

Rushing Headlong to Infirmity: Australian Defence Policy and Force Structure Development

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This article argues that there has been a failure to articulate strategic priorities in Australian defence policy in recent years. It discusses recent intelligence failures and associated organisational reforms, capability acquisition projects of the last years, the development of the defence budget, and the loss of momentum in the transformation of the ADF for the conduct of information warfare and network-centric warfare.¹

The Defence White Paper released in December 2000 was a valiant attempt at imposing coherence, carefully articulating Australia's strategic interests and objectives, Australia's military strategy, and the Australian Defence Force's (ADF) capability priorities. However, some of the basic premises of *Defence 2000* were soon undermined by large cost over-runs on major acquisition projects, as well as capability decisions increasingly made by the government outside the Defence capability planning structure.² Moreover, the overall scale and variety of commitments undertaken by the ADF have continued to increase. This article reviews recent developments in Australian defence policy, as well as aspects of national security policy more generally, with a view to assessing the adequacy of current defence planning and prospective capability development for ensuring Australia's security in the decade after next.

Intelligence Failures

Relevant, accurate and timely intelligence is essential for the formulation of long-term national security goals, the development of military strategy, and the conduct of both military operations and 'operations other than war'. Australia has a relatively large intelligence community, including both collection and assessment agencies. The total personnel and budgets of the major agencies have nearly doubled over the past 5-6 years. They are now substantially larger than they were at the height of the Cold War. However, their performance on critical occasions since the end of the Cold War has been gravely deficient.

¹ This is a revised version of a paper initially prepared for an ANU/Blake Dawson Waldron Lecture on 28 March 2007.

² Hugh White, 'Big-spending Defence Needs a Bit of Discipline and a New Deal', *Sydney Morning Herald*, 7 March 2005.

The ending of the Cold War was itself the subject of failure by both Australian intelligence agencies and the UKUSA community more generally. With the ending of the Cold War, the intelligence agencies have had to face a more bewildering range of security concerns. There are many more actors than in the bipolar years, including various sorts of non-state actors (from refugees to terrorists). Assessments involve economic and ideological matters as well as military and political developments. An increasing variety of security concerns are 'transnational', such as the activities of transnational criminal organisations or the impact of global climate change.

It took the Australian Intelligence Community (AIC) more than six months to appreciate the extent and gravity of the Asian economic crisis in 1997-98 and its security ramifications. The Department of Defence's *Australia's Strategic Policy*, substantially drafted when the crisis hit Thailand in July 1997 but not published until December, included no hint of the possible geopolitical impacts of the crisis, such as the probable increase in China's relative standing, or the political trauma that would afflict our largest neighbour, or the extent to which it would damage the burgeoning practice of regional security cooperation between Australia and the ASEAN countries.³ There was complacency in the Office of National Assessments (ONA) regarding the collapse of the Suharto regime.

Questions have also been raised about the performance of the AIC with regards to developments concerning East Timor in 1998-99. There was a politicisation of the intelligence process, as the government struggled to maintain good relations with Jakarta and did not want to hear about the Indonesian military's plans and propensity for violence in East Timor, although as the author has argued elsewhere, the Defence Intelligence Organisation (DIO) reporting was extremely detailed and mostly of high quality in terms of accuracy and timeliness.⁴

Failures of a different sort occurred during the SIEV-X incident in October 2001. The comprehensive *Report* by the Senate Select Committee on a Certain Maritime Incident identified "several instances where the chain of reporting of intelligence broke down or was dysfunctional".⁵ It also found that the raw intelligence reporting was unreliable and inconclusive:

Despite the sizeable intelligence capability at the disposal of Operation *Relex*, much of the raw intelligence reporting was neither precise nor conclusive nor, for that matter, reliable. Instead, it appears often to have

³ Desmond Ball, *Implications of the East Asian Economic Recession for Regional Security Cooperation*, Working Paper, no. 331, Canberra, Strategic and Defence Studies Centre, Australian National University, 1999).

⁴ Desmond Ball, 'Silent Witness: Australian Intelligence and East Timor', *The Pacific Review*, Vol. 14, No. 1, March 2001, pp. 35-62.

⁵ Senate Select Committee on a Certain Maritime Incident, *Report*, Canberra, Senate Printing Unit, Parliament House, October 2002, p. 286.

been hazy, contradictory and complex. Sometimes it was wrong. Occasionally it was deliberately false.⁶

However, these problems are inherent in raw intelligence. Analysts are supposed to have the requisite training and experience, relevant expertise and judgement to convert problematic raw intelligence into meaningful reports that are distributed in timely fashion to the relevant consumers. Failures arising from problematic raw intelligence inevitably imply defective analytical and reporting processes.

