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ACRYDUX

THE DIBB REPORT

Mr Paul Dibb's review of Australian defence capabilities and force structure proposals were
released too close to the copy deadline for this issue of THE NAVY to allow a detailed analysis to be
included: However some sections of the report relating to maritime matters are reprinted in the
following pages and Viewpoint contains the writer's "first reading" impressions of the report.

It must be said that the report is comprehensive, contains much
detailed information concerning present and proposed defence arrange-
ments, and it is written in easily understood language. Mr Dibb and his
small staff must have worked very hard indeed during the twelve months it
looked to complete the report.

By and large Mr Dibb's views on Australian defence are very similar to
those expressed by Labor Party defence spokesmen and ministers during
the past decade that is to say a "defensive" rather than a "deterrent"
position is favoured and this no doubt will be argued during the next few
months.

The report contains a number of observations which cannot be re-
peated too often. For example, it is made clear that Australia is not and
cannot be completely self-reliant in defence. Our greasiest reliance is on
the United States for a variety of reasons ranging from intelligence
collection (to which Mr Dibb attaches great importance) to technology
transfer and the supply of equipment.

ANZUS is a bilateral arrangement between the United States and
Australia and is therefore the fundamental of Mr. Dibb's plans. However his
convention that "the pressure of the joint facilities" (one could emphasise
the word "Joint") "together with the access we provide to visits by US
warships and the staging through Australia of the B52 bombers, are a
sufficient tangible contribution to the Alliance" and his refusal to accept
that Australia has any part to play in US contingency planning for global
war, is unlikely to be well-received by the Americans, not that they are
likely to publicly disagree.

On the assumption there is no real threat to Australian security in
sight, Mr Dibb has recommended that force planning be directed towards
an Australian Defence Force (ADF) able to cope with harassment and
attacks in the north and north-west (particularly) of the country, with some
capacity for expansion in the event of a major attack or attempted invasion by a neighbouring country. Some might suggest a well
equipped Coastguard could deal with small scale occurrences, indeed that
might well be the end result if the pall of gloom hanging over the national
exchequer does not lift.

Mr Dibb rightly regards Indonesia as Australia's most important
neighbour in defence terms and stresses the need for a viable relationship
with that country. One suspects there have been some excisions from this
part of the report but to the writer any armed clash between Indonesia and
Australia could not be regarded as a mere "affair" rather it would be of
considerable concern to a number of countries including the other ASEAN
countries, Japan and of course the United States.

Leaving aside Indonesia the only regional country likely to be
involved in operating Australia is the militarily powerful Vietnam and
then only as part of a larger strategy to weaken United States dominance
in the Pacific Basin and elsewhere. Vietnam with USSR maritime
assistance could cause a few headaches in our part of the world.

Mr Dibb discounted the importance of trade to Australia and the need
to protect shipping at "considerable distances" from the mainland: his
proposed structure for the Navy reflects this view and in the opinion of
many closely associated with maritime affairs it is a major weakness in the
report. Australians in general are not maritime-conscious and it remains to
be seen whether the proponents of a versatile and capable Australian Navy
can argue their case strongly enough to get anywhere.

The writer believes Mr Dibb's proposals to strengthen our local
defence capabilities are in the main sound and probably overdue. One
must however express concern at the essentially defensive nature of the
proposals — in many ways waiting for something unpleasant to happen
rather than trying to prevent the happening — and what seems to be a very
selfish outlook — let's look after ourselves and to blades with anyone else.
This does not appear to be a sensible approach in an increasingly inter
dependent world, and not one likely to win friends we might need one
day.

DEADLINE

The deadline for the July 1986 issue
Of The Navy is
AUGUST 1, 1986

GEOFFREY EVANS
Federal President
The Navy League of Australia
The design and performance of a new submarine is a major undertaking, involving significant financial and technological investments. The capability required for the new submarine project should be able to provide a sustained presence in three separate areas simultaneously, a major improvement over that available from the capability proposed. This extra margin of capability could be subject to scrutiny on the best of all possible worlds.

In recent years, there has been a general awareness, perhaps the closest of the three, that submarines are essential, particularly those relevant to low-level contingencies, for example, mine countermeasures forces and ground support operations. The latter is a task that can be performed quickly and to the satisfaction of all concerned, a good opportunity for this task (five on each coast). Precursor sweeping would be required, whereas now we have a heavy amphibious transport ship and six LCHs. The availability of underwater replenishment can increase the time on station of destroyers (and other ships) being used for operations in these areas. The latter is a task that can be performed quickly and to the satisfaction of all concerned, a good opportunity for this task (five on each coast). Precursor sweeping would be required, whereas now we have a heavy amphibious transport ship and six LCHs. The availability of underwater replenishment can increase the time on station of destroyers (and other ships) being used for operations in these areas. The latter is a task that can be performed quickly and to the satisfaction of all concerned, a good opportunity for this task (five on each coast). Precursor sweeping would be required, whereas now we have a heavy amphibious transport ship and six LCHs. The availability of underwater replenishment can increase the time on station of destroyers (and other ships) being used for operations in these areas. The latter is a task that can be performed quickly and to the satisfaction of all concerned, a good opportunity for this task (five on each coast). Precursor sweeping would be required, whereas now we have a heavy amphibious transport ship and six LCHs. The availability of underwater replenishment can increase the time on station of destroyers (and other ships) being used for operations in these areas. The latter is a task that can be performed quickly and to the satisfaction of all concerned, a good opportunity for this task (five on each coast). Precursor sweeping would be required, whereas now we have a heavy amphibious transport ship and six LCHs. The availability of underwater replenishment can increase the time on station of destroyers (and other ships) being used for operations in these areas. The latter is a task that can be performed quickly and to the satisfaction of all concerned, a good opportunity for this task (five on each coast).
options A  government decision on source selection would probably be sought in the considerably more capable than the Fremantle class patrol boats To fulfil the kinds capabilities in our region destroyers with their more capable weapons and sensor systems The new class of ship maintain as destroyers sea-keeping, endurance and reconnaissance capabilities that patrol boats do not have and yet they will not be as expensive to acquire or distant waters They will have the sea-keeping, endurance and reconnaissance capabilities that patrol boats do not have and yet they will not be as expensive to acquire or Fundamentals considerations in the final decision on whether and how to replace the DDGs will be trends in the survivability of destroyer-type vessels against stand-off missile attack, as well as further progress in the development of capability priorities. At present, Navy aims to provide at short notice four Sea King ASW helicopters for the RAN. The six FFGs are capable of carrying two Seahawk helicopters each. There is little need to add further helicopters for special purposes such as minesweeping or other defence tasks should it be considered for offshore counter-terrorism operations. If helicopters are required for offshore counter-terrorist operations after the September 11, 2001, attacks, the new four Sea King helicopters for the new light patrol frigates. It is estimated that an initial purchase of 12 such helicopters (one for each of the eight light patrol frigates plus four for replacement and maintenance support helicopters) might cost in the region of $300 million. The defence department has also recently considered the purchase of one or two more Sea King helicopters to reinforce the ASW/anti-surface surveillance targeting (ASST) helicopters at a cost of $424 million.

Air Force operations "the I utuv»« Eiowaw /one sitd (Kutmu'.e auun  and la

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SUCCESS ACCEPTED THEN COMMISSIONED

The Royal Australian Navy's new Fleet Replenishment ship, SUCCESS, began acceptance sea trials off Sydney on Thursday, April 10, and was handed over to the Navy on Tuesday, April 15, 1986.

The contract for construction of SUCCESS, which was based on the French Duranne class Replenishment ship, was awarded in October 1979. In December 1985, she successfully completed two weeks of contractor acceptance trials, and since then had been completing machinery inspections and final fitting out.

SUCCESS on trials. Photo: (Photo ABPHS Boyld)

New Helicopters

The Australian Defence Force is to acquire 22 new helicopters — 14 Sikorsky S70A-9 Black Hawks for the RAN and eight Sikorsky Seahawks for the RAN’s guided missile frigates.

The Black Hawk utility helicopters will replace the Bell 212, the only utility helicopter serving with the Bell 412 (UH-1H) “Huey”, which entered service with the Australian Army in the Vietnam conflict. The Black Hawk has been evolved through the operational and technical experience gained in Vietnam.

The aircraft can deploy quickly over long distances to operational areas, fully crewed and ready for combat. For the first time, the Australian Army will be able to move a full section of ten combat troops in one utility helicopter over a range of 160 km, in most of the operating conditions likely to be encountered.

The purchase of the additional eight Sikorsky Seahawks aircraft (which, when combined with their sensors, weapon systems and associated equipment, are worth $187.51m at December 1985 prices), will bring to 16, the number of RAN helicopters purchased for its FFG-7 frigates.

Four of the frigates are already in service and the final two are under construction at Williamstown Dockyard, Melbourne.

Mr Beazley said the additional helicopters would greatly enhance the RAN’s capabilities for anti-shipping and anti-submarine warfare.

The Navy helicopters were being purchased 22 months earlier than anticipated, to meet the needs of the two frigates being built at Williamstown.

“This will reduce the cost of the aircraft by enabling continuity of production, both in the US and with Australian industry, and will ensure the same aircraft configuration as the initial helicopters,” the Minister said.

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Page Eight

NAVIN

July, 1986

Page Nine
HMAS VAMPIRE TO BE DECOMMISSIONED

The last of the Royal Australian Navy's purpose-built gunnery ships, the 27-year-old Daring-class destroyer, HMAS VAMPIRE, is to be decommissioned in mid-1986 and put up for disposal. The possibility of her being transferred to the National Maritime Museum as a major exhibit is being examined.

Announcing this, the Minister for Defence, Mr Kim Beazley, said HMAS VAMPIRE was one of three Daring-class destroyers built in Australia — the others were HMAS VOYAGER and HMAS VENDETTA. She had an armament of 4.5 in dual purpose guns in twin mountings, six 40/60 Bofors guns, a triple barrel anti-submarine rocket and a quadruple torpedo tube mounting.

The 3,670 tonne destroyer built at the Cockatoo Island Dockyard in Sydney, was commissioned into the RAN in June, 1959. HMAS VAMPIRE had spent 50,000 hours underway at sea, and in that time had steamed 800,000 nautical miles.

Mr Beazley said: "In the early stages of her career she won the prestigious Clarence Cup on three separate occasions as the most efficient ship in the Fleet; and over the years, has won other important awards. She has served Australia well.

"As the oldest commissioned ship in the Navy, the ship has played a valuable role in both her operational and training capacities. "GAYUNDAH"

HMAS VAMPIRE after modification to a training ship. Photo: RAN

HMAS VAMPIRE early in her career. Photo: RAN

Protection of Merchant Shipping Exercise

An international exercise designed to test procedures for the control of merchant shipping in times of tension was conducted from April 7 to 18.

