

Chapter 3

A brief history of Australia's naval shipbuilding industry

3.1 This chapter gives a brief history of naval shipbuilding for the Royal Australian Navy (RAN). It provides a summary of RAN builds and naval shipbuilding and repair facilities in Australia prior to World War 2. The chapter then looks at the vessels built for the RAN during the 1960s, 1970s and early 1980s and notes the difficulties experienced with both in-country and offshore builds.

The early years of naval vessel construction and repair in Australia

3.2 The docking and repair of naval vessels at Australian dockyards pre-dates federation. In the 1850s, the Williamstown dockyard on the southern shore of Port Phillip Bay was established as a base for the Victorian Navy—the first navy established on the Australian continent.¹ Australia's first dry dock was opened in 1855 at Mort's Dock in Balmain. In 1856, the New South Wales government reserved Garden Island in Sydney Harbour as a base for the Royal Navy and a ship repair site.² In 1857, Fitzroy Dock was constructed at Cockatoo Island at Potts Point to service visiting vessels of the Royal Navy.³

3.3 The Cockatoo Island dockyard assembled the first Australian-built warship for the RAN—HMAS *Warrego*—in June 1912, a year after the official establishment of the RAN.⁴ The same year, the Commonwealth government purchased the dockyard from the New South Wales government. It remained in Commonwealth ownership until 1933, when it was leased to the Cockatoo Docks and Engineering Co. Pty Ltd. Appendix 7 shows that the Commonwealth had an active record of naval vessel construction at Cockatoo Island between 1912 and 1933, highlighted by the commissioning of three *River* class torpedo boat destroyers in 1916. After 1933, the Cockatoo Docks and Engineering Company maintained a high rate of naval vessel construction with the building of two *Sloop* vessels (frigates) in the mid-1930s and

1 Charles Murton, 'Historic Williamstown', *Williamstown Historical Society Museum*, <http://www.labyrinth.net.au/~crmurton/historicwtown.html> (accessed 19 May 2006).

2 *History of Garden Island*, see <http://www.gardenisland.info/1-02-000.html> (accessed 11 May 2006).

3 R. G. Parker, *Cockatoo Island: A History*, Thomas Nelson (Australia), Melbourne, 1977, p. 10. National Archives of Australia, *The History of Cockatoo Island dockyard*, http://www.naa.gov.au/Publications/research_guides/guides/dockyard/chapter01.htm (accessed 11 May 2006).

4 National Archives of Australia, *The History of Cockatoo Island Dockyard*, http://www.naa.gov.au/Publications/Research_Guides/guides/dockyard/pages/chapter01.htm (accessed 5 May 2006). HMAS *Warrego* had been built in Scotland and dismantled for reassembly at Cockatoo Island.

several *Bathurst* class minesweepers, *Tribal* class destroyers and *River* class frigates during the war years (see Appendix 7).

3.4 Since 1857, Garden Island has been the base of the Royal Navy's Australia Station and by the turn of the 20th century was well-established as a naval dockyard. In 1912, the Garden Island dockyard was transferred to the control of the Commonwealth Naval Board and the following year, the Admiralty handed over the island's buildings to the Commonwealth government.⁵ The dockyard was used extensively during World War 1 for the repair of naval vessels and during the early 1920s for the refit of the British-built 'J class' submarine. In the 1940s, a naval graving dock was built on the island to enable fast refit and repair of naval vessels in Australia. Previously, many vessels needed to travel to Singapore for repair. With the fall of Singapore in 1942 and ongoing construction work at Cockatoo Island, a dry dock at Garden Island became a strategic imperative.⁶ When the Captain Cook Graving Dock opened in 1945, at a cost higher than the outlay on the Sydney Harbour Bridge, Garden Island was established as the most important ship repair facility in Australia.