Intelligence concerning the emergence, scale and virulence of international terrorism at the beginning of this decade was badly deficient. A year after 9/11 none of the Australian agencies had any warning of the Bali bombings. As Philip Flood reported in his *Report of the Inquiry into Australia's Intelligence Agencies* "Australian intelligence agencies should have known more before December 2001 about JI [Jemaah Islamiya] as a group developing terrorist capabilities and intentions", and that "DIO continued to underestimate the potential scale of any possible terrorist attack... up until October 2002".⁷

The intelligence agencies also performed poorly with respect to the collapse of authority in the Solomon Islands in 2000-02 that triggered the RAMSI intervention in July 2003. Philip Flood found that, in the lead-up to the coup in June 2000,

reporting was not inaccurate, but generally failed to provide assessments that did much more than monitor events. Neither organisation [ONA and DIO] predicted the coup, although both had recognised the potential for such action and either dismissed its immediate likelihood or simply highlighted the threat.⁸

The most egregious and monumental intelligence failure concerned the question of Iraq's development of Weapons of Mass Destruction (WMD). As Philip Flood reported in July 2004:

There has been a failure of intelligence on Iraq WMD.... Australia shared in the allied intelligence failure on the key question of WMD stockpiles, with ONA more exposed and DIO more cautious on the subject.⁹

It found "a number of systemic weaknesses" in the assessment agencies; the most important was "a failure rigorously to challenge preconceptions or assumptions about the Iraqi regime's intentions". The report found an absence of "contestability", and said that "more rigorous challenging of the assumptions underlying their assessments should have been carried out [by both ONA and DIO]". It noted that "the lack of a National Assessment

⁶ Ibid, p. 266.

⁷ Ibid, pp. 39, 41.

⁸ Ibid, pp. 46-47.

⁹ Ibid, p. 34.

coordinated by ONA, or a formal Intelligence Estimate from DIO, were regrettable".¹⁰

The government's response to this litany of failures has been to endow the intelligence agencies with rapidly increasing resources. Overall, the total budget of the Defence group of intelligence agencies (DIO, Defence Signals Directorate (DSD), and the Defence Imagery and Geospatial Organisation) will more than triple between 2001 and 2010. It grew from \$167 million in 1999-2000 to \$467.5 million in 2006-07. Their total personnel have grown from 1,452 in 1999-2000 to around 2,050 today (including ADF personnel posted to the agencies). With respect to internal security intelligence, the Australian Security Intelligence Organisation (ASIO) has experienced extraordinary growth; it will soon be the largest organisation in the AIC. The government announced in October 2005 that it planned to increase ASIO's staff to 1,860 and its budget to more than \$300 million by the 2010-11 financial year.¹¹ More than 70 per cent of its resources are devoted to counter-terrorism activities.

However, rapidly doubling or tripling the staff and budgets of the respective agencies is not necessarily the right answer. More resources can fix some problems, but not most of those identified in the failures described above—the cultural ethnocentrism that has flawed the assessment processes, the failure to identify and appreciate new sorts of threats (especially those involving non-state actors), the deficient coordination of intelligence activities and institution of processes of dissemination for 'whole of government' policies, and the politicisation of important aspects of the intelligence process since the 1990s.

A major problem, as Philip Flood noted, is that the assessment agencies, and especially ONA, have become preoccupied with servicing the government's increasing demand for 'current intelligence', at the expense of producing longer-term assessments. Flood found that the number of National Assessments had declined from around 20 a year in 1978-83 to an annual average of less than four since 1984; in 1995 and 1997, none at all was produced.¹² In addition to providing a 'mechanism for contestability', the production of National Assessments, including the process of selecting the subjects for intensive study and analysis, provides the singular mechanism for identifying, monitoring and comprehending long-term geopolitical trends of profound significance; without them, surprises become endemic.

Another major problem, also addressed by Philip Flood, has involved the setting of priorities for both the collection and assessment agencies. He

¹⁰ Ibid, pp. 25-26.

¹¹ Brendan Nicholson, 'PM Backs Staff Boost for ASIO', *The Age*, 17 October 2005.

¹² Philip Flood, *Report of the Inquiry into Australia's Intelligence Agencies*, Canberra, Commonwealth of Australia, 2004, pp. 88-89.

found that the system for setting priorities within the Defence agencies “has fallen into disuse”, and in any case, “when it operated, it contained no link to the national priority system”. He recommended that

the Department of the Prime Minister and Cabinet should ensure the national and defence priorities systems are integrated, and approved by Cabinet annually.

The demands of current policies, concerned with the wars in Iraq and Afghanistan, the war on terror, and instability in the Southwest Pacific, have distracted attention from secular geostrategic developments in East Asia which over the longer-term could seriously and dangerously affect Australia’s security environment. The prospective balance of power in Northeast Asia, involving all dimensions of the rise of China, the strategic competition between Japan and China, the re-emergence of Russia, and the unresolved issues on the Korean peninsula and of China-Taiwan relations, is of paramount importance. Strategic competition between India and China, linking developments in South Asia with those in Northeast Asia (including arms race dynamics), has potentially very disturbing ramifications. In China and Japan, exploitation of the ‘revolution in military affairs’ and acquisition of the technical requirements for Network-centric operations and Information Warfare (IW) are proceeding apace. The full implications for Australia’s national security and defence strategy of the information technologies that will be available in 2020-25 remain unexplored.

The veritable failings of the intelligence agencies pose special problems for strategies dependent on warning times. In other words, they are more significant for defence of Australia contingencies, in which the opponent is likely to have the initiative, and for regional contingencies that require rapid reaction capabilities, as compared to Coalition operations further afield where the size and timing of the Australian contribution is not militarily vital. The warning time issue is compounded by diffuse strategic guidance, which permits less discipline in force structure development. But with capabilities less calibrated to prospective warning times, the necessity for accurate and percipient intelligence assessments, reporting on threats before they unfold, becomes unqualified. There should be no room for surprises or under-estimates where the defence of Australia is concerned.