The Minister for Defence said that the exercise, named Expanded Sea B6, involved 185 Royal Australian Naval Reserves in all capital cities, and the ports of Newcastle, Port Kembla, Port Hedland and Cairns.

During the exercise, Reserve officers boarded merchant ships of participating nations to brief ship masters on plans and procedures to control the movement of merchant ships in times of tension. Helicopters were used to board selected ships at sea.

Similar exercises were conducted simultaneously in many parts of the world, including North and South America, Europe, the Pacific and

The exercise was accompanied by the French warship, Jeanne D'Arc. From mid-18, the ship was to be joined by the two new survey launches. Tenders are being called for four modern survey launches for the Royal Australian Navy to be used to update existing nautical charts of northern Australian waters.

"This is a high priority task. Except for the recognised shipping routes, Australia's northern waters are inadequately charted. Much of the information on which current charts are based, came from surveys carried out in the last century," Mr Beazley said.

"Accurate, updated charts will greatly increase the safety of all who use these waters — fishermen, yachtsmen, tourists and merchant seamen, as well as the RAN."

Each of the new survey launches will be about 35 metres long, and have a crew of two officers and ten sailors. They will be fitted with the latest marine survey equipment and work in conjunction with the existing hydrographic ships, HMAS MORESBY and HMAS FINDER.

Tenders have been called from Australian and New Zealand shipyards and the RAN expects to commission the four launches in 1988/89. After commissioning, the launches will be based at Cairns. Their first task will be to help update charts of the Great Barrier Reef.
THE GREAT PATROL BOAT RACE

"Gentlemen, start your patrol boats..." Well, that wasn't quite the way it started, but the first Great Patrol Boat Race had all the ingredients of more conventional tests of speed and skill.

The inaugural race for the fastest boats was on May 2, involving HMAS Ships WHYALLA, GEELONG, GAELER and TOWNSVILLE. The latter two boats were Darwin and Townsville based respectively, and were out to show their southern peers how things should be done.

Racing was in the area of TVS SEAL and TRV TREVALLY. The aim of the race was to take the opportunity, while boats were together, to conduct full power trials concurrently, and to see who was the fastest.

The opportunity was also taken to show the media and interested guests what life on a patrol boat is like. To this end, each boat carried a media crew as well as school children who were in an essay contest held in conjunction with Radio 2BI.

After embarking guests, all boats sailed from WHYALLA on May 2. After reaching Broken Bay, engine trials using the post main engine, were conducted in company performance of the boats and without a wedge. As the boats headed south for Botany Bay, the patrol boats cast a look at selected points, as well as for accuracy of navigation.

Enroute to Broken Bay, engine trials, using the post main engine, were conducted in company performance of the boats and without a wedge. As the boats headed south for Botany Bay, the patrol boats cast a look at selected points, as well as for accuracy of navigation.

While heading south for Botany Bay, the boats came across TVS SEAL, clearly designated as a merchant ship in distress. All boats were then required to send a medical team aboard, as well as two school children who were in an essay contest held in conjunction with Radio 2BI.

At the end of the final full power run, TOWNSVILLE led the remaining three boats through the heads and the high speed run back up the beach. An annual back at WHYALLA, the winner was announced by Commander Australian Naval Warfare and Patrol Boat Forces. CMDR R. G. Dagworthy, and the prize was presented by John Woods from Radio 2BI to LACR Denis Collyer Commanding Officer of TOWNSVILLE, the winning boat and the fastest boat in the high speed run.

CMRD Dagworthy thanked participants, especially Radio Station 2BI and John Woods for the great assistance in promoting the event.

COMAUSMINPAB also congratulated all crews and the organisations in the healthy spirit and outstanding success of the day. He declared that the RAN's 75th Anniversary were the real winners on the day.

INTRODUCTION

The City of Sandringham believes that the preservation and restoration of HMVS CERBERUS provides an opportunity for local, state and federal governments to work together to create a bicentennial memorial of national and international significance.

The proposal to restore this unique warship gains further significance in 1986, as 1986 marks the 75th Anniversary of the Royal Australian Navy.

The City of Sandringham has already invested considerable time, effort and money to assess the feasibility of raising and restoring HMVS CERBERUS. Since the City acquired beneficial ownership of the ship in 1926, there has been a growing number of enquiries which highlight the fact that HMVS CERBERUS is an historic vessel to Australian and world standards.

Expert reports indicate that the ship is still salvageable, although there has been some deterioration. It appears that unless some prompt action is taken, the alternative is to lose this piece of Australian history for ever. The City has therefore, instructed the planning team to put in place special bicentennial funding to salvage and restore the CERBERUS.

The City of Sandringham strongly recommends that the Federal Government should provide special bicentennial funding to salvage and restore the CERBERUS.

The City of Sandringham proposal and supporting documents provide detailed costings and recommendations.

The City of Sandringham estimates that the total cost of the proposal will not exceed $3.6 million and earnestly commends the proposal to State and Federal Government consideration.

The City of Sandringham believes that the proposal is a real local government role in researching, planning and implementing the submission and confirms that the proposal for the restoration of HMVS CERBERUS is a positive step towards the future of the ship and the enhancement of the Port of Melbourne.

The Melbourne Maritime Museum has indicated that it not only supports the proposal but that it has already begun its planning and management of the project. The City of Sandringham believes that the restoration of HMVS CERBERUS once again will not only be of local significance, but also of national and international importance.

The Museum has indicated that it will raise funds to support the project and that the restoration of HMVS CERBERUS will be a significant ceremonial event.

HMAS GAWLER leads HMAS Townsville (right) and HMAS Geelong (left) - Photo: POHR Steve Grant

HMAS TOWNSVILLE, eventual winner of the Great Patrol Boat Race - Photo: POHR Steve Grant

HMAS GAWLER flying the flag of the Northern Territories and Seven National News- Photo: POHR Steve Grant

HMVS CERBERUS in a rendering - Photo: R. Colquhoun

THE HISTORICAL IMPORTANCE OF HMVS CERBERUS

HMVS CERBERUS is one of the most historically important naval vessels in existence.

During the 1860s, the question of colonial defence played a major role in Britain. The Victorian government of the day was greatly concerned about the defence of Melbourne. An attack from foreign waters was considered a possible threat.

With clouds of fear over the colony, the British government commissioned the eminent naval architect E. J. Reed to construct a new class of warship. He designed the CERBERUS.

The CERBERUS was not an ordinary warship. Her design was a complete break from established tradition.

Known as a turret ship, or breastwork monitor, she became the prototype of a new class of warship.

The design of the CERBERUS was the prototype upon which all major battleships from 1895 to 1905 were based.

Once fully restored, and opened to the public, CERBERUS would be a historical attraction to rival the best that the world has to offer and a fitting monument to the men of Australia's colonial naval forces.

SAVE THE CERBERUS

During March, 1985, the Sandringham City Council commissioned A. R. Colquhoun and Associates Pty Ltd to investigate and report on the feasibility of restoring the former HMVS CERBERUS, and transporting her to a site adjacent to the currently restored POLLY WOODSIDE for preservation and restoration.

After receipt of the report by A. R. Colquhoun and Associates, the Council commissioned R. G. Dagworthy and Associates to prepare detailed proposals for the restoration of CERBERUS.

After receipt of these two reports, the Sandringham City Council prepared a detailed submission, entitled SAVE THE CERBERUS, for the raising and restoration of the monitor. Basically, the plan envisaged refloating and relocating CERBERUS to the old Duke and Orr dry dock next to the POLLY WOODSIDE. The old dry dock would be restored to display condition, using as much original material as can be located. Where it is not possible to obtain original equipment, then these spaces will be used to display technical equipment of a contemporary nature or photographic exhibit depicting CERBERUS and her career.

Once fully restored, and opened to the public, CERBERUS would be a historical attraction to rival the best that the world has to offer and a fitting monument to the men of Australia's colonial naval forces.
The principal dimensions of the CERBERUS were length 225 feet, beam 45 feet, draught 15 feet 6 inches, and displacement 3,340 tons.

Special compartments in the hull could be filled with 500 tons of water to reduce the freeboard making the ship a smaller target for attack.

The CERBERUS was laid down in 1867, launched in 1868 and completed in September 1870. CERBERUS came to Melbourne under her own power and the voyage took 123 days. She arrived in Port Phillip Bay on April 9, 1871, to a great welcome.

The architects recommended that the CERBERUS be refloated by the Architects. There have been recent inspections by Royal Australian Navy diving personnel, and in 1926 the Black Rock Yacht Club became interested in the vessel, and in 1921, was renamed HMAS PLATYPUS II, and was used as a seagoing monitor built entirely without masts and rigging. CERBERUS was followed by DEVASTATION, a large, seagoing monitor.

The vessel was the first of its type to be designed without masts, sails and rigging. CERBERUS was followed by DEVASTATION, a large, seagoing monitor.

The success of the “Monitor” type of vessel in the US Civil War, led to the concept being taken up in the United Kingdom by Captain Cowper Coles, RN, who designed the revolving turret situated in revolving gun turrets.

The main characteristics of the “Monitor” type of vessel, so named after the MONITOR, designed and built in the USA by John Ericsson in 1861-62, are a low, armoured hull on which are mounted armoured guns for assistance in defending the Port of Melbourne against enemy incursions. E. J. Reed, then Chief Constructor of the Navy, designed the revolving turret for assistance in defending the Port of Melbourne against enemy incursions.

CERBERUS is described in her building specification as a twin-screw iron armoured-clad turret ship of 2,107 tons, with monitor deck and search beakwerk for Melbourne.

The present condition of the vessel in these areas may be summarised:

1. FLYING DECK
   The deck has been removed completely.
2. DECK OVER BREAStWORK
   With the exception of the canting tower, which still stands, the vessel has generally been raised to the level of the turret tops and the deck over the beakwerk.
3. UPPER DECK
   The upper deck and the greater proportion of its sheathing remained. Little equipment is left. The underside of the structure has not been examined for integrity, though this aspect has been covered as part of the conservation of the vessel.

The monastery of the deck closes have loosened all the open holes which were provided for various purposes. It is understood that the majority of these closing devices were of gunmetal and while some have been armed and scrapped, it is suggested that some remain loose below the hull, below the water level.

The upper openings in the upper deck do not appear in all respects with those shown on the original general arrangement drawing produced for assistance in defending the Port of Melbourne against enemy incursions.

The CERBERUS history of service was such that the Royal Australian Navy’s 75th Anniversary Consultative Committee, with the assistance of Public Relations Consultant, Consolidated Royce, is preparing a submission seeking Federal Government funding for preservation and restoration of the vessel.

The CERBERUS was the flagship part of the Victorian Navy, and in 1911, the vessel was the first of its type to be designed without masts, sails and rigging. CERBERUS was followed by DEVASTATION, a large, seagoing monitor built entirely without masts and rigging. CERBERUS was followed by DEVASTATION, a large, seagoing monitor.