3.5 At Williamstown, work began on a state shipyard in 1865 and a dry dock was completed in 1873.⁷ The shipbuilding dockyard was officially opened in April 1913 following the construction of two building berths. In 1918, the Commonwealth purchased the dockyard from the Victorian government and subsequently announced a six ship construction program at Williamstown.⁸ Thereafter, the Williamstown dockyard averaged 'a vessel per year in addition to a large programme of refitting'.⁹ From 1913 to 1945, however, Williamstown was only active in constructing naval vessels during World War 2, when it built eight *Bathurst* class minesweepers and the survey vessel *Warreen*. In 1940–41, two building slips were completed and in 1942, the Navy took over the dockyard from the Melbourne Harbour Trust.¹⁰

5 *History of Garden Island*, <http://www.gardenisland.info/1-02-000.html> (accessed 11 May 2006).

6 *Captain Cook Graving Dock*, <http://www.gardenisland.info/1-02-010.html> (accessed 11 May 2006).

7 Parliamentary Standing Committee on Public Works, *Construction of Facilities for the Australian frigate project, Williamstown dockyard, Melbourne—Phase B*, Parliamentary Paper No. 189/1985, 1985, p. 3. The dock was called the Alfred Graving Dock.

8 *Historic Williamstown*, <http://www.labyrinth.net.au/~carmurton/historicwtown.html> (accessed 11 May 2006). See A. Bunnett, G. Halliburton and P. Webb, 'The Southern base of the RAN: A short history of HMA Naval Dockyard, Williamstown', *Naval Historical Review*, <http://www.navyhistory.org.au/review/71-1.pdf> (accessed 11 May 2006).

9 A. Bunnett, G. Halliburton and P. Webb, 'The Southern base of the RAN: A short history of HMA Naval Dockyard, Williamstown', *Naval Historical Review*, <http://www.navyhistory.org.au/review/71-1.pdf> (accessed 11 May 2006).

10 Parliamentary Standing Committee on Public Works, *Construction of Facilities for the Australian frigate project, Williamstown dockyard, Melbourne—Phase B*, Parliamentary Paper No. 189/1985, 1985, p. 3.

3.6 In the inter-war years, Australia's naval shipbuilding companies were not large enough to compete with the yards in Glasgow and Belfast and relied on substantive foreign orders. The 1930s were particularly lean for the Williamstown dockyard, which produced only three vessels.¹¹ Even in the 1920s, however, when the RAN ordered production of 22 steel ships from Australian shipbuilding companies, 'most had to close, or confine themselves to repairs'.¹²

3.7 Unsurprisingly, the RAN's demands during World War II were a fillip for Australia's naval shipbuilding and repair industry. The majority of naval vessels built at the Cockatoo Island and Williamstown dockyards were completed during the early to mid-1940s. In total, 113 RAN naval vessels were built at ten Australian dockyards during the Second World War, in addition to the repair of over 4000 RAN ships, over 500 United States Navy ships and 391 Royal Navy Ships.¹³

Shipbuilding challenges—the experience of the 1960s, 1970s & early 1980s

3.8 The repair of naval vessels at Australian dockyards continued in the immediate post-war years, albeit at a lesser rate. The RAN continued to purchase naval vessels from the UK and by 1964 had ordered the three Perth-class guided missile destroyers from the U.S. Dr Paul Earnshaw has noted that 'from about 1960...Australia had become a more discriminating customer, obtaining its naval requirements from the most appropriate source'.¹⁴

3.9 However, Australia's increasing resort over the 1960s and 1970s to purchasing foreign naval vessels for the RAN reflected the poor performance of domestic naval shipbuilding projects. The construction of the *Daring* and *River* class destroyers at the government-owned Williamstown and Cockatoo dockyards in the 1950s and 1960s ran well over cost and schedule.¹⁵

3.10 The difficulties plaguing local construction and the preference for foreign acquisition continued in the 1970s, leaving Australian dockyards to focus primarily on repair work. Apart from the two oceanographic vessels, HMAS *Cook* (1973) and HMAS *Flinders* (1981), the Williamstown dockyard did not commission a naval

11 'History of hard work and strife', *Herald Sun*, 15 June 2006, p. 66.

12 Australian Heritage Commission, *Linking a nation*, 2003, <http://www.ahc.gov.au/publications/national-stories/transport/chapter2.html> (accessed 11 May 2006).

13 J. H. Straczek, Sea Power Centre Australia, *General RAN history, RAN in the Second World War*, <http://www.navy.gov.au/spc/history/general/ww2.html> (accessed 20 May 2006).