Strategic Guidance and Operational Commitments

With regard to defence plans and capabilities, the government has tended since the mid-1990s to direct that the ADF prepare for a wider variety of tasks further afield from the Australian continent and its maritime approaches. There is no doubt that the ADF has performed very well in each of its commitments. In military terms, its performance has been superlative. It has suffered few fatalities in combat operations. But there is a crying need for a comprehensive net assessment of just how successful these commitments have been with respect to achievement of their strategic

objectives, as well as analysis of alternative, non-ADF means by which some of these objectives might have been better achieved. The war in Afghanistan remains unresolved. The majority of voters in both the United States and Australia believe that the Coalition has been defeated in Iraq, and the withdrawal of US forces is only a matter of time.¹³

In the case of East Timor, the success of INTERFET notwithstanding, Australia's policies have been seriously flawed and grossly imbalanced. More than 90 per cent of the \$3.9 billion that Australia contributed to East Timor in the 5-year period from September 1999 to mid-2004 was spent by the ADF. It produced a fine training complex and barracks at Metinaro for the East Timor Defence Force and raised two fairly proficient infantry battalions for improbable contingencies apart from interference in domestic affairs, but with substantial opportunity costs, manifest in languishing police and judicial systems, education, health and sanitation conditions, and capacity for governance. It was a recipe for disaster.¹⁴

A persuasive case can be made that RAMSI has failed to address the basic issues underlying the instability in the Solomons, that it has failed to adequately communicate, interact and build trust with the local community, that the Australian personnel are regarded poorly by the locals, that the violence in Honiara in April 2006 was caused in part by frustration with RAMSI, and that it risks "further civil unrest and hardship for the people of the Solomon Islands".¹⁵ In January, the Foreign Ministers of the Solomons, PNG, Fiji and Vanuatu—the Melanesian Spearhead Group—declared that Australia was a "bully" bent on regional "hegemony".¹⁶

The respective merits of each of these sorts of activities notwithstanding, however, they have resulted in incoherence and confusion in defence planning, and have affected force structure development, the development of operational concepts and doctrine, and readiness.

Force Structure Development

Important defence capabilities have been ordered, although little new capability has been delivered for many years – the principal exceptions being the RANs *Armidale*-class patrol boats and the major upgrade of 350 of the Army's M113 armoured personnel carriers. There has been substantial investment in command, control, communications, intelligence, surveillance and reconnaissance capabilities. Six Boeing 737-7ES *Wedgetail* airborne

¹³ Robert Pape, *Dying to Win: The Strategic Logic of Suicide Terrorism*, Melbourne, Scribe, 2005, chapter 12.

¹⁴ Desmond Ball, 'The Defence of East Timor: A Recipe for Disaster?', *Pacifica Review*, Vol. 14, No. 3, October 2002, pp. 175-189.

¹⁵ Matthew G. Allen, 'Dissenting Voices: Local Perspectives on the Regional Assistance Mission to Solomon Islands', *Pacific Economic Bulletin*, Vol. 21, No. 2, 2006, pp. 194-201.

¹⁶ Solomon Islands Government, 'MSG Accuses Australia's Hegemony', at <<http://www.pmc.gov.sb/?q=node/925>> [Accessed 26 October 2007].

early warning and control aircraft have been ordered, although their delivery has suffered considerable delay.¹⁷ The *Jindalee* Operational Radar Network became operational in April-May 2003, providing broad-area, over-the-horizon surveillance of Australia's north and northwestern approaches. The Optus C-1 communications satellite, which carries four Defence payloads (Global Broadcast, UHF, X-band and Ka-band), was successfully launched on 11 June 2003. The High Frequency Modernisation Project (JP 2043) will be fully completed by the end of 2007.¹⁸ The contractor for six High-Altitude, Long Endurance (HALE) Unmanned Aerial Vehicles (UAVs) for maritime and land surveillance will finally be decided early next year.

But the incoherence and lack of firm priorities in the strategic guidance and political interference in the capital acquisition process have resulted in an increasing number of questionable capability development decisions. I want to comment on six of them, amounting to a total of more than \$25 billion in current (2006-07) dollars, and likely to exceed \$35 billion by the time they become operational.

The most dubious decision is the acquisition of 59 refurbished *Abrams* M1A1 main battle tanks. Costing only \$550 million, they are relatively cheap. However, the official rationale is scant and unpersuasive. The most advanced and capable main battle tanks in the world, they are to replace the ageing *Leopard* tanks purchased in the 1970s and themselves never adequately justified, and to provide the Army with greater lethality in 'future close contact'.¹⁹ They are a terrific capability, employed in large formations in high-intensity conflict. However, the 2000 White Paper 'decided against the development of heavy armoured forces suitable for contributions to coalition forces in high intensity conflicts'; it said that they 'are most unlikely to be needed in defence of Australia or in our immediate region'.²⁰ No provision for such acquisition was made in successive Defence capability planning documents.

Weighing 68 tonnes, the *Abrams* tanks are too heavy for most transportation systems. They cannot be carried on the Adelaide-Darwin railway, and they are too heavy for nearly every bridge in the 'Top End'. (In Katherine Shire, for example, road bridges have a maximum capacity of 50 tonnes). The first

¹⁷ 'Early-warning Wedgetail Late Again', *Australian Defence Report*, 2 February 2007, at <http://www.australiandefencereport.com.au/2-07/early_warning_wedgetail_late_aga.htm> [Accessed 26 October 2007].