A new development in naval design, led to the development of the battleship, a class of warship significant in both world wars. CERBERUS is thus the sole surviving example of this important stage of naval design.

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The main characteristics of the “Monitor” type of vessel, so named after the MONITOR, designed and built in the USA by John Ericsson in 1861-62, are a low, armoured hull on which are mounted armoured guns for assistance in defending the Port of Melbourne against enemy incursions.
RESTITUTION - GENERAL CONSIDERATIONS

2 SCOPE OF RESTORATION

The CERBERUS was in service for some 50 years. The period covered the introduction of many changes in engineering technology as well as changes in naval vessels and the armaments used.

There are a number of plans available, which show CERBERUS as she was in her original form and modified to suit the battleship. Various references to alterations, additions and changes in usage are recorded in accounts of the CERBERUS.

In its present position at Black Rock, the high water level is 0.8 metres, the vessel has been immersed beyond its light draught for some 60 years. The reason for proposing that the vessel be surrounded by some 2m of water is to preserve it. For this reason, the vessel is on dry land has a number of significant disadvantages:

(a) The vessel's external appearance has changed over the years due to the presence of water and water features.

(b) Once the vessel has been cleaned and protected, restoration will be completed.

(c) The presence of wind and water will affect the vessel permanently.

(d) If the hull is exposed, then the form of the construction used, as a result of which a large number of items will be highlighted.

4 SCHEME OF RESTORATION

It is proposed that restoration proceed in two stages:

Stage 1

1. Make Dock clear of all obstructions to vessel:
   (a) The vessel's exterior can be sandblasted to remove scale and a protective paint scheme applied.
   (b) Once the vessel has been cleaned and protected, restoration will be completed.
   (c) A draught of 2m to 3m will be maintained, on wind and rain.

2. (1) Lower deck: Stage 1 would enable the vessel to be opened for public exhibition, while Stage 2 proceeds
   (a) The nature of the design of the vessel lends itself to the above situation. Access from the upper deck outside the breastwork to below decks is, by way of four wooden escarpment hatches. Access otherwise is via hatches located in the breastwork deck leading down to the upper deck within the breastwork and then below.

   The upper deck thus effectively forms a barrier between the two main areas of the vessel.

   Before the vessel can be made ready for inspection above the upper deck level, two major tasks must be completed

   (a) reconstruction of the turrets.
   (b) reconstruction of the flying deck.

   Restoration of the turrets is closely associated with the plans for restoration of the vessel in the Yarra.

   In the case of the turrets, it is understood that two approaches can be made:

   (a) to jack the turrets down to a suitable level after cutting the upper deck in two, or
   (b) by removing the turrets completely.

   Since the turrets are on rolling rollers, it will be necessary, in any case, to remove the turrets to restore the roller gear.

   It is proposed that the second option be adopted. The guns and carriages could be lifted from the turrets, then the turrets lifted from the ship and all be landed at Williamstown Dockyard, prior to the ship voyage. The guns, carriages and associated gear, when restored could then be returned to the vessel on land, at an appropriate time for lifting back into place by mobile crane.

   It has been noted that one gun has been partly cut up and that one section of turret armour has been cut away. In the case of the gun, the muzzle could be left as is - with an explanatory notice. The turret armour could probably be restored by volunteers.

   ...continued...
Warships for the Royal Australian Navy 1945-85

by Rear Admiral William J. Rourke, AO, RAN, B.Econ., M.Ec. (Honorary)

This is an account of the acquisition of warships for the Royal Australian Navy in the forty years since World War II. It is a record of our overseas and Australian programs of the period, with particular attention paid to the decisions made by Royal Australian Navy officials in collaboration or purchase or local construction. The descriptions of warships are described and prospects for the next decade are assessed.

Acknowledgements

Many people have helped prepare this paper. I would particularly like to thank Mr Mike Shallcock, Director of Naval Ship Production, and Mr B. Rohn, Director of Forward Design for the substantial assistance they have provided. The paper is prepared by the Department of Defence, but the responsibility for the authors.

Introduction

Australian governments since Federation have felt some measure of support for naval shipbuilding as a necessary part of defence industry. However, the shipbuilding capacity built up in times of need has tapered in periods of low demand. In the last decade this capacity has been used more extensively to be determined whether or not it can be successfully maintained and will again into another period of disuse. Much will depend upon the partnership between the government and industry.

Before World War II

The Australian Commonwealth Naval Board was established in 1905, but it was not until the period of disuse. Much will depend upon the partnership between the government and industry.

World War II

As the cost of the war two more ships PARS (II) and WARRAMUNGA with a third BATAA was added to the Admiralty and for the Royal Imperial Canadian Navy. Ten RIVER class destroyers were built, two of them at Williamstown. This shipyard of Engineers and assembled at the shipyard, and that the skills, experience and investment needed favoured Williamstown for this reason.

March 1946, the Prime Minister announced that the government had approved in principle the building of additional destroyers (two ARUNTA class and two RAMATTA class) and at Williams town, Victoria), when the two destroyers of British design then being built (TOBRUK and ANZAC) had successfully progressed so as to avoid the disposal of the skilled and other personal Funds were made available to enable new methods of production to be undertaken.

At the beginning of World War II most matériel and equipment for ships was imported from Britain but by 1946 about seventy per cent was being made in Australia. It was decided that the development should be continued and extended in the new destroyer design, modified slightly for the Australian service. They were the first all welded naval vessels built in Australia. Ten destroyers were laid down in 1944. These ships were completed in 1947. With this success the Admiralty and for the Royal Imperial Canadian Navy. Ten RIVER class destroyers were built, two of them at Williamstown. This shipyard of Engineers and assembled at the shipyard, and that the skills, experience and investment needed favoured Williamstown for this reason.

In August 1950, just after the DARING's had been laid down the Government announced that six new anti-submarine destroyers of the RIVER class would be built at Cockatoo Island and at Williamstown. The programme was subsequently cut back to four ships with the final two not authorised until the early sixties.

The design of the Australian RIVER class was similar to that of the British LEANDER class. Proportion plant employed steel plant with double reducing gear and turbines. Seaweed armour was used. The design of the RIVER class was similar to that of the British LEANDER class. Proportion plant employed steel plant with double reducing gear and turbines. Seaweed armour was used. As an example of the class were laid down in July 1951 and were completed in October 1953.

In 1952, it was decided to re-establish the shipbuilding industry in Australia. The first ship was laid down in 1954 and was completed in 1957. This involved a considerable investment and an effort of the shipbuilding industry.

In 1961 six TON class minesweepers were ordered and in January 1963 it was announced that a new naval base would be established at Christmas Island. In the words of Dr Hughes, the then General Manager of Walkers, "and in 1963 it was decided..."
The Australian designed DDL was under construction in a special group facility at Williamstown Naval Dock Yard. The ships are to the same design configuration as the FFG 7 class, at Williamstown Naval Dock Yard. Orders for the acquisition of the DDL have been awarded to Ramsay Fibreglass of Victoria, to meet a most demanding requirement. A competitor trial will be followed by a production run of at least two vessels for the RAN in 1980. There are good prospects of export orders.

The launch of the DDL, 17th April, 1981, at Williamstown Naval Dock Yard. The RAN's first two FFGs, ADELAIDE and CANBERRA, under construction in the USA.
We must enlarge the opportunities for this by shipbuilders here and overseas. We need to increasing our complementary activities with that responsibility effectively they must participate encouraging him to develop a detailed design than has been common in the past, and giving the shipbuilder a broader specification.

Influenced by Government policies of industry standards of combat system support for surface advances in this area and has achieved high.

The board understands that the principal defence requirement is for facilities of policy changes and their effects is outside the assistance Although a comprehensive account should be made to the emphasis accorded to commercial vessels The assistance provided for submarines will begin this year, with associated participation If all goes well a construction contract should be placed in 1987. and it seems likely that most or all of the submarines in the programme will be locally built. The Government will be based upon the realised performance of Australian builders, and that in turn will be based on the realised performance of the last few years, and of the immediate future.

During the months there will be a need of stores for repairing other vessels, and the EVERS as well, and the surface combatant to follow the Australian Frigate programme needs to be selected when the next one or two years. There seems to be no reason why these ships should not be built in Australia, and it is to be hoped that the decision to complete the EVERS will be maintained and developed in the years to come. 2. and 3. were built not only at the shipyard, but in the many supporting industrial activities.

We have some difficulties in that the number of yards building for naval and commercial work seems to be greater than the lowest workload that could sustain them. If we have to have the needed community of employment it seems necessary we must consider some reduction in the number of yards. Although Williamstown has made great advances in its industrial relations and in its organisation in order to re-establish this shipbuilding industry we do not believe Government yards are best suited to ship building and that the approach that does not seem to work with departmental procedures. Perhaps opportunity will arise in the years to come, to evaluate the naval building activity, and for two or three of the companies already committed to the present yard building yards it will be necessary, however, that we must continue to support both in Australia and overseas so as to earn a right to a continuing workload.

Conclusion

It adds significantly to our capability to support our defence force if the yards we need can be taken on because of the reasonable and efficient economy. Start up costs will often be such that single ships might not provide an economical programme, but our industry has shown that we can do this in the past. If they can, they will be able to get the cost of quality and meet the performance of our latest combatant. The capability is further developed and maintained if we do these and other activities of shipbuilding, and will have made a significant contribution to the defence and security of the country.
Although Naval Intelligence is uncertain of the mix of aircraft the Soviets will use, it expects KREMLIN will be using a mix of fighters and interceptors. The Su-27 Flanker and the MiG-29 Fulcrum, which possess true short takeoff and landing capabilities, enable them to destroy low flying targets like cruise missiles.

According to Naval Intelligence, the Su-27 Flanker will be a candidate for the fighter-interceptor role. The Flanker is a larger single-seat, twin engine fighter similar in size to the US Air Force F-15 Eagle. It is estimated to reach speeds up to Mach 2 and have an operating radius of about 715 miles. The Fulcrum and Flanker are thought to be highly maneuverable aircraft capable of being equipped with six to eight much-improved AA-10 anti-aircraft missiles at medium range (50 to 500 miles). However, the Su-27 may also be configured for ground attack missions. In addition, more than 30 MiG-29s are already operational in the Soviet air force.

In addition to its high-performance aircraft, KREMLIN will be adorned with air defense galling guns, surface-to-air missiles and possible anti-ship missiles. The Flanker and Fulcrum are thought to be highly capable of destroying ships at sea.

The Su-27 Flanker and MiG-29 Fulcrum are similar in size to the US Air Force F-15 Eagle and F-16 Fighting Falcon respectively, with a combat radius of more than 300 miles and an operational radius of about 1,000 feet.

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In addition, more than 30 MiG-29s are already operational in the Soviet air force. The Su-27 Flanker and MiG-29 Fulcrum are similar in size to the US Air Force F-15 Eagle and F-16 Fighting Falcon respectively, with a combat radius of more than 300 miles and an operational radius of about 1,000 feet.
Admiral Thomas H. Moorer, Chief of Naval Operations from 1967 to 1970, in a speech delivered on October 16, 1962, "(That's just an) operation reality which we must adjust to."