14 Dr Paul Earnshaw, 'Australian Naval Shipbuilding—1960s to the present', *Journal of the Australian Naval Institute*, January–March 1998, p. 22.

15 Dr Mark Thomson, *Setting a course for Australia's naval shipbuilding and repair industry*, Australian Strategic Policy Institute, Policy Report, August 2002, p. 16. He wrote that: 'the *Daring* class ships were delivered years late, and cost twice as much as the same class of ships built in Britain. The *River* Class suffered three-fold cost escalation during the project.'

vessel between 1971 and 1991. After the commissioning of HMAS *Torrens* in 1971, the Cockatoo Island dockyard did not commission another vessel until the underway replenishment ship HMAS *Success* in 1986.

3.11 The Department of Defence experienced problems with both local construction and foreign acquisition projects. The following section identifies problems associated with the three major warship decisions of the 1970s—the locally designed DDL (light) destroyers; the acquisition of four frigates from the U.S. Navy (USN); and the foreign design and local construction of HMAS *Success*.

Problems with Defence specifications—the DDL destroyer project

3.12 In August 1972, the approved build of three DDL destroyers 'promised a significant level of work for the Australian industry...that would enhance and sustain project and construction skills over time'.¹⁶ The estimated project cost was \$355 million in 1972 prices, with construction on the lead ship planned to commence in 1975 and the others at two year intervals thereafter.¹⁷ In 1973, the Williamstown dockyard began a program of extensive modernisation to prepare for the build.¹⁸ The DDL Project Director, Commodore G. Willis, explained:

In the interest of providing a stable workload, and thus retraining the skills and techniques required with a build of this size it is desirable to confine DDL construction to one yard which can be kept fully employed. This has the added advantage that an improvement in productivity can be expected as the yard learns from its experience and thus reduces costs...Although local building costs are higher than those overseas...local construction...minimises future logistic support problems...simplifies management of the project...increases our technical knowledge...[and] provides the skills and facilities we should need in any case for the repair of battle damage in an emergency.¹⁹

3.13 However, the Department of Defence faced rising cost estimates for the vessel and was unable to settle on its specifications.²⁰ The Navy reviewed the DDL project

16 Dr Paul Earnshaw, 'Australian Naval Shipbuilding—1960s to the present', *Journal of the Australian Naval Institute*, January–March 1998, p. 23.

17 Commodore G. J. Willis, *Royal Australian Navy: A survey of future needs*, Parliamentary Paper No. 138/1972, Commonwealth Government Printing Office, Canberra, August 1972, pp. 25–26.

18 Parliamentary Standing Committee on Public Works, *Construction of Facilities for the Australian frigate project, Williamstown dockyard, Melbourne—Phase B*, Parliamentary Paper No. 189/1985, 1985, p. 3.

19 Commodore G. J. Willis, Parliamentary Paper No. 138/1972, *Royal Australian Navy: A survey of future needs*, Commonwealth Government Printing Office, Canberra, August 1972, p. 26.

20 Stanley S. Schaezel, *Local development of defence hardware in Australia*, Working Paper No. 100, The Strategic and Defence Studies Centre, Australian National University, June 1986.

and found that it would prove unduly expensive.²¹ A Joint Parliamentary committee also found that there was technical risk from an Australian design.²² In August 1973, the government cancelled the DDL project and instead initiated the foreign order of Guided Missile Frigates. Mr John C. Jeremy, a council member of the Royal Institution of Naval Architects, told the committee that the cancellation of the DDL project:

...tended to swing the pendulum towards accepting existing designs with a minimum of technical risk. That tends to mean that, within your organisations in-country, you lose the ability to start with a blank sheet of paper. You are taking something from someone else and modifying it. In my personal opinion, during the 1970s we lost a lot of the [design] capability that we had built up in the decades after World War II.²³

3.14 One of the lessons drawn from the DDL project was the need for tighter controls on Navy's design requirements. Part of the problem was that those involved with the specifications for the project were without responsibility for cost and schedule. Mr Stanley S. Schaetzel has argued in reference to the DDL project that specifications should have been established between industry and the Defence Science and Technology Organisation (DSTO) according to mutually agreed broad requirements, with close consultation between the prime contractor and Defence on issues of cost and performance.²⁴