¹⁸ Defence Materiel Organisation (DMO), 'JP 2043 – High Frequency Modernisation Project', November 2006, at <<http://www.defence.gov.au/dmo/esd/jp2043/jp2043.cfm>> [Accessed 26 October 2007].

¹⁹ 'Abrams M1A1 Tank', Department of Defence Online Media Room, 4 August 2004, at <<http://www.defence.gov.au/media/download/2004/Aug/040804.cfm>>. See also Department of Defence, *The Hardened and Networked Army*, December 2005, at <www.defence.gov.au/army/hna> [Accessed 26 October 2007].

²⁰ Department of Defence, *Defence 2000: Our Future Defence Force*, Canberra, Commonwealth of Australia, 2000, p. 79.

18, which were delivered to Port Melbourne and carried by Heavy Tank Transporters to Puckapunyal in September 2006, may never leave there. There are few docks in Indonesia or the Southwest Pacific where they can be unloaded, and fewer road bridges they can cross. Maintenance of their gas turbine engines is very expensive. (The US Army reportedly allocates 25 per cent of its maintenance budget for combat systems to them).²¹

Moreover, the *Abrams* decision has affected other procurements, as new heavy sea-lift and air-lift capabilities are needed to transport them to theatres of operation. It was a consideration in the subsequent decisions to acquire four giant C-17 *Globemaster III* heavy-lift transport aircraft for the RAAF and two large amphibious landing ships (LHDs) for the RAN.

In the case of the C-17s, the government announced in March 2006, without going to tender, that four Boeing *Globemaster IIIs* are to be acquired, at a cost of \$1.94 billion, to give the ADF a Responsive Global Aircraft capability. The C-17 has four times the carrying capacity of the C-130 *Hercules*, and is able to carry one *Abrams* tank, five *Bushmaster* infantry vehicles, and *Black Hawk*, *Seahawk*, *Chinook* and *Tiger* helicopters.²² It was a hasty decision, with all other potential contenders effectively eliminated because of their inability to carry the *Abrams*, even though a larger fleet of smaller and cheaper aircraft (such as the Airbus A400M, which is half the cost but has two-thirds the cargo volume of the C-17) would have provided greater strategic lift capacity.²³

The procurement of two new LHDs is a \$2 billion acquisition project (JP 2048). Each LHD will be able to carry up to 1,000 troops, six helicopters and 150 vehicles, including *Abrams* tanks and armoured vehicles. The Spanish design under consideration has a 'ski jump' on the flight deck, enabling it to operate 'short take-off and landing' aircraft and perhaps even F-35 Joint Strike Fighters (JSF).

There is considerable justification for a substantial amphibious landing capability. However, while the requirement for a substantial amphibious landing/transport capability might be incontrovertible for regional contingencies, two very large ships is not the most cost-effective choice. Studies within the Department of Defence have reportedly found that three or four smaller ships (around 12,000 tonnes) would be more useful in regional contingencies. The larger ships are superior in high-level conflicts involving full-scale amphibious assaults with heavy firepower against well-

²¹ Mark Dodd, '\$500m Abrams Tanks in the Wars', *The Australian*, 23 September 2006.

²² 'New Heavy Lift Capability for Air Force', Department of Defence Online Media Room, 3 March 2006, at <<http://www.defence.gov.au/media/download/2006/Mar/20060303b.cfm>> [Accessed 26 October 2007].

²³ 'Australia to Spend up to \$1.5 Bn on 4 C-17s', *Defence Industry Daily*, 5 April 2006, at <<http://www.defenceindustrydaily.com/2006/04/australia-to-spend-up-to-15-bn-on-4-c17s-updated/index.php>> [Accessed 26 October 2007]

defended positions, but this capability has never been articulated as a priority for the ADF.²⁴

The single most important and the most expensive program concerns the acquisition of new combat aircraft to replace both the F/A-18A *Hornets* and the F-111s. It will be by far the largest capital project in Australia's history. It is critical for both strategic/defence and financial/budgetary reasons that there be no mistake about either the type(s) of replacement aircraft or the number of units to be acquired. The *Defence 2000* White Paper said that provision had been made in the Defence Capability Plan for "up to 100 new combat aircraft", which should be in service by 2012.²⁵ By mid-2002, the AIR 6000 Project Office had identified nine contenders for the requirement.

However, the decision-making process was pre-empted in mid-June 2002 when Prime Minister Howard visited Washington and promised Australian participation in the Lockheed Martin F-35 JSF program in return for the White House's commitment to the proposed US-Australia Free Trade Agreement. The Parliamentary Library reported in June 2006:

Several questions remain about the overall wisdom of committing to the JSF so early in the project's development. Such questions focus on the eventual cost of the aircraft and whether it represents value for money, whether advances in unmanned systems will make it obsolete before it enters into service, and whether the multinational partnership underpinning the large number to be built – which lower the prices per unit – will endure.²⁶

The JSF is probably the right choice, at least for part of the requirement. The AIR 6000 Project Office would have undoubtedly selected it anyway. However, cost increases and project delays have raised concerns about whether sufficient aircraft can be afforded and whether sufficient numbers will be in service in time to avoid an 'air combat capability gap' when the F-111s and F/A-18s phase out.