Adm Hayward agreed, "(The Soviets) are simply following a long-range strategy of expansionism."

Adm Tuttle, a Naval Aviator, who was Commander Battle Force Sixth Pacific Fleet, Vice Admiral Charles S. Kopp, and Rear Admiral Charles M. Connor, and Rear Admiral Charles H. V. Betts, all four of whom are career officers in the United States Navy, have each provided the Soviets valuable experience to apply to the development of their (large, deck) carrier aircraft. A KREMLIN class ship is more than a battle group. It is an entire military force, an umbrella for the entire Soviet Navy."
The MORESBY furnaces at the Newcastle Steel Works involves the handling and breaking up of many and varied steel articles. They range from the humble iron bedstead to surplus Army tanks, but perhaps the most ambitious job yet tackled in this respect was the demolition of HMAS MORESBY, recently successfully completed.

The MORESBY was built originally for the Royal Navy, at Barlinie, Clyde, Ltd, in 1918, being classed as HMS SILVIO, a minesweeper of the "24" Racehorse class. Transferred to the RAN in 1925, she was renamed MORESBY, and after conversion into a tugs vessel by Portmarnock Dockyard, was sent in 1927 to North Queensland and New Guinea, in that new channel, in which she previously worked as dangerous waters. Many of the charts of Pacific Ocean areas prepared by the MORESBY were used to assist the Allied forces during World War II.

Reconditioned and armed in 1939, this vessel was used as an escort ship for convoys until 1941, when she was converted back to a survey ship, and was engaged again on special chart work. In August 1945, the MORESBY entered Koepang Harbour as flagship of the Japanese. She was the last of the Japanese to surrender in Timor, and the last voyage was made under the command of Mr Harry Hughes (assistant to Mr H. J. S. Bell), Commander, and was continuing on the lower decks.

The main steering engine and telecontrol gear was transferred to the Newcastle Technical College, where it was re-conditioned and a new section was added for instructional purposes. The main engine room-augmentor was salvaged and found a use as a 'hotframe', growing bumper crops of early tomatoes.

Demolition was commenced, and the ship was cut down to about two feet above the water level remained. Much care was required to avoid fire, as there was a great deal of scrap timber and waste oil present. Flooding was also a serious risk, and led to be guarded against. All the ship's steel work was covered with a heavy layer of paint, which necessitated the use of military respirators when any breathing was carried on in enclosed spaces. Provision was also made for the supply of air under pressure to each person.

By August 14, the vessel was reduced to a hull, which was towed up to the coal barge, near the present scrap drop. There it was beached low-down, and preparations made to pull the hull, weighing approximately 420 tons, on shore for final demolition. Power was supplied by two locomotive cranes, the falls of which were fixed to the hull, and a number of watertight sections. The final demolition was completed, and the last piece of equipment, the low-ton manger-bottom wiper, was pulled through on September 26, exactly 28 weeks from the date of commencement of the task. In this period, 1000 tons of urgently needed scrap was obtained for the open hearth furnaces.
Our Maritime Defence: A Case for Jump Jets

The Navy League of Australia is seriously concerned about the state of, and projections for, the maritime defence of the nation.

In coming on power in 1982, the present government made a decision regarding the structure of our maritime defence forces that substantially reduced the country's ability to respond to a variety of possible threats. Thereafter, we could have countered this by changing the structure of our maritime defence forces. This is something that we must continue to do.

Our strategic and economic implications of the above are such as to make us seriously consider the jump jet, or VSTOL aircraft, a piece of equipment the nation could possess. If further proof is required of the value it can be appreciated by the Royal Navy as its sole fixed wing support, by the support command at 2VSTOL, for their fleet aircraft, such as those of today, in India, Spain.

In our own case, a small force of say, 10 aircraft would be a major step forward into the technology of the future, a large investment, but they would enable us to enter this very important new field of technology at modest cost.

Another gap which exists in our maritime capability is in the area where government appears anxious to concentrate its maritime effort, our coastal waters. We have a significant maritime, but our ships are mainly lightly armed and would have a very limited role. If confronted by an armed opponent they would probably be placed at significant risk. Hence, we let other small nations in the area of these units, nations like Israel, which has proved the efficacy of missile carrying ships.

Again, budgetary constraints determine that we cannot fill our patrol craft role with anything else again. It is important that we develop the expertise in the use of this technology to see if they can be adapted to this role. We must solve all the problems of communications in time of conflict. We do know that the Forrestal class ships are not capable of being adapted with missiles.

We should, therefore, take two patrol boats with missiles and ensure that our naval personnel achieve maximum exposure to the use of such equipment within our near future. Without them, we must see ships and the men who sail in them, at unacceptable risk.

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ROYAL NAVY CARRIERS, 1945-1990

by LEO MARROTT

Published by Ian Allan

Review Copy from Lionfish Books

A highly readable and informative work, it is well illustrated by a large number of spectacular photographs and a large number of line drawings. It is a comprehensive survey of the Fleet in more than 500 illustrations, including 375 photographs and 57 colour plates, and more than 1000 line drawings. The book covers the Royal Navy's long history, from the earliest days to the present. It is a must for all students of naval history, and is an excellent reference work for all students of naval weaponry of the 1939-45 period.

NAVAL WEAPONS OF WORLD WAR II

by JOHN CAMPBELL

Published by Conway Maritime Press

Review Copy from Caxton Maritime Press

Like many books published by Conway during the past decade, "Naval Weapons of World War II" is undoubtedly the ultimate reference work for all students of naval weaponry of the 1939-45 period. It is packed with a vast amount of information, including more than 400 photographs, plus 300 line drawings. Most of all, it is a valuable aid for easy reference and identification. The first chapters are devoted to the seven major weapon systems used in World War II, including anti-aircraft weapons, mines and torpedoes, rockets and missiles.

US NAVY VESSLELS, 1943

by JAMES L. SHAW

Published by Naval Institute Press

Distributed in Australia by Thomas C. Lofton, at 11 Munro Street, Past Melbourne, Vic 3207. This 250 page, $30 book is a superb collection of photographs depicting the construction and development of the US Navy's ships during World War II. It is recommended to all ship lovers as one of those "coffee table" type books.

US NAVY, 1943

by TERRY C. TREADWELL

Published by Conway Maritime Press

Review Copy from Lionfish Books

Sub-titled "The Past, Present and Future of Aircraft Carrier Submarines," this 144 page book is an excellent reference guide to the Royal Navy's aircraft carriers. It is a highly informative and well-illustrated work, and is a must for all students of naval history.

US NAVY, 1943

by HUGH W. COWIN

Published by Conway Maritime Press

Review Copy from Caxton Maritime Press

During the past few years I've had the immense pleasure of reviewing Conway's excellent "All the World's Fighting Ships" series with much interest, and I'm pleased to say that this new book is a good continuation of the earlier publications. "Combat Fleets of the World" and "And Ships Fighting" have little to worry about in this new book. As the book is arranged by ship type, it is very difficult to obtain a true idea of any one ship, except for the brief introduction preceding each armament. However, the new book is a good addition to the earlier publications.

US BATTLESHIPS

by NORMAN FRIEDMAN

Published by Arms & Armour Press

Review Copy from Caxton Link Australia Pty Ltd

This book, the fourth in a series written by Norman Friedman, has already achieved a great deal of success. "US Battleships" describes the development of the American capital ships from USS IOWA and USS NEW YORK of 1898, through to the Montana class, cancelled in the Second World War, and then up to the introduction of the Montana type. The first chapter is devoted to the battleship class, and contains a large amount of information, including many tables and detailed descriptions of the ships. The book is lavishly illustrated with black and white photographs, plus a few "hundreds" of line drawings. Overall, it is a very useful and informative book for all students of naval history.

US NAVY SUBMARINES WITH WINGS

by JOE STRACZEK

Published by Lothian Books

Review Copy from Lionfish Books

Now a companion volume, 'US Naval Submarines, 1943' appears in the bookshops, and is in the Royal Navy at the height of the cold war. The book is a comprehensive survey of the Fleet, with more than 900 illustrations, including 675 photographs and 16 line drawings. This book is illustrated from two, three and sometimes four different views to enable the weapons users to recognize the friendly, hundreds of US Navy ships from any angle.

Each class, or ship, is covered in this book, and is a great addition to the series of "All the World's Fighting Ships" series.

SHIPS OF THE PANAMA CANAL

by JAMES L. SHAW

Published by Naval Institute Press

Distributed in Australia by Thomas C. Lofton, at 11 Munro Street, Past Melbourne, Vic 3207. This 250 page, $30 book is a superb collection of photographs depicting the Panama Canal and its ships and facilities. It is recommended to all ship lovers as one of those "coffee table" type books.

AUSTRALIAN NAVY, 1943

by TERRY C. TREADWELL

Published by Conway Maritime Press

Review Copy from Caxton Maritime Press

This book, the fourth in a series, is well respected "All the World's Fighting Ships" series. It is well illustrated, and boasts five separate indexes. The author has attempted to produce a different type of reference book, and I hope he will continue to produce them. This book is a welcome addition to those already published, and is a must for all students of naval history, in particular that it deals with a new Australian topic.

Australia's Naval Expedition To The Boxer Rebellion

by BOB NICHOL

Published by Allen & Unwin Australia

In recent years, much has been written about the exploits of the various colonial naval contingents to the Sudan and South Africa. But very little has been written about the two colonial naval expeditions. The four to New Zealand and the second to China. The book is comprehensively illustrated, and the author has a good knowledge of the subject. It is an excellent reference work for all students of naval history.

The book is well written, and is a must for all students of naval history. It is well illustrated, and is a welcome addition to the series of "All the World's Fighting Ships" series.
The RN’s Aviation Training Ship – an aircraft carrier in all but name

The Belfast yard, Harland & Wolff is well into a contract to convert the container ship CONTENDER REZANT into what is euphemistically described as an Aviation Training Ship for the RN.

The contract was awarded in late 1984 and the ship, renamed RFA ARGUS, is due to be handed over in late 1986.

Although ostensibly intended to cater for a training ship for merchant shipping, the conversion of the vessel is expected to offer the RN a considerable advantage in the export market. The ship is expected to be able to offer the design as a cut-price aircraft carrier, with modifications to reduce noise levels and displacement up to about 20,000 tonnes.

Once the conversion contract for the RN has been completed, Harland & Wolf is expected to offer the design as a cut-price aircraft carrier on the export market, presumably with modifications to reduce noise levels.

Under the RN conversion contract, a 30m section of the ship is being added amidships, bringing the displacement up to about 20,000 tonnes.

The ship’s original bridge superstructure block is to be retained and a second, larger block added immediately aft of it, leaving the underwater deck clear for flight operations.