Problems with foreign acquisition—the FFG 01–04 project

3.15 Based on the recommendation of a navy review, the Labor government approved an offshore build for the two FFGs in April 1974. The builder, Todd Pacific Shipyards Corporation in Seattle, was to supply the frigates under Foreign Military Sales (FMS) arrangements managed by the U.S. Navy.²⁵ The decision to build offshore reflected the government's concerns about local shipyards' low productivity and high level of industrial disputation. The Coalition government approved the purchase of a third FFG from the Seattle yard in 1977, and a fourth in 1980. The ships were delivered between November 1980 and July 1984, 'broadly within the required timeframe'.²⁶

21 Mr Bill Rourke RADM (Ret'd), 'The Australian Frigate Project', Letters to the Editor, *Australian Defence Journal*, no. 128, January–February 1998, p. 3
<http://www.defence.gov.au/publications/dfj/adj128.pdf> (accessed 23 May 2006).

22 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 15.

23 Mr John C. Jeremy, *Committee Hansard*, Sydney, 28 June 2006, p. 62.

24 Stanley S. Schaetzel, *Local development of defence hardware in Australia*, Working Paper No. 100, The Strategic and Defence Studies Centre, Australian National University, June 1986.

25 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 15.

26 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 13.

3.16 As with the RAN's in-country builds, however, the offshore build of the four FFGs also met cost and capability hurdles. The projected project cost for the first two vessels—with helicopters—was \$187 million in March 1974 prices.²⁷ However, the FFG 01-04 project ran well over cost with the four vessels (excluding helicopters) costing over A\$1 billion in December 1982 prices. Defence attributed nearly half this cost (A\$497 million) to inflation and exchange rate variations.²⁸ The other significant cause was the retrofit of the first three frigates to incorporate emerging technologies, notably a long range sonar system (TACTACS) and more capable helicopters (LAMPS III). The fourth FFG, HMAS *Darwin*, was built with several RAN requested modifications. It cost \$256 million, nearly \$100 million more than the FFG-03. It has been claimed that the retrofits may have been avoided had the RAN seized opportunities to incorporate modifications during the construction phase.²⁹

3.17 The other problematic aspect of the FFG 01-04 project was the Australian government's use of a Foreign Military Sales contract.³⁰ A 1974 Memorandum of Agreement with the U.S. contained a clause enabling Australia to withdraw from the project if the ships failed to meet RAN requirements or proved 'unacceptably costly'. However, the USN appeared to resist any substantial alterations and at one point, the U.S. Department of Defence instructed the USN to cease providing financial data to Australia.³¹

3.18 The FMS contract also limited opportunities for Australian industry participation in the manufacture and supply of components for RAN and USN frigates. This was despite the 1974 Memorandum encouraging the U.S. government to limit the value of orders placed with U.S. firms so as to maximise opportunities for Australian industry participation.³² The Department of Defence admitted that in future, it was necessary to sign deeds of agreement with the prime contractors before negotiating a Letter of Offer and Acceptance with the U.S. government. It suggested

27 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 15.

28 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 17.

29 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, pp 27 and 29.

30 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 13. The 1986 JCPA report concluded that the FMS contract 'did not adequately protect Australia's interest especially in negotiations between the US navy and the shipbuilder'.

31 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, pp 31 and 33. On another occasion, the RAN inquired why it was not consulted when Ballistic Laminate was fitted to FFG 01-02 ships. There were also a number of examples of poor workmanship by Todd Pacific Shipyards on the hull of FFG-02.

32 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 35.

that earlier involvement of local suppliers and a more competitive local industry would enhance Australian industry participation in foreign projects.³³

Problems with foreign design and Australian construction—HMAS Success

3.19 The 1976 Defence White Paper identified the need to develop Australia's self-reliance through investing in key industrial capacities. The local construction of the Fleet Underway Replenishment Ship HMAS *Success* reflected this policy.