The estimated cost of the AIR 6000 project in 2000 was about \$10.5 billion, but it had escalated to \$15.5 billion by 2006. It will likely exceed \$20 billion by the time the first aircraft is delivered. The unit costs of the JSF are currently expected to exceed \$100 million, compared to \$40 million initially anticipated.²⁷

A study by the Kokoda Foundation in October 2005 found that four squadrons (97 aircraft, including 14 for training and 19 attrition and maintenance) of F-35s would be only "marginally viable in meeting

²⁴ Hugh White, 'Big Ships: Too Costly, Too Cumbersome', *Sydney Morning Herald*, 12 July 2004.

²⁵ Department of Defence, *Defence 2000: Our Future Defence Force*, p. 87.

²⁶ Parliamentary Library, Parliament of Australia, *The F-35 (Joint Strike Fighter) Project: Progress and Issues for Australia*, Research Note, No. 32, 2005-06, 9 June 2006, p. 1.

²⁷ *Ibid.*

government requirements”, and would be insufficient in prolonged campaigns. Five squadrons (120 aircraft, including 16 for training and 24 attrition and maintenance) is the minimum required to satisfy current government policies, including an air expeditionary capability. It noted that “the outlay required for this sized fleet does not fit within the current budget for Project AIR 6000”.²⁸

Moreover, the JSF is deficient in important long-range strike capabilities, which are singularly essential for core defence of Australia tasks, including counter-air operations for achieving air superiority, anti-shipping operations, and offensive operations against notional aggressors. The F-35 lacks the range of the F-111, except when it carries external fuel tanks or receives aerial refueling, sacrificing its ‘stealth’ capability. There was a good case for considering the F-22 *Raptor*, however, the US officially informed Australia in January 2007 that the *Raptor* “will not be made available to foreign military sales”.²⁹

With delays in the JSF development program, the unavailability of the F-22, and the unlikelihood of any Unmanned Combat Aerial Vehicle (UCAV) capability before 2020, the prospect of an air combat capability gap has become very real. In February 2007, the government announced, after only cursory critique of the proposal in Defence, it was intending to purchase 24 fourth-generation Boeing F/A-18F *Super Hornet* fighters, being built on an existing production line for the US Navy, at a cost of \$6 billion (including weapons and supporting infrastructure, but only the initial through-life support costs), to avoid such a gap. A press report noted that the decision was “the triumph of raw politics over strategic logic that has left defence planners shaking their heads in amazement”.³⁰ A report by the Australian Strategic Policy Institute has argued that other fourth-generation fighters (such as F-15s) are more cost-effective than the *Super Hornet*, and that it would be sensible to defer any ‘stop-gap’ decision until other ways of avoiding a capability gap are further explored.³¹

The Air Warfare Destroyer (AWD) project (Sea 4000) is also very problematic. It involves the acquisition of three *Hobart*-class destroyers, equipped with Raytheon SM-3 or SM-6 (or equivalent) anti-missile missiles, to provide sea-to-air protection of the battle fleet against tactical ballistic and cruise missiles. It is also supposed to provide anti-missile coverage over other areas where ADF elements might be engaged, and there is some expectation that it might eventually offer a missile defence for selected parts

²⁸ Peter Nicholson and David Connery, *Australia's Future Joint Strike Fighter Fleet: How Much is Too Little?*, Kokoda Paper No. 2, Canberra, Kokoda Foundation, October 2005.

²⁹ Cameron Stewart, ‘US Rules Out Deal on F-22’, *The Australian*, 14 February 2007, pp. 1-2.

³⁰ Patrick Walters and Cameron Stewart, ‘Six Billion Flight of Fancy’, *The Australian*, 8 March 2007.

³¹ Andrew Davies, ‘The Generation Gap: Australia and the Super Hornet’, *Policy Analysis*, Canberra, Australian Strategic Policy Institute, 15 February 2007.

of the Australian homeland. The project, which will cost at least \$6 billion, has been criticised on both strategic and technical grounds. Allan Behm, a former First Assistant Secretary in Defence involved in the development of strategic guidance, has said:

What do we make of the Air Warfare Destroyers? Are they to be tacked onto the [US] 7th Fleet so that we, too, can go to war with China over Taiwan? There is no regional threat, peacekeeping, peacemaking or stabilisation operation that might involve Australia and that warrants this expenditure. We are simply not going to go to war with our neighbours, and the missile threat in high-intensity conflicts already exceeds the capability of *Aegis* technology to provide reliable battle fleet protection.³²

ADF elements deployed in both high-intensity conflicts and, more sporadically, low-intensity operations and even peacekeeping operations, will increasingly confront missile threats of various sorts and scales. However, there are undoubtedly more cost-effective ways of providing protection against limited numbers of tactical and theatre missiles than investment in a few large and expensive launch platforms. Insofar as missile defence is a major factor driving the size of the new destroyers beyond around 4,000 tonnes, then this mission should be separated from their other roles and more radical concepts considered for addressing the missile threats. In their missile defence roles, the AWD platforms essentially perform three functions: command and control, airspace surveillance and anti-missile missile launch. With fully networked C³I systems, these functions need no longer be embodied in a single platform.