The original container ship had two funnels, one each side, near the stern. The port funnel is Pielstick diesels ducted over below the flight deck to the starboard funnel. The hangar will extend almost from one end of the ship to the other, permitting the ship to carry more aircraft than the ARK ROYAL, the third launches Carriers class. In the hangar, there will be two lifts, one half-way down the deck on the port side, the other close to the fantail on the starboard side, just aft of the superstructure.

The ship will have extensive workshops and magazines, although it is not known whether the latter will be used specifically for the training role or for wartime operations.

Welding for Harland & Wolff as the principal contractor for the conversion is being carried out by the company’s low-cost Carrier EIP system. The ship will be able to move under the contract with Harland & Wolff. It will also be fitted for, but not with, a cheap, comprehensive ESM system that is to be provided by the company’s low-cost Carrier EIP system. The ship will be fitted with the latest ESM systems, which are planned to be installed in the ship.

The ship will be fitted with the latest ESM systems, which are planned to be installed in the ship.

The Memorial itself doesn’t immediately strike most casual passers by as a naval ship. It is a rather heavy work, somewhat in the northeastern style. Detailed close examination is needed to unravel its meaning and movement of the figures, and the angles and black shapes of the ship’s bow and hangar. It conveys strongly, as the sculptor intended, the theme of “Sailors and Ships – Interaction and Interdependence”.

Conservation of the work is strongly urged as the Queen arrived. Right on time, in the true spirit of inter-service co-operation, forged so strongly in time of war, the band struck up, and the sailors marched off.

The Princess, standing before the huge bronze Memoral, welcomed Her Majesty, and spoke affectionately of the role of the Navy in our national defence. There are no coal, no water, no service co-operation, forged so strongly in time of war. The band struck up, and the sailors marched off.

The magpies and galahs winged their way back leisurely, and silence descended on the Memorial.

Some, as they left, wondered would it be yet another forgotten Memorial hidden in Anzac Parade, far from the madding crowds of our great cities, its message largely out of mind, perhaps like the defence of the nation itself, or would a spirit of nationalism and new realism in defence gradually emerge as 1988 approaches?

Maybe our enterprising and imaginative Minister of Defence will be able to do something about the plastic bunting of the veteran sailor on behalf of his highly trained and motivated, but no so well equipped successors.

For, as that arch but perceptive, Nicolai Machiaveli, once said in another context, but with a longer term in office, “When princes think more of luxury than of arms, they lose their state.”
Operating nine factories for the manufacture of munitions and other defence material, three aerospace facilities and two dockyards, the Department of Defence Support develops and manufactures a range of products for the Australian defence force.

PRODUCTS

- Aircraft
- Guided weapon systems
- Explosives
- Rocket motors
- Propellants
- Uniform clothing
- Generator sets

MUNITION FACTORIES

- Ordnance Factory, Footscray, Vic
- Ordnance Factory, Bendigo, Vic
- Ordnance Factory, Manbyrnong, Vic
- Small Arms Factory, Lithgow, NSW
- Albion Explosives Factory, Vic
- Explosives Factory, Manbyrnong, Vic
- Mulwala Explosives Factory NSW
- Munitions Filling Factory, St Marys, NSW
- Australian Government Clothing Factory, Coburg, Vic

AEROSPACE FACILITIES

- Government Aircraft Factories, Fishermen's Bend and Avalon, Vic
- Aircraft Engineering Workshop, Pooraka, SA
- Guided Weapons and Electronics Support Facility, St Marys, NSW
- DOCKYARDS
  - The Williamstown (Vic) and Garden Island (NSW) dockyards have extensive facilities for the construction and repair of naval vessels.
  - Dockyards have extensive facilities for the construction and repair of naval vessels.

The annual rate of the survey ship MONO WAI was let out to a private company because of the delays caused by the manpower shortage.

- Most of the equipment being taken out — furniture, baths, light switches — will be used on other vessels. Other equipment — mechanical, electrical and operational — will be sold for scrap.

The Defence Department has always been in the market for donations, but not recently, however, because of manpower shortages.

The committee has been told that it will have to compete with those who want her as scrap.

They gave the figure that the last tug to be scrapped, the TANARAKAI, was sold for — but not $100,000, to cover the costs of sinking her.

The OTAGO was decommissioned towards the end of 1980 and Dockyard dockyard staff began contributing her for parts for naval use. Little has been taken off recently, however, because of manpower shortages.

- The OTAGO of non-essential equipment is the last priority of a dockyard which is ignoring, but not forgotten.

Another user may yet pass before anyone decides whether she is to end up as NoSuch steel on construction sites or as an attraction for divers under the waters of the Bay of Islands. A group, once headed by the late Dr H. G. Tarbuck, wanted the Government to donate the OTAGO so that she could be used as a diving attraction.

The committee has been told that it will have to compete with those who want her as scrap. That means a fundraising effort of at least $60,000 — the figure that the last tug to be scrapped, the TANARAKAI, was sold for — but not $100,000, to cover the costs of sinking her.

Sailors have mixed emotions about the future of the OTAGO. There is an emotional attachment by some who have served on her. They would rather she were not sunk and left to rust away. They would prefer a quick end. That way, she disappears, and stays in the memory as a ship.

- Other sailors were worried that, eventually, a diver would manage to enter the sunken ship, a diver would manage to enter the sunken ship. That means a fundraising effort of at least $60,000 — the figure that the last tug to be scrapped, the TANARAKAI, was sold for — but not $100,000, to cover the costs of sinking her.

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To be of any use as a diving attraction, the OTAGO would need to be sunk so that she settles upright on her keel. Sailor's say, and safer, to send her to the scrapyard. Others, however, are against cutting her up.

The new holes would need to be made by explosive, which would need to detonate simultaneously. The new holes would need to be made by explosive, which would need to detonate simultaneously. Sailors have mixed emotions about the future of the OTAGO. On the one hand, they would prefer a quick end. That way, she disappears, and stays in the memory as a ship. On the other hand, they would rather she were not sunk and left to rust away.

One of those is the first executive officer on the OTAGO during her delivery voyage from Britain in 1960, the now retired Rear Admiral K M Saull. He is patron of the group wanting to sink her as a diving attraction.

"I would rather see it continue to be useful instead of ending up as scrap." he says. Other sailors were worried that, eventually, a diver would manage to enter the sunken ship, a diver would manage to enter the sunken ship. That means a fundraising effort of at least $60,000 — the figure that the last tug to be scrapped, the TANARAKAI, was sold for — but not $100,000, to cover the costs of sinking her.

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The Navy League had its origin in the United Kingdom in 1895. It was formed by a group of citizens who were worried about the state of the Royal Navy at the time, as they felt it was inadequately staffed to defend Britain's interests, which at that time were spread over the world.

This group went around the country and at public meetings and so on expressed their concern, and these meetings were conducted at the House of Commons using the Parliament as their forum. This is one of the advantages of the Parliamentary system, although I suspect the Parliament is not as influential as it was in those early times.

In the event, the Royal Navy was strengthened in the following years, fortunately for Britain, by the outbreak of the First World War. Also during this period — the early part of this century — the Navy League spread and branches were formed in what were then the British Dominions, and a Navy League was formed in the United States. I will return to this one later.

Although the Navy League started as what might be termed a "defence, or Navy Lobby", it soon developed into a Sea Cadet training organisation and, as far as I have been able to ascertain, the Dominion branches were involved mainly with Cadet Training right from the start.

As far as we know, the first Australian Branch of the Navy League was formed in Victoria in 1915, and later branches were formed in New South Wales (not later than 1928 and probably earlier), and in northern Tasmania. Sub-branches were formed in Geelong in 1932 and in Portland about the same time. All these branches and sub-branches were devoted to Cadet Training — mainly boys in the 14 to 18 year age group, who at the time were known as Naval Reserve Cadet (NRC) Cadets and were the Naval equivalent of the Army's School Cadets and later the Air Training Corps.

Until 1966 the Sea Cadet organisation was financed by the Navy League. In that year Naval support was sought. The Naval administration of the day quite properly said — yes, we're willing to talk but not with an organisation that has Headquarters 12,000 miles away, and that marked the beginning of an independent Australian Navy League.

By 1969 we had severed our Colonial ties. The Navy League of Australia had been formed and its Cadet Corps "recognised" by the Navy. It was not until 1982 however, by which time the Corps had been renamed the Australian Sea Cadet Corps that the Naval Defence Act was amended to allow the Navy to provide worthwhile support. (This remaining, incidentally, caused all sorts of problems for the Geelong Sea Cadet until the support took the form of uniforms and equipment and Navy also assumed responsibility for training. The Navy League and I are not talking about the Navy League of Australia "owned" the ASCC and was responsible for providing buildings, finding the instructors, and administration.)
REMEMBER THE GOOD OLD NAVY

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MTU engines are in service in Australia with the RAN's new Fremantle Class Patrol Craft and the Army's Leopard Tanks.

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CIVIL PROFILE

Sydney Harbour has for years been criss-crossed with the Urban Transit Authority's Hydrolots on the Circular Quay to Manly run. Shortly, a new 238 passenger Hydrolot goes into service on the same run and later this year five Inner Harbour Passenger Ferries commence service. These vehicles are powered by MTU engines, and are the advantages of high power to weight ratio, reliability, economy of operation, and minimum noise levels are fully exploited.

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OCTOBER, 1986

THE NAVY

The Magazine of
THE NAVY LEAGUE OF AUSTRALIA

ROYAL AUSTRALIAN NAVY
75th ANNIVERSARY 1911 to 1986
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For further information contact Bill Power, Director, Western Australian Submarine Task Force, Department of Industrial Development, 6th Floor, 170 St George's Terrace, Perth WA 6000. Telephone: (09) 327 5555. Telex: DEWVA 94681. Fax: 327 5542.

THE NAVY LEAGUE OF AUSTRALIA

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THE NAVY LEAGUE OF CANADA

The Federal President, Geoffrey Evans, has received a letter from the National President of the Navy League of Canada, Mr Fraser McRae, which reads:

"Having in 1985 been through our Canadian Navy's 75th Anniversary, may I, through you, bring the heartiest of congratulations to our Navy's 75th Anniversary. While we may be a long way apart physically, I am very close spiritually, with the same national heritage, the same naval background, and I am sure the same problems and successes.

The Navy League of Canada, indeed many of our Naval Associations and even our naval staffs, have often looked to Australia as a similar case in point. Our Sea Cadets have had a happy relationship whenever funds have allowed exchanges, such as just last year. Your Navy has also progressed towards modernisation and expanded competence, just as ours has, and rather more swiftly too!

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A 75th Anniversary, we found, gave us many opportunities to show our somewhat neglected population some naval "Pride and Commitment" through travelling tattoos, TV, radio, parades and ship visits by widespread participation in such events by our regular Navy. Reserve and Cadets I am sure your Navy will likewise take this chance to show Australians they have an RAN to be proud of — of its past, its present and its future capabilities."