3.20 HMAS *Success* was to be the largest ship built in Australia for the RAN. In 1977, the Government of France was awarded the design contract for \$2.7 million based on the DTCN-PR Durance Class Ship. In October 1979, Vickers Cockatoo Dockyard Pty Ltd was awarded the construction contract for \$68.4 million (in November 1978 prices) with ship delivery by 31 July 1983.³⁴ In June 1983, however, the contract was renegotiated, extending the acceptance date by three years and increasing the project cost to \$187.3 million (in January 1983 prices).³⁵ When the vessel was finally commissioned in 1986, the total project cost was estimated at \$197.41 million.³⁶

3.21 The main reason for the cost and time overrun on HMAS *Success* was a protracted dispute between the Commonwealth and the Vickers Cockatoo Dockyard Pty Ltd over the drawings and specifications contained in the 'Production Package' (PP) from the French company, *Directions Techniques Des Constructions Naval*.³⁷ There is evidence that the Department of Defence significantly underestimated the extent of the differences between the original building specifications and the French PP.³⁸ A 1983 Auditor-General's report criticised the department for failing to ensure that the French company had the PP needed for an Australian build.³⁹

33 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 36.

34 K. F. Brigden, Report of the Auditor-General, Parliamentary Paper No. 234/1983, p. 15.

35 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 75.

36 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 69.

37 The French agency from which the Commonwealth purchased the Production Package was the *Direction Techniques des Constructions Navales*.

38 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 73.

39 K. F. Brigden, Report of the Auditor-General, Parliamentary Paper No. 234/1983, 6 September 1983, p. 16. Derek Woolner, *Procuring change: How Kockums was selected for the Collins class submarine*, Research Paper No. 4, 2001–02, Parliamentary Library, p. 11. It was suggested that the problem may have been as fundamental as translation difficulties.

3.22 On the other hand, Defence argued that the builder had deliberately underestimated the value of its original contract price in order to recover the costs from a significantly more expensive design package.⁴⁰

3.23 The construction of HMAS *Success* also suffered from industrial relations disputes and skills shortages. In October 1982, Senator the Hon. Anthony Messner noted:

...the problems which have occurred at the builder's yard...relate to the attracting and retaining of suitable skilled workers after a long gap in shipbuilding at that dockyard. Also, one very significant contribution to the delay has been industrial disputation because that builder has been a target for the unions' shorter working hours campaign.⁴¹

3.24 The 1986 Joint Committee of Public Accounts report noted that 171 days had been lost through industrial disputation.⁴² It also identified insufficient staff resources to handle the design modifications, poor onsite representation leading to confusing quality assurance arrangements and an inadequate project management structure and resources.⁴³ These failings led Defence and the naval shipbuilding sector to prioritise project management and human resources in future naval shipbuilding projects.

Developing a modern, efficient naval shipbuilding industry

The Australian Frigate Project

3.25 The Australian Frigate Project (AFP) was initiated in May 1978 with the establishment of the Defence Naval Destroyer Group. Based on the Group's report, the FFG-7 Class Frigate was selected for local construction given it served 'the strategic need to regain shipbuilding skills' and offered a flexible design to maximise local technological input.⁴⁴ In 1980, the Coalition government made a commitment to build two FFG-7 frigates at Williamstown, conditional on the dockyard demonstrating its

40 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 73.

41 Senator the Hon. Anthony Messner, Minister for Veterans' Affairs, *Senate Hansard*, 21 October 1982, p. 1697. The Minister's response also contained an answer to the issue of the international competitiveness of an Australian build: 'As to whether the French and/or South Koreans could build a ship in less time than it will take to build HMAS *Success*, it has to be acknowledged that Australia's policy in relation to this kind of development is for work to be undertaken in Australia. Consequently, the question of vessels being built in other countries does not arise'.

42 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 75.

43 K. F. Brigden, Report of the Auditor-General, Parliamentary Paper No. 234/1983, 6 September 1983, p. 25.

44 Paul Earnshaw, 'The Australian Frigate Project', *Australian Defence Force Journal*, No. 126, September–October 1997, p. 9.

capacity to build the ships to the RAN's requirements. In 1981, the government selected HMAS *Darwin* (FFG 04) as the baseline for the build.