The decision to locate the Headquarters Joint Operations Command near Bungendore, just 30 km east of Canberra, is technically and operationally flawed and was undoubtedly politically motivated. The project was estimated to cost “up to \$150 million” in July 2001; by early 2006, but in November 2006 the Department of Defence said it was \$572 million in current (2006-07) dollars, or \$1.2 billion over the next 30 years under the contract arrangements. The technical advice prepared by the Department of Defence favoured other alternative locations, and most particularly HMAS *Harman*, about 10 km southeast of Parliament House and host to the Defence Network Operations Centre, which provides network support for military operations.³³ The Bungendore site is only about 20 km further from Parliament House than *Harman*—sufficient neither to deter meddling politicians nor to justify a green-fields site. Its rationale lay in electoral politics. It has been described by *The Bulletin* as a “billion dollar bribe”, intended to secure the marginal seat of Eden-Monaro for the government parties in the November 2001 elections.³⁴

³² Paul Daley, ‘The Wrong War’, *The Bulletin*, 27 September 2006, pp. xx.

³³ DMO, ‘Projects: JP 2008 Phase 3F – ADF SATCOM Capability Terrestrial Upgrade’, 9 March 2007.

³⁴ Paul Daley, ‘Billion Dollar Bribe’, *The Bulletin*, 16 November 2006.

Network-Centric Warfare and Information Operations

In June 2002, the ADF released its doctrinal statement on Australia's approach to warfare. This occurred at about the same time that the notions of being able to gain an information advantage, dispersing forces, and networking them began to appear. The ADF argued that its aim for the future was to obtain common and enhanced battlespace awareness and, with the application of that awareness, deliver maximum combat effect. It would seek to achieve this through networked operations, which would necessitate a comprehensive 'information network' that would link sensors (for detection), command and control (for flexible, optimised decision-making), and engagement systems (for precision application of force).³⁵

In 2002, the ADF also released *Force 2020—the ADF's vision statement*—whereby networked operations were seen as allowing the war-fighter, through superior command decision-making supported by information technologies coupled with organisational and doctrinal agility, to utilise relatively small forces to maximum effect. *Force 2020* states that "in the force of 2020, we will have transitioned from platform-centric operations to Network-Enabled Operations".³⁶ Further doctrinal development proceeded through 2003, including production of an *NCW [Network-Centric Warfare] Concept Paper* and an *NCW Roadmap*, which were completed by December 2003, and promulgated in February 2004.³⁷

However, the implementation of NCW has lost momentum. The demands on planners of the extraordinary tempo of current operations, and the focus on Coalition and regional operations, have distracted them from ensuring that Australia will have the necessary capabilities for achieving information superiority around 2020. Moreover, the work in 2002-03 was fundamentally incomplete. It was mostly concerned with enhancing and sharing battlefield awareness and with shortening decision cycles; it essentially ignored the offensive opportunities and challenges of NCW, and the offensive role of IW more generally.

The 'war on terror' has stimulated some aspects of Information Operations while further distracting planners from the longer-term construction of an all-embracing NCW architecture. DSD has enhanced its capabilities for monitoring and tracking mobile phones, and for surveilling Web sites, Internet usages and international e-mail traffic. However, these achievements have been essentially defensive, involving investigative and

³⁵ Department of Defence, *The Australian Approach to Warfare*, Canberra, Department of Defence, June 2002. See also Gary Waters and Desmond Ball, *Transforming the Australian Defence force (ADF) for Information Superiority*, Canberra Papers on Strategy and Defence, No. 159, Canberra, Strategic and Defence Studies Centre, Australian National University, 2005.

³⁶ Department of Defence, *Force 2020*, Canberra, Department of Defence, 2002, p. 19.

³⁷ Australian Defence Headquarters, *Enabling Future Warfighting: Network Centric Warfare*, ADDP-D.3.1, Canberra, Australian Defence Headquarters, Canberra, February 2004.

forensic activities, rather than exploiting cyber-space for offensive Information Operations (IO).

There is a myriad of complex and extremely difficult issues that require resolution before radically new command and control arrangements can be organised, new technical capabilities acquired and dramatically different operational concepts tested and codified. These include the extent to which complete digitisation and networking of the ADF will permit flatter command and control structures; the availability of different sorts of UAVs and the timeframes for their potential acquisition; the role of offensive operations and the development of doctrine and operational concepts for these; the promulgation of new rules of engagement; and a plethora of human resource issues, including the scope for the creative design and utilisation of reserve forces and other elements of the civil community.³⁸ These matters will take many years to resolve and even longer, in some cases at least a decade, for the ensuing decisions to be fully implemented.

NCW and IO have fundamental implications for the role and place of the intelligence process, although this was ignored in the Flood inquiry into Australia's intelligence agencies. In IO activities, the intelligence process is categorically conflated with the conduct of operations. The role of intelligence changes from a staff agency to an instrumental service. The intelligence cycle becomes the definitive sequence in the operations themselves. In exemplary cases, remotely-controlled sensor systems serve as both intelligence sources and shooters, as in the case of the Predator armed with Hellfire missiles.³⁹

The Defence intelligence agencies will have to be drastically reformed, and in parts substantially augmented, in order to perform their central role in NWC and IO/IW. They presently lack important technical capacities, and are surely incapable of providing the timely, accurate and insightful intelligence necessary, when operationalised through IW, to manipulate the policy-making and decisional processes of notional adversaries.