GREETINGS FROM CANADA

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DEADLINE

The deadline for the January, 1987 issue of the Navy is

NOVEMBER 1, 1986

Page Two

NAVY October, 1986

Page Three
27 navies sail the seven seas with Signaal.

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Since then many reviews have been staged. In the earliest of times the Review was in fact the mobilisation of the nation's navy but nowadays is more of a display or ceremonial event. Such a ceremonial review was held in England in 1967 to celebrate the Golden Jubilee of Queen Victoria and in more recent times for the Silver Jubilee of Queen Elizabeth II in 1977.

For the Royal Australian Navy a number of Fleet Reviews have been held since its inception in 1911. In Port Philip in 1929 His Royal Highness, the Prince of Wales reviewed a massed Australian Fleet of some 30 warships and auxiliaries while in 1938 an impressive naval demonstration entitled 'Fleet Week' was staged. Later in 1961 for the Navy's Golden Jubilee. Fleet units sailed into Sydney Harbour in an impressive display of the naval tradition.

For the 75th Anniversary Naval Review, His Royal Highness Prince Philip, the Duke of Edinburgh is the Reviewing Officer for the ships of the Royal Australian and six Allied Navies.

A highlight of the day will be the two mobile lines of warships, consisting of the Flag Line (with one unit from each nation with their respective Armies and Navies) and the second line of warships with all the other nations represented.

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The Royal Australian Navy's Charles F. Adams class Guided Missile Destroyers are generally considered the Fleet's most versatile front line warships of seven nationalities between the lines of other ships, passing the destruction caused by Cyclone NAMU in the Solomon Islands. For the Naval Review, HMAS STALWART will be berthed at the Oil Wharf at the northern extremity of the Garden Island Naval Dockyard.

Fleet Auxiliary Oiler Replenishment — HMAS SUCCESS

HMAS SUCCESS entered service with the Royal Australian Navy in April, 1986. A fleet underway replenishment ship, she was built in Australia by Cockatoo Dockyard Pty Ltd of Sydney. She is both the largest ship built in Australia for the Royal Australian Navy and also the largest ship ever built in the Port of Sydney.

The ship's role is to replenish Fleet units at sea by the underway transfer of liquid fuels, distilled water, dry and frozen victuals, ammunition, and spare parts and stores.

HMAS SUCCESS enables Fleet units to operate with a greater degree of independence from shore support than had previously been possible.

During the Naval Review, HMAS SUCCESS will be located at the dolphins at Kirribilli Point, adjacent to Admiralty House and Kirribilli House.

Guided Missile Destroyers — HMA Ships PERTH and HOBART

The Royal Australian Navy's Charles F. Adams class Guided Missile Destroyers are generally considered the Fleet's most versatile front line units. Two of these American built ships are part of the Naval Review, in addition to their extensive deployments in Vietnam during the 1960s and early 1970s the DDGs are involved in all major Royal Australian Navy exercises as well as deployments to South East Asia, the Pacific and Indian Oceans.

To further improve their effectiveness, the three DDGs, beginning with BRISBANE (modernising at present at Garden Island), have begun an extensive modernisation/refit which will see them fitted with new sensors, improved computer, gun and missile systems, plus new mess decks and cabin facilities.

With their high technology and proud history the Royal Australian Navy's DDGs will continue to provide the front line of the nation's naval defences through to the turn of the century.

For the Naval Review HMAS PERTH will lead a group of seven warships of seven nationalities between the lines of other ships, passing the destruction caused by Cyclone NAMU in the Solomon Islands. For the Naval Review HMAS PERTH will be covered by HMAS STALWART.

Guided Missile Frigates — HMA Ships DARWIN, SYDNEY, ADELAIDE and CANBERRA

The FFG is a long range escort ship designed to satisfy area air interdiction roles.
Like the guided-missile destroyers, the FFGs are armed with both Standard and Harpoon anti-surface missiles. For anti-submarine warfare, the FFGs will embark two Sikorsky S-70B helicopters to provide long-range cover for the Fleet. The FFGs are the backbone of the Royal Australian Navy. They are designed to complement the other Fleet units, to protect Australia's sea lanes, merchant and military convoys and to contribute to effective naval task force operations.

Destroyer Escorts — HMA Ships, DERMVENT, PARRAMATTA and TORRENS

Three of the Royal Australian Navy's four River Class destroyer escorts will be present at the Naval Review.

Designed primarily as anti-submarine ships, the destroyer escorts were commissioned into the Fleet between 1961 and 1971. Like the DDGs, the River Class are armed with the Australian-designed Oberon anti-submarine missile system and in recent years have been fitted with the Maluske Sonar System. also developed in Australia.

From 1977 to 1985, HMA Ships PARRAMATTA, STUART and DERMVENT received half-life modernisations. Since then, the two younger ships, HMAS SWAN and HMAS TORRENS, have also been extensively refitted.

For self defence each ship is armed with the Seacat missile system and a twin 4.5 inch gun, which can be used against an air or surface target. Each ship is also fitted with two sets of torpedo tubes.

Two of the DEL, HMAS STUART and HMAS SWAN are now permanently homeported to HMAS STIRLING in Western Australia as part of the two ocean navy concept. The former was the first ever RAN Fleet unit to be based since the creation of the RAN in 1911.

The River Class DEs are expected to be replaced in the active Fleet from the early to mid-1990s. Initially by two new FFGs now being built in Victoria and then by a new generation of frigates.

Submarines — HMA Submarines OTAMA and OVENS

Six Oberon class submarines (HMA Submarines OXLEY, OTWAY, OVENS, ORION, ORIAN and OTAMA) were commissioned into the Royal Australian Navy between 1967 and 1978 and are operated from HMAS PLATYPUS in Sydney Harbour. The boats' main roles are to provide anti-surface and anti-submarine defence for the Fleet. In 1987 HMAS STIRLING in Western Australia will also become the home port for an Oberon class submarine.

For the Naval Review HMAS OTAMA will be located near the mouth of Blackheath Bay between Garden Island and Clark Island, and HMAS OVENS near Kurnell Point. Each ship may also be assigned additional roles in support of the World War II commemoration.

Fleet Training Ship — HMAS JERVIS BAY

Originally commissioned in 1977, HMAS JERVIS BAY is a high tech ship designed for maximum performance and operations with minimum manpower. The ships also introduced to the Fleet in the 1970s. HMAS JERVIS BAY was designed to become an effective response to HMAS JERVIS BAY which is a Royal Australian Navy training ship. It is capable of taking on and discharging her own cargo in any weather conditions.

During her five years in commission the ship has operated around the world, from the tropics to the South Pole, and she is one of the few ships capable of carrying out operations in remote areas.

Patrol Boats — HMA Ships GEELONG, DUBBO, WOLLONGONG and ADVANCE

Three Fremantle and one Attack Class patrol boats are to participate in the Naval Review. HMAS DUBBO and WOLLONGONG (Fremantle Class) will sail at 0900 as part of the ceremonial review. They are the first of the new generation of patrol boats. The lead boat, HMAS FREMANTLE, was constructed in the UK and now serves as Flag Officer in HMAS COOK.

The most versatile ship in the Fleet, HMAS TOBRUK is an amphibious heavy lift ship designed for joint RAN/Army operations. Originally commissioned in 1980, HMAS TOBRUK is primarily responsible for military as well as civilian oceanographic and hydrographic research.

Oceanographic Research Ship — HMAS COOK

Fulfilling the role of Reviewing Vessel for HRH Prince Philip, the Duke of Edinburgh, HMAS COOK will review over 40 warships and auxiliaries during the period from 1200 to 1330.

Supporting the rear of the second column will be the diving tender (DTV 1009) SEAL, and the torpedo recovery vessel (TRV 902) TREVELYAN. The partol boat HMAS GEELONG will act as escort for the Reviewing Office in HMAS COOK.

Amphibious Heavy Lift Ship — HMAS TOBRUK

Originally commissioned in 1980, HMAS COOK is primarily responsible for military as well as civilian oceanographic and hydrographic research.

Hydrographic Survey Ship — HMAS FLINDERS

A rare visit to Sydney, especially for a ship of the Royal Australian Navy, HMAS FLINDERS is home ported to Cairns in northern Queensland. HMAS FLINDERS will lead the second column of review ships past Bradleys Head at 1230.

The lead boat, HMAS FREMANTLE, was constructed in the UK and now serves as Flag Officer in HMAS COOK.
Eight Westland Sea Kings are the principle anti-submarine helicopters and have operated from various ships including STALMART and TOBRUK. For FFG operations, sixteen Sea Kings are due to begin flying from 1988 with a maximum of two embarked in each frigate.

Light utility search and rescue, survey, support and training is performed by an Aerospatiale Souquet helicopter. Four Bell Rovers are used for communications and survey work. The Bell Loupines and Westland Wessex helicopters satisfy utility flying as well as search and rescue responsibilities.

Two H54B electronic warfare training aircraft are flown by the Fleet Air Arm from HMAS Albatross. Each H54B can be reconfigured for the VIP or transport role.

During the Naval Review, HMS ILLUSTRIOUS and her consorts will be at buoy or anchored in the harbour. HMS ILLUSTRIOUS laying off Crowe Point immediately in front of the battleship USS MISSOURI and command ship USS BLUE RIDGE. HMS BEAVER will follow HMS PERTH, the second ship in the Moving Flag Line Review.

Two of the Royal New Zealand Navy's four operational frigates will participate in the Naval Review, these being HMNZS Southland and Canterbury.

Like all of New Zealand's major Naval units both frigates are regular visitors to Sydney for training, operational and goodwill visits and often remain in service until 1990-1993.

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During the Naval Review, HMS ILLUSTRIOUS and her consorts will be at buoy or anchored in the harbour. HMS ILLUSTRIOUS laying off Crowe Point immediately in front of the battleship USS MISSOURI and command ship USS BLUE RIDGE. HMS BEAVER will follow HMS PERTH, the second ship in the Moving Flag Line Review.

Two of the Royal New Zealand Navy's four operational frigates will participate in the Naval Review, these being HMNZS Southland and Canterbury.

Like all of New Zealand's major Naval units both frigates are regular visitors to Sydney for training, operational and goodwill visits and often remain in service until 1990-1993.

Eight Westland Sea Kings are the principle anti-submarine helicopters and have operated from various ships including STALMART and TOBRUK. For FFG operations, sixteen Sea Kings are due to begin flying from 1988 with a maximum of two embarked in each frigate.

Light utility search and rescue, survey, support and training is performed by an Aerospatiale Souquet helicopter. Four Bell Rovers are used for communications and survey work. The Bell Loupines and Westland Wessex helicopters satisfy utility flying as well as search and rescue responsibilities.