3.26 A new Labor government came to office in March 1983 arguing that Australia should have the capacity to build warships in-country. Its commitment to self-reliance furthered the Coalition government's approach, and was significant given the previous Labor government's cancellation of the DDL project in favour of an offshore build.⁴⁵

3.27 However, the government was also committed to fiscal restraint in the defence portfolio and recognised the need to reform highly inefficient, government-owned shipyards. Mr Derek Woolner, a Visiting Fellow at the Strategic and Defence Studies Centre, has noted that the government:

showed that defence construction projects would no longer be used for job creation when it resisted union demands to build a second tanker at Cockatoo Island, ultimately condemning the yard to extinction.⁴⁶

3.28 These decisions were integral to the government's broader program of micro-economic reform.⁴⁷ The challenge was to build a competitive domestic defence industry through rationalising defence factories and dockyards, while offering the private sector opportunities for long-term investment. The government maintained that through better management, a significant program of defence procurement could take place without continuous real growth in defence appropriations.⁴⁸

3.29 The Labor government's strategy was to use the Williamstown dockyard to demonstrate its commitment to commercialising defence shipbuilding projects.⁴⁹ The selection of Williamstown for the FFG build was conditional on the resolution of productivity issues at the dockyard.⁵⁰ The Defence Minister, the Hon. Gordon Scholes, described the FFG 05–06 project as 'a chance for the dockyard to prove that

45 The committee heard from Mr John O'Callaghan, head of the Australian Industry Group Defence Council, of the important commitment made from 'people like Sir James Killen' (Minister for Defence 1975–1982) to building major naval surface ships and submarines in-country. *Committee Hansard*, 28 June 2006, p. 41.

46 Derek Woolner, *Procuring change: How Kockums was selected for the Collins class submarine*, Research Paper No. 4, 2001–02, Parliamentary Library, p. 10.

47 Paul Earnshaw, 'The Australian Frigate Project', *Australian Defence Force Journal*, No. 126, September–October 1997, p. 10.

48 See The Hon. Kim Beazley, Minister for Defence, *House of Representatives Hansard*, 14 October 1986, p. 1928.

49 Paul Earnshaw, 'Australian Naval Shipbuilding—1960s to the present', *Journal of the Australian Naval Institute*, January–March 1998, p. 26.

50 Parliamentary Standing Committee on Public Works, *Construction of Facilities for the Australian frigate project, Williamstown dockyard, Melbourne—Phase A*, Parliamentary Paper No. 98/1984, 1984, p. 8.

it can...maintain price and production schedules', and emphasised the importance of prerequisite agreements on work practice issues and construction specifications.⁵¹

3.30 The government announced on 12 October 1983 that the project would cost an estimated A\$830 million (in December 1982 prices). The size of the local cost premium paid for the build is unclear. However, a review of the project by the Joint Committee of Public Accounts in February 1986 estimated the 'cost premium of local production to be in the order of 30 per cent'.⁵²

3.31 The contract for the build was signed in November 1983 between the Department of Defence and the Department of Defence Support. The first frigate (FFG 05) was to be delivered between the middle of 1990 and 1992 and the second (FFG 06) between the middle of 1992 and 1994. The project contract was designed specifically to maximise Australian industry involvement in the areas of expertise and capability that would increase Australia's self reliance and military preparedness. Materials sourced from the U.S. were supplied only if they could be delivered within project design and schedule and allowing for the Australian cost premium.⁵³

3.32 The defining moment of the frigate project came on 1 April 1987 when the Defence Minister, the Hon. Kim Beazley, announced the government's decision to sell the Williamstown Naval Dockyard. In December 1987, the dockyard was sold to the Australian Marine Engineering Corporation (AMEC) for \$100 million and a contract was signed with the company extending the delivery date for the FFG 05 by three months. In the event, an increased rate of work at the dockyard led to the launch of HMAS *Melbourne* (FFG 05) ahead of schedule on 5 May 1989. Although AMEC's efforts to launch the FFG 05 put the FFG 06 behind schedule, the second ship was delivered in October 1993, a month ahead of the original 1983 contract date.