A critical deficiency is the lack of a net-war or cyber-warfare centre. Australia has a plethora of organisations, within and outside Defence, concerned with some aspect of cyber-warfare (including network security), but they are poorly coordinated and are not committed to the full exploitation of cyber-space for either military operations or IW more generally. A dedicate cyber-warfare centre is fundamental to the planning and conduct of both defensive and offensive information operations. It would be responsible for exploring the full possibilities of future cyber-warfare, and developing the

³⁸ Waters and Ball, *op. cit.*, pp. 61-68.

³⁹ Vince Crawley and Amy Svitak, 'Is Predator the Future of Warfare?', *Defense News*, 11-17 November 2002, p. 8.; Craig Hoyle and Andrew Koch, 'Yemen Drone Strike: Just the Start?', *Jane's Defence Weekly*, 13 November 2002, p. 3.

doctrine and operational concepts for IO. It would study viruses, denial of service programs, 'Trojan horses' and 'trap-door' systems, not only for defensive purposes but also to discern offensive applications. It would study and the ready to penetrate the firewalls around computer systems in military high commands and headquarters in the region, in avionics and other weapons systems, and in telecommunications centres, banks and stock exchanges, and be able to insert confounding orders and to manipulate data without the adversary's knowledge.

Resourcing Defence

Defence has been treated generously by the Howard Government. The defence budget has grown from \$13.43 billion in 2000-01 to \$19 billion in 2006-07, and it is currently projected to reach \$26.7 billion in 2015-16, an increase of almost 100 per cent over the 15-year period.⁴⁰

However, in the absence of clearly articulated strategic priorities and strict discipline with respect to acquisition decisions, much of this expenditure will be wasted and, by 2015-20, the force structure is likely to be severely distorted and deficient in critical areas. The budgetary largesse cannot compensate for erratic decision-making over the longer term. To begin with, there is likely to be significant escalation in the costs of the major capital acquisition programs. It is not unlikely that \$60 billion budgeted for acquisitions between 2006 and 2016 will escalate to more than \$100 billion. Second, the erratic decisions of the past several years have taken insufficient account of the attendant personnel, operating and maintenance costs.⁴¹

Moreover, Treasury projections suggest that it will be increasingly difficult for Defence to sustain real growth beyond 2015, at which point it will still be paying some of the cost over-runs from the recent project decisions as well as their continuing operating costs. Growth in GDP is likely to slow over the next two decades, as the population ages, averaging perhaps 2.0 per cent in the 2020s. A gap in spending and revenue trends begins around 2016 and widens to the equivalent of 2.0 per cent of GDP by around 2025, as the tax base shrinks and health and other welfare expenses soar.⁴²

Budget problems at this point, beyond around 2015-16, could have dire consequences for essential capabilities. Large projects such as the F-35 JSF program will be the most vulnerable. Limiting the program to only three

⁴⁰ The Hon. Dr Brendan Nelson, Minister for Defence, 'A Long Term Plan to Defend Australia', Media Release 057/2006, 9 May 2006, at <<http://www.minister.defence.gov.au/NelsonMintpl.cfm?CurrentId=5604>> [Accessed 26 October 2007].

⁴¹ Daley, 'The Wrong War', pp. xx. See also Mark Thomson, *A Trillion Dollars and Counting: Paying for Defence to 2050*, Canberra, Australian Strategic Policy Institute, 2004.

⁴² The Hon. Peter Costello, Treasurer, *Intergenerational Report 2002-03*, 2002-03 Budget Paper, No 5, Canberra, 14 May 2002, pp. 6-7.

squadrons, unable to provide adequate strike and air superiority capacity in higher-level defence of Australia or regional contingencies, may be seen as the easiest way to accommodate the future fiscal realities.

There will be sparse funds for the acquisition of new capabilities, some as yet not even conceived, such as NCW/IO facilities, and others still in the early stages of maturation, such as UAV systems. Under Project AIR 7000, a contract decision is expected in early 2008 for a squadron of six HALE UAVs to supplement the surveillance capabilities of the P-3C *Orion* maritime patrol aircraft.⁴³ But no allowance has been made for another squadron of *Global Hawks* for Signals Intelligence (SIGINT) collection, which will surely be seen as necessary within the next decade. It could well be the case that three *Global Hawks* (with one on continuous 36-hour station) equipped with various sorts of antenna systems, could provide comparable communications intelligence coverage to that of the first *Rhyolite* geostationary SIGINT satellites in the 1970s. Other configurations, focused on 'microwave alleys', could provide direct support for interactive cyber-warriors.

UCAVs may eventually make up a substantial proportion of Australia's air combat capability. The Pentagon is currently evaluating two competing long-range strike systems.⁴⁴ But no allowance has been made for perhaps two squadrons of UCAVs to supplement the strike capabilities of the F-35s when they become available around 2018.

The costs of NCW and IO will not be trivial. The bandwidth requirements of NCW and IO are staggering. Advanced communications satellite systems will be necessary, using laser transmission and Internet routing to provide high-bandwidth connectivity.⁴⁵ The networks and servers used by Defence for Network-enabled operations have to be completely secured—not only against terrorists and other non-state actors, but also against the cyber-warfare activities of notional regional adversaries. Special operations units will have to be formed for covert activities, such as placement of devices in microwave relay facilities, optical cable networks, switching centres and air defence systems in particular countries. The construction of a cyber-warfare centre could well cost more than a billion dollars.