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PROGRAMME OF EVENTS
RAN 75th ANNIVERSARY NAVAL ASSEMBLY
AND REVIEW — OVERALL ACTIVITIES

DATE
MONDAY, SEPTEMBER 29
SEPTEMBER 29-OCTOBER 7
TUESDAY, SEPTEMBER 30
WEDNESDAY, OCTOBER 1
THURSDAY, OCTOBER 2
FRIDAY, OCTOBER 3
SATURDAY, OCTOBER 4
SUNDAY, OCTOBER 5
MONDAY
TUESDAY, OCTOBER 7
OCTOBER 7-13

TIME
AM
AM
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AM
AM
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PM
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PM
AM/PM
AM
PM
PM
PM

EVENT
27 Major Warships enter Sydney Harbour and Flypast
Royal Australian Navy Fleet Reception in HMAS STALWART
International Sailors’ Dance at the University of NSW Roundhouse
Sporting programme of representative fixtures/challenges between Fleet units and local sporting organisations
Tours of Sydney and New South Wales by visiting personnel
Organised tours of ships
Royal Navy Reception onboard RN Flagship
USS MISSOURI arrives in Sydney
United States Navy Reception
International Sailors’ Dance, Galaxy Room, Centrepoint Tower
Church Service in Garden Island Chapel
Combined Revese March through Sydney, Governor-General takes salute
Lord Mayor’s Reception — Town Hall
PM Royal Navy Reception onboard RN Flagship
USS MISSOURI arrives in Sydney
United States Navy Reception
International Sailors’ Dance, Galaxy Room, Centrepoint Tower
NSW State Government Reception at Sydney Opera House
Review (at anchor) HMAS COOK
Review (at anchor) HMAS COOK
Review (at anchor) HMAS COOK
Review (at anchor) HMAS COOK
RAN 75th Anniversary Commemorative Service
Royal Reception in HMAS STALWART
Royal Dinner at Tresco
Review (at anchor) HMAS COOK
Review (at anchor) HMAS COOK
Public Holiday in New South Wales
Sydney at Home for Visiting Sailors
NAS NOWRA Open Day Air Show
USS MISSOURI sails
Ships open to Visitors
Many other sporting/social events
Organised tours of remaining ships continue

TIME EVENT
1830-2000 Royal Australian Navy Fleet Reception in HMAS STALWART
2000-0100 International Sailors’ Dance at the University of NSW Roundhouse
0930-1100 CNS and dnlmgithed guetit emhark in HMAS COOK at Pier On
1130 HRH Prince Philip embark in HMAS COOK at Pier On
1145 HMAS COOK sails
No hands on all ships to be taffers in for
1200 HMAS COOK, in position. 21-gun salute
1230 HMAS COOK passes Prince Philip: Review by Prince Philip
1245 Prince Philip boards HMAS COOK
1255 HMAS COOK arrives in position at entrance to Sydney Cove
1300 RAN Headquarters, operation and visitors’ tour
1330 HMAS COOK enters to Walsh Bay, NSW
1335 HMAS COOK opens to visitors
1345 HMAS COOK sails
1400 CHRIST the Lamp, HMAS COOK
1445 HMAS COOK sails
1500 HMAS COOK enters to Walsh Bay, NSW
1530 HMAS COOK
A-4 USS MISSOURI leaves Sydney Cove
1545 HMAS COOK
A-9 USS MISSOURI leaves Sydney Cove
THE FLEET ARRIVAL OCTOBER 4, 1913
Some Contemporary Reports

THE VOYAGE OUT

HOW THE SHIP CAME HOME

INCIDENTS ON THE WAY

July 21, 1913, must ever be a memorable date in Australian history, for on that day HMAS Australia, the first locally-owned Dominion flagship in the Empire, with the first Dominion Admiral in Command of her, swung out from Portsmouth Harbour for her Australian home.

21st of July: A day of glorious memory. On that day and near the very spot where the Australia put out from — on the 21st of July, 1588 — the Royal Navy date in Australian history. For on that day the Australia became the first Dominion flagship in the Empire, with the first Dominion Admiral in Command of her, swinging out from Portsmouth Harbour for her Australian home.

The first RAN Fleet Unit arrived.

The Australia was a magnificent ship, and her arrival was hailed with delight by the crowds ashore. The ships and men were greeted in unmistakable fashion. A long line of eucalyptus trees was planted by the new arrivals, and it is now a beauty spot for the citizens of Sydney.

By arrangement the flagship picked up the Victory — the old ship of many memories. The Australia and the Sydney were officially welcomed by Sir George Patey, KCMG, in the name of the Imperial Government. Sir George spoke of the Australia and the Sydney as being the first vessels to be built in Australia for the Royal Navy, and he expressed the hope that they would be a credit to the country.

Arrival at Capetown.

The Australia and the Sydney entered the roadstead of Table Bay. The bay was a magnificent sight, with the mountains in the background and the sea sparkling in the sunlight. The Australia and the Sydney were greeted with a resounding cheer by the crowd ashore.

At Simons Town the warships parted company, the Australia proceeding to Durban — the home of the Royal Navy in the South African Union. The Sydney went on to Port Elizabeth, and the three vessels arrived at Cape Town on the same day.

CROWDS ASHORE AND AFLOAT

The vessels left for Sydney on the same day, and arrived at Sydney Harbour on October 4th. The Australian ships were greeted with a resounding cheer by the crowd ashore, and the Australian men-o'-war were entertained as if they were on a British battleship.

Our ships come in.

BRITANNIA: Congratulations, daughter! It is a proud day for both of us.

A seaman on the Sydney died on the coast of Spain on July 28, and was buried at sea; and whilst the Australia was at Spithead, a petty-officer was killed, owing to the breaking of a ditch, and was buried with honours on the island.

FORTY-SEVEN PER CENT AUSTRALIANS

Forty-seven per cent of the men on the ships are Australians. The fact was commented on by the High Commissioner, Sir George Reid, when he visited the flagship at Portsmouth.

“Told you that I could see no difference.” Sir George added, “I can see no difference.”

The ships were welcomed by the people of the city, and were greeted with cheers and applause. The Australian ships were a great source of pride to the people of the city, and they were welcomed with open arms.

To the Australians in South Africa, indeed, the visit of the Commonwealth battleships was a source of great delight. The ships were greeted with a resounding cheer by the crowd ashore, and the Australian men-o'-war were entertained as if they were on a British battleship.
The breezes blow fresher than on deck. Along windshafts to every point, and at times...

The ship illuminations during the evening attracted many thousands. Government House, where dancing was kept up till the small hours of the morning.

ON THE FLAGSHIP
CROWDS OF VISITORS OUT OF REGULAR NAVY CUSTOMS

Thousands of people explored the flagship yesterday. Though all the ships were open for inspection, a large crowd seemed to have taken a fancy to the Adelaide, and many seemed to have wanted to see a few stars. A few went over the Sydney, but the Melbourne and the other ships had hardly any visitors.

Everywhere about the quarters of the men. In the one case there were a lot of little officers and its midshipmen, and in the other, men and women strolled and clambered.

They climbed every ladder that went upward, and there were a large number of little officers and its midshipmen, and in the other, men and women strolled and clambered.

They climbed every ladder that went upward, and there were a large number of little officers and its midshipmen, and in the other, men and women strolled and clambered.

In the demens chair. HMAS AUSTRALIA

The ship is not a very large affair, but it is well provided for the comfort of the men aboard. There are 3000 letters and newspapers for those on the ship, while the remainder of the mail is forwarded by means of a cable from Man-...
75 YEARS OF HISTORY
by LIEUTENANT JOE STRACEK, RAN

1. In May 1914, King George V signed a pro-
clamation establishing the Royal Australian
Navy on 1 July 1914.
2. The Royal Australian Navy's fleet enters
Sydney Harbour for the first time on 10
April 1915.
3. On September 11, 1914 members of the
Australian Naval and Military Expeditionary
Force commenced operations to occupy Cey-
on and New Guinea.
4. The Australian submarine AE 1 was
reported lost with all hands on September 14,
1914 off Rarotonga.
5. On July 21, 1915, HMAS MELBOURNE
lands a party on Fanning Island to help protect
the undersea cable station located there.
6. A large troop convoy carrying Australian
and New Zealand troops departed Albany,
Western Australia in November 1914; the con-
voy was escorted by Australian cruisers and
ships of the Imperial Japanese Navy.
7. The light cruiser HMAS SYDNEY engaged and
destroyed the German light cruiser SMS EMDEN
off the Cocos Islands on engaged and
destroyed the German light
cruiser SMS EMDEN off the Cocos Islands on
9 July 1914.
8. HMAS SYDNEY with the Italian cruisers
BARTOLOMEO COLLEGI and GIOVANNI DELLE BANDE NERE, SYDNEY
sailed with the latter and docked in Genoa.
9. In July 1940, the heavy cruiser HMAS
AUSTRALIA took part in an abortive British
operation against French warships based at
Dakar.
10. During August 1940, HMAS HOBART
helped in the evacuation of British forces from
Bengal.
11. HMAS ADELAIDE helped prevent a
possible coup by Vichy French occupants in
New Caledonia during September 1940.
12. Italian warships participated in the
battle of Matapan.
13. In April 1941, Australian cruisers and
destroyers participated in the evacuation of
Crete.
14. HMAS VARRA was in action against
German submarines during the North Pacific
Fleet's passage.
15. The cruiser HMAS SYDNEY carried out
patrols off the South American coast.
16. On April 25, 1943, as Australian troops
were preparing to land at Calcutta, the Aus-
17. During the early part of 1943 HMAS
PCY carried out patrols in the Bay of Bengal
based on the Andaman Islands.
18. Australian cruisers and submarines
patrolled the area from the Caribbean to Nova
Scotia.
19. In December 1914, HMAS PIONEER
underwent a refit at Simon's Town Naval Base.
20. During November 1918, Australian de-
21. HMAS SYDNEY and HMAS MEL
22. In December 1914, HMAS SYDNEY
23. During the 1944 survey season, HMAS
24. In October 1917, the cruiser HMAS
25. During the period 5 to 11 May, 1942,
26. Japanese midget submarines attacked
27. During the period 31 May to 1 June,
28. The Mactan Cruiser and Destroyer
29. On the 28 June, 1940, HMAS SYDNEY
30. Australian ships formed part of the
31. In May 1939, the cruiser HMAS
32. In July 1940, the heavy cruiser HMAS
33. During August 1940, HMAS HOBART
34. Italian warships provided support for
35. Italian warships provided support for
36. In 1941, the Australian Navy partici-
37. From June to August 1942, Australian
38. During September 1943, members of
39. The Royal Australian Navy participated in
40. During the period 5 to 11 May, 1942,
41. On July 15, 1943, HMAS NESTOR was
42. On the 19 November, 1941, the cruiser
43. During April 1941, Australian cruisers
44. During the period 5 to 11 May, 1942,
45. In May 1943, the Royal Australian Navy
46. During September 1942, the Australian
47. From May to June 1943, Australian
48. The heavy cruiser HMAS CANBERRA
49. During September 1943, members of
50. The heavy cruiser HMAS CANBERRA
51. Men of the Royal Australian Navy's
52. In September 1942, whilst taking supplies to
53. In July 1941, HMAS MELBOURNE
54. During September 1943, members of
55. The cruiser HMAS SYDNEY participated
56. During May 1943, Australian ships parti-
57. During September 1942, the Australian
58. In September 1942, whilst taking supplies to
59. On 22 September, 1943, Lieutenant
60. In May 1943, whilst trying to
61. Units of the Royal Australian Navy parti-
62. During the period 5 to 11 May, 1942,
63. On 22 September, 1943, Lieutenant
64. In April 1943, the Australian Navy par-
65. The cruiser HMAS CANBERRA
66. Australian destroyers supported the Brit-

Page Twenty
NAVY
October 1988
During the period 1946 to 1947 ships of the Royal Australian Navy were involved in intense mine-sweeping operations around the Australian coast clearing war-time fields. HMAS WARRAMUNGOO was sunk off the north Queensland coast during these operations on 13 September 1947.

