryan, *Transcript*, pp. 73-74.

country. Dr Ryan notes that during operations in Somalia in 1993-94 US Marines could not communicate with US Army forces.⁸¹

- 5.94 In relation to the ADF's capability to interoperate with US forces, Dr Ryan suggested that there are difficulties but nevertheless, there should not be a preoccupation with trying to achieve perfect interoperability. The RSL noted that 'as the technology gap between the war-fighting equipment operated by Australia's Navy, Army and Air Force and that operated by our most powerful allies widens, the ability of the ADF to be interoperable with allied forces lessens.'⁸² The RSL concluded that 'the ADF when combined with the forces of powerful allies, such as in our recent involvement in Iraq, the capability limitations of our Defence Force are such as to preclude all but very small combat operations when acting alone.'⁸³
- 5.95 Defence was more positive about the ADF's ability to interoperate. In particular, Defence noted that Australia 'will become more interoperable when we have the AEW&Cs.'⁸⁴ In addition, Defence claimed that the level of Air Force interoperability 'is quite effective, as it is for ground forces.'⁸⁵ Defence stated:

I think we have demonstrated in all of the environments an ability to be interoperable with the United States and also with other allies and friends. There is our experience in East Timor. I know the naval experience in the Northern Arabian Gulf is not only with the United States. I think we have credible levels of interoperability. It is an important task as we look to the future and at changes in the strategic environment, and coalition operations will become increasingly the norm, so there is a requirement on us to ensure we can be interoperable—not only with the United States but with friends and allies from regions and globally.⁸⁶

- 5.96 Australia's contribution to operations in Afghanistan and in Iraq demonstrated that the ADF can make an effective contribution through niche forces. This matter was examined during hearings. Brigadier Jim Wallace stated:

We hear talk of niche capabilities. I have been arguing this for years. It is a great frustration to me. If we are going to do this

81 Dr Alan Ryan, *Transcript*, p. 74.

82 Rear Admiral Ken Doolan, Returned and Services League, *Transcript*, p. 332.

83 Rear Admiral Ken Doolan, Returned and Services League, *Transcript*, p. 332.

84 Mr Shane Carmody, Deputy Secretary, Department of Defence, *Transcript*, p. 323.

85 Mr Shane Carmody, Deputy Secretary, Department of Defence, *Transcript*, p. 323.

86 Lt-General Peter Leahy, Chief of Army, *Transcript*, p. 26.

within budget, or within a slightly increased budget, then we need to acknowledge that what we are talking about in niche capabilities are capabilities in each service which can be provided safely to a high level of conflict and which, first of all, provide back, in defence of Australia—if we ever had to do it—a force multiplier.⁸⁷

- 5.97 The Royal United Services Institute (RUSI) of Australia (NSW) commented that ‘it is no good having niche capabilities if you have not got the standard capabilities’ for such things as ‘the defence of Australia, the maritime strategy and the ability to deal with the sea-air gap.’⁸⁸

Conclusions

- 5.98 A key part of being able to operate effectively in coalition operations is the need for effective interoperability. The evidence suggests that it is probably unrealistic for the ADF to aim for perfect interoperability with our allies, particularly the US. Defence claims that in a range of environments it has demonstrated the capability to be interoperable with the US and other allies. However, other groups argued that as the gap in war fighting equipment between the US and Australia widens so does the level of interoperability. It is a demanding challenge for Australia to achieve interoperability because of rapid developments in technology. Nevertheless, Australia must focus on those areas where it considers interoperability essential.
- 5.99 The matter of interoperability requires further examination. The committee, therefore, will scrutinise this matter further as part of its new inquiry into Australia’s defence relations with the US. The issue of interoperability between Australia and the US is included in the terms of reference which are reproduced at Appendix D.
- 5.100 In relation to the ADF’s increasing use of niche forces for contributions to overseas operations such as the Afghanistan and Iraqi conflicts, the committee supports the use of niche forces as part of broader coalition operations. For example, Australia’s special forces, air traffic controllers, clearance divers and medical teams have made significant contributions as part of recent coalition operations.

87 Brigadier Jim Wallace, *Transcript*, p. 150.

88 Vice Admiral David Leach, RUSI (NSW), *Transcript*, p. 223.