3.33 The frigate project succeeded in its prime objective of re-establishing a major warship capability in Australia: 90 per cent of AMEC's costs and 75 per cent of the overall project costs were sourced locally.⁵⁴ The final project cost in real terms was similar to the 1983 contract schedule, with the only period of real cost increase associated with the privatisation process.⁵⁵

51 The Hon. Gordon Scholes, 'Construction of two FFG-7 frigates at Williamstown Naval Dockyard: Ministerial Statement', Minister for Defence, *House of Representatives Hansard*, 12 October 1983, p. 1659.

52 Joint Committee of Public Accounts, *Review of Defence Project Management*, Parliamentary Paper No. 19/1986, Report 243, Vol. 2, Canberra, 1986, p. 57; Paul Earnshaw, 'The Australian Frigate Project', *Australian Defence Force Journal*, No. 126, September–October 1997, p. 10.

53 A premium is essentially a subsidy paid by government to secure a local build. The question of premiums will be discussed in detail in chapter 14.

54 Paul Earnshaw, 'The Australian Frigate Project', *Australian Defence Force Journal*, No. 126, September–October 1997, p. 10.

55 Paul Earnshaw, 'The Australian Frigate Project', *Australian Defence Force Journal*, No. 126, September–October 1997, p. 18.

Naval shipbuilding as a platform for a competitive local defence industry

3.34 Moreover, the AFP established the Labor government's commitment to self-reliance and a competitive defence industry. In March 1987, the government released a Defence White Paper which emphasised the need to develop Australia's indigenous defence industry capability and improve its competitiveness. Upon presenting the White Paper to parliament, the Defence Minister the Hon. Kim Beazley warned that in the event of an attack on Australia:

[m]ajor maritime forces would...be needed, involving large numbers of high capability ships and aircraft. These forces do not now exist in this region and could not be rapidly or secretly developed.⁵⁶

3.35 In this context of the need for self-reliance, the Minister's commitment to the development of Australia's defence industry was twofold. The first was to create a 'more efficient defence', ensuring that government-owned defence factories and dockyards 'perform to the standards of competitive private industry'.⁵⁷ The Williamstown decision was integral to this direction, and others would soon follow. Mr Beazley's second commitment was to invest significantly in a competitive local industry.⁵⁸

Conclusion

3.36 This chapter highlighted some of the problems with Australian naval shipbuilding projects in the three decades until the mid-1980s. The failure of the DDL destroyer project and the shortcomings of the FFG 01–04 and HMAS *Success* projects can be attributed to contractual disputes between Defence, shipbuilders, foreign designers, suppliers and workforces. Defence lacked contractual rigour in its specifications while shipbuilding companies suffered from poor handling of their inventories and their labour. It was in this context that the Australian Frigate Project

56 The Hon. Kim Beazley, Minister for Defence, *House of Representatives Hansard*, 19 March 1987, p. 1091.

57 The Hon. Kim Beazley, Minister for Defence, *House of Representatives Hansard*, 19 March 1987, p. 1091.

58 The Hon. Kim Beazley, Minister for Defence, *House of Representatives Hansard*, 19 March 1987, p. 1091.

targeted—and succeeded in developing—the capability and competitiveness of the Australian naval shipbuilding sector.

3.37 The following chapter looks at the renaissance of Australian naval shipbuilding in the context of the projects to build the Collins class submarines, the ANZAC frigates and the Huon class Minehunters. They were highly significant projects, establishing the current prime contractors—ASC, Tenix and Thales Australia (ADI)—and the underpinning skills and capacity within Australian shipyards.⁵⁹

59 See The Allen Consulting Group Pty Ltd, *Future of Naval Shipbuilding in Australia: Choices and Strategies*, May 2005, p. 24.

Part II

Australia's capacity to produce large naval vessels

Part I provided an overview of developments in the shipbuilding industry worldwide and identified the major challenges facing the builders of modern warships. It then focused on the evolution of Australia's shipbuilding industry up to the completion of the Australian Frigate Project.

Part II is primarily concerned with the capacity of the Australian industrial base to construct large naval vessels over the long term and on a sustainable basis. It examines in detail the four major elements upon which Australia's capacity relies—the country's prime shipbuilders; the wider shipbuilding industrial base made of a network of suppliers located in Australia, the infrastructure that supports the industry and the available skills base and workforce.