⁴³ Peter La Franchi, 'Australia Funds Study', *Flight International*, 9 May 2006, at <<http://www.flightglobal.com/articles/2006/05/09/206472/australia-funds-study.html>> [Accessed 26 October 2007]; and Gregor Ferguson, 'Aerospace Dominates Australia's 10-Year Plan', *DefenceNews.com*, 17 July 2006.

⁴⁴ 'X-45 J-UCAV Joint Unmanned Combat Air System', at <<http://www.airforce-technology.com/projects/x-45-ucav/>>; and Defense Advanced Research Projects Agency (DARPA), 'DARPA Awards Funding for Joint Unmanned Combat Air Systems' X-47B', 20 October 2005, at <<http://www.darpa.mil/j-ucas/index.htm>> [Accessed 26 October 2007].

⁴⁵ Henry S. Kenyon, 'Networking Moves Into the High Frontier', *Signal*, April 2004, pp. 59-62.

Strategic Policy and Planning Priorities

Clear and coherent guidance is especially necessary in the Defence portfolio, where the fiscal costs are so large, the scope for play of Service interests and political factors so great, and the consequences of poor planning so potentially calamitous. However, since the 1987 White Paper, which gave unqualified priority to 'self-reliance' and the defence of Australia as primary determinants of the force structure, successive 'guidance' has not only explicated additional priorities, but has also involved progressively looser articulation, allowing the interjection of formally unjustified projects. 'Priority' has lost its meaning; all sorts of disparate capabilities can be rationalised.

The 2000 White Paper identified "two key sets of capabilities" as the priorities for ADF planning.⁴⁶ Prime billing was given to defence of Australia, but each of the Services also needed capabilities for regional ("immediate neighbourhood") operations as well as for Coalition operations further afield, and the internal qualifiers ("substantial", "support", "contribute to") allowed these to be determined very subjectively.

In any case, the script was not followed. High-intensity operations, involving land forces as well as air and naval forces, and in Coalition as well as sea-air gap and regional situations, have become a determinant of capability development. It is not simply that they require the contribution of capabilities that would be acquired under tighter criteria anyway; they have been the primary rationale for several recent major capability decisions. The *Abrams* tank decision, explicable only in terms of high-intensity Coalition operations by land forces, was in turn a factor in the decisions to purchase the C-17 *Globemaster IIIs* and the LHDs; defence of the LHDs has become the "primary role" of the proposed AWDs.⁴⁷

This expensive excursion into capabilities for high-intensity operations has proceeded in essentially *ad hoc* fashion. No new strategic policy or military strategy incorporating high-intensity land operations have been promulgated. However, long-term capability planning requires clear guidance with respect to the relative importance now accorded these operations, with explicit ranking of competing priorities, and firm direction regarding their respective resource allocations. This can only be done through a new White Paper process.⁴⁸

Multi-pronged capability development policies impose special demands on both the intelligence and capability planning processes. The intelligence agencies have to monitor the warning signs for a range of different sorts of contingencies, while a force structure no longer dedicated to the defence of

⁴⁶ Department of Defence, *Defence 2000: Our Future Defence Force*, pp. 53-54.

⁴⁷ White, 'Big Ships: Too Costly, Too Cumbersome'.

⁴⁸ White, 'Big-spending Defence Needs a Bit of Discipline and a New Deal'.

Australia requires they accord even closer attention to possible long-term threats in order to maximise warning, mobilisation and force expansion times. Intelligence prediction is always hazardous; the Australian agencies do not have a good performance record; and the necessity to support the present tempo of operations inevitably tends to distract from consideration of hypothetical future scenarios. Structural reform is needed to provide the institutional bases for both long-term strategic assessment capacity and prospective NWC/IO activities to flourish.

Finally, the adoption of a new strategic policy must be subject to informed public debate and ultimately broad public acceptance. Such debate should be more sophisticated than has been apparent in recent years, which saw silly arguments by proponents of high-intensity expeditionary forces about the unimportance of geography and an inability to articulate the structural consequences. Central to such debate should be the proposition that impending fiscal realities and distorted capability planning will produce deficiencies in capabilities for both the defence of Australia and regional contingencies. Our abilities to maintain air superiority and conduct strike operations, control the sea-air gap, and achieve information superiority in contingent circumstances after a decade or so hence will be problematic.

One of the endowments of the 'pure DoA' policy was that it commanded bipartisan and popular support. For three decades, there was a broad consensus about defence policy: the unequivocal priority of the self-reliant defence of Australia, with increasing appreciation of regional operations, and with sufficient flexibility in the force structure to provide options for the government for substantial commitments in the immediate region and more modest contributions beyond. The ADF was adequately funded, albeit less munificently than in the recent splurge. However, there is a palpable risk of growing public disenchantment with Defence. Management is seen as incompetent and profligate, unable to prevent massive budget blow-outs; the intelligence community has lost much credibility; 'security' and 'defence' have become political issues, with the ADF serving as a political instrument, whether in stopping 'boat people' or in supporting the United States in Iraq; and the imminent failure in Iraq and the inability of the ADF to bring peace and stability wherever it goes (including in our own neighbourhood) will dampen public enthusiasm for expeditionary activities. It would be a great shame for the ADF to lose its high public regard; it would be disastrous if public disdain for Defence manifests at the very point where a national consensus will be needed to rectify the critical capability deficiencies currently being generated.

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