80. In July 1950 HMAS AUSTRALIA made an emergency dash to Heard Island to pick up and transport a critically ill doctor to Fremantle.

81. The Royal Australian Navy and Clearance Divers commenced operating in guided missile destroyers was despatched to provide assistance during salvage operations in February 1974.

82. Helicopters of the Royal Australian Navy Fleet Air Arm rendered invaluable assistance during the flood in Mackay and the Hunter Valley in February 1955.

83. The Royal Australian Navy's involvement in the Vietnam War commenced with the despatch of HMAS SYDNEY in 1965. One year later the first of the Royal Australian Navy's guided missile destroyers was despatched to Vietnam.

84. Royal Australian Navy helicopter pilots and Clearance Divers commenced operating in support of Allied forces in Vietnam during the late 1960s.

85. Royal Australian Navy medium to large size air and sea units were based in Hong Kong.

86. Royal Australian Navy Clearance Divers provide assistance during salvage operations after an earthquake hit Bali in July 1976.

87. Sailors from HMAS PARRAMATTA rendered assistance during relief operations after an earthquake hit Bali in July 1976.

88. Since the mid 1970s patrol boats of the Royal Australian Navy have been carrying out regular security patrols around the Bass Strait.

89. During the 1970s and 1980s members of the Royal Australian Navy served with peace keeping forces in the Middle East.

90. Throughout the early 1980s Australian coast clearing wartime fields HMAS AUSTRALIA cleared debris away from inlet tubes on the Rewa River.

91. During the period 1946 to 1947 ships of the Royal Australian Navy were involved in intense mine-sweeping operations around the Australian coast clearing war-time fields. HMAS WARRAMUNGOO was sunk off the north Queensland coast during these operations on 13 September 1947.

92. A Royal Australian Navy Task Group led by HMAS STALWART visited Shanghai in September 1994. This was the first visit to China by an RAN Task Group.

93. HMAS STALWART takes relief supplies to Macquarie Island after regular supply ship became stuck in ice in December 1985.

94. Three guided missile destroyers were built for the Royal Australian Navy by the Defoe Shipbuilding Company of Buy City, Michigan from 1963 to 1967.

95. Ships of the Royal Australian Navy regularly exercise with American warships based out of Pearl Harbour.

96. Ships of the Royal Australian Navy have been regular visitors to Hong Kong since the Great War. Occasionally, Australian Warships were based in Hong Kong.

97. Four guided missile destroyers were built for the Royal Australian Navy by Todd Shipyards at Seattle.

98. Ships of the Royal Australian Navy are responsible for the charting of waters around Australia.

99. An Australian Task Group provides assistance to the Solomon after the devastation rendered by Cyclone Namu in May 1996.

100. An international fleet review was held in Sydney on 4 October, 1995 to celebrate the Royal Australian Navy's 75th Anniversary.

101. Sailors from HMAS PARRAMATTA rendered assistance during relief operations after an earthquake hit Bali in July 1976.

102. Sailors from HMAS PARRAMATTA rendered assistance during relief operations after an earthquake hit Bali in July 1976.
PARTICIPATING SHIPS — RAN
SOME FACTS AND FIGURES 1911 to 1986

HMAS ADELAIDE (I) during the Second World War.

DUBBO CORVETTE 1942
First ship of the Royal Australian Navy to be armed with guided missiles.

PERTH GUIDED MISSILE DESTROYER 1965
First ship of the Royal Australian Navy to wear the white ensign at sea on March 1, 1967.

HMAS SYDNEY (I) in action.

HMAS PARRAMATTA (I) on trials.

HMAS ADELAIDE (I) during her life.

HMAS DERWENT early in her life.

October, 1986  NAVY  Page Twenty-five

Page Twenty-four  NAVY  October, 1986
HMAS PARRAMATTA Silver Jubilee
1961-1986
[All photos courtesy JOHN JEREMY, Cockatoo Island Pty Ltd]

On July 4, 1986 HMAS PARRAMATTA celebrated her Silver Jubilee — 25 years service preserving the peace.

The keel of the third warship to bear the name of the cradle city of Australia was laid down at Vickers Cockatoo Island Dockyard on January 13, 1957.

PARRAMATTA III was launched on January 31, 1959 by Lady Dowling, wife of the then CNS, VADM R. Dowling.

PARRAMATTA was commissioned into the RAN under the command of CMDR G.R. Griffiths RAN on July 4, 1961.

Twenty-five years later the ship has been instrumental in creating one-third of the history of the RAN.

PARRAMATTA represents the RAN of the 60s and 70s and her story illustrates the meaning of Sea Power.

In the mid 1950s the Australian Liberal Government, in reflection of the forward defence principle of Australian strategic policy and in recognition of the rapid development of a serious Soviet submarine threat, announced the acquisition of a new warship class to be built in Australia — anti-submarine frigates.

PARRAMATTA, the first of six ships of the class, was constructed to the British 'Type 12' design modified for Australian conditions.

Building time was 4½ years and the cost seven million pounds.

During the 1960s PARRAMATTA ranked among the world's most modern anti-submarine escorts.

This is reflected in the ship's motto 'Strike Deep'.

Between 1962 and 1977, the ship's pendant number — initially F05, later DE46 — was a familiar sight in South East Asian waters showing the flag on deployments and in SEATO exercises.

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On trials.

The ship decommissioned on May 10, 1977, re-commissioning on August 26, 1981 after undergoing extensive overhaul at Williamstown Naval Dockyard. During the ensuing four years PARRAMATTA was again kept busy providing an RAN presence overseas. Despite modernisation, PARRAMATTA now has limitations of age and design. The ship is manpower-intensive through lack of automated systems. Fighting co-ordination with younger NCDS fitted units is difficult and the ship is not air capable.

Notwithstanding such drawbacks PARRAMATTA continues to render valuable service to the RAN. Fitted with the advanced Australian sonar MULLOKA in 1985, the ship still performs a vital ASW role and acquits herself well in exercises.

Ship and equipment shortcomings are largely overcome by the professionalism and commitment of all onboard. Self-reliance is the cornerstone of pride and competitive spirit.

The quality of Ship's Company over 25 years augurs well for the future. The story of HMAS PARRAMATTA does not end with her Silver Jubilee. The ship will continue to serve Australia until the early 1990s. There will almost certainly be a fourth PARRAMATTA to carry on a proud tradition.

Her role will be identical to that of the first three PARRAMATTAS — to preserve the peace.

In June of this year the break even point in the Calendar Project was reached and a sigh of relief expressed by the organisers. Any income from that point will be directed towards support for Naval Reserve Cadets and other maritime projects. The surplus will not be the significant sum aimed for, despite the strenuous efforts of the Calendar Committee over a period of 9 months.

It is still hoped to increase the surplus by the sale of the revised product, that is sets of 12 excellent prints of ships of the RAN through the ages. Voyager (I). Premantura, Tingira, Sydney (I), Perth (II), Melbourne (II), Kanimbla, Bathurst, Oberon, Australia (I), and Canberra (II) together with Wings Over the Navy. The prints are now trimmed and ready for mounting and are available for a mere $50 per set (plus postage if applicable), or they can be obtained from your State Navy League Secretary.

I take this opportunity of thanking those people in Navy, Navy League and others who have assisted in the project. My thanks particularly to Commander Jim Speed and his wife Katalin who gave insistingly of their time towards the completion of a project of some magnitude; the product cost alone was approximately $52,000.

JOHN BIRD
FEDERAL VICE-PRESIDENT
NAVY LEAGUE OF AUSTRALIA

Flying the Red Ensign.
Protection that can cruise for 7000 km at 20 knots and then manoeuvre at much higher speeds in a combat situation.

The Navy's new FFG Guided Missile Frigates weigh in at a very slim 3,600 tonnes. This process is being carried out by Bunge Industrial Steel Pty. Ltd. Through this and hundreds of other alliances, BHP is helping forge a secure future for Australia.

BHP Steel Plate continues as the strength behind Australia's continued growth in industry and commerce.

BHP congratulates the Royal Australian Navy on its 75 years of achievement.
The Iowa class battleship can operate offen-

sively with carrier battle groups in areas of

higher threat, adding a new dimension of

survivability and offensive capability. With

appropriate escort, she can serve as the

predominant unit of a battle group in areas of

lesser threat. This serves to extend the

reach of the Navy’s battle groups.

In addition, the 58,000-ton dreadnought can

operate effectively in support of amphibious

operations, providing self-defense against

surface and air threats and providing naval

guider support and strike strike. Missouri's

aviation facilities include an opera-

ting station for a helicopter and stowage

space for three additional units. The battleship

can refuel helicopters from its aviation fuel

tank with an aviation refueling station for a

helicopter and stowage space.

Missouri can carry two types of mis-

siles. Eight armoured box launchers for the

Tomahawk cruise missiles have been

installed giving it the capacity to launch 32 of

these land attack or anti-ship missiles. There

are also four quad-launchers for 46 anti-

ship Harpoon missiles.

When Missouri was first commissioned in

1944, she had a crew of 1,344 officers and 2,400

enlisted personnel. Today the crew number 64 officers

and 1,500 enlisted with an additional two offic-

ers and 38 enlisted personnel from the US

Marine Corps.

The battleship Missouri became the center

of the world's attention when the deadline for

the surrender of Japan was announced from her

deck on September 2, 1945.

When the Foreign Minister of Japan stepped

forward to affix his signature to the Instrument

of Surrender, the fighting between Japan and

the Allied Nations was formally ended.

The battleship was on the deck of the 'Mighty Mo' in Tokyo Bay. Never before in all the history of the US Navy had such an event taken place aboard a ship of war.

The ceremony was carried around the world

via radio. Top newspaper correspondents and

photographers were there to carry news and

pictures of the event around the globe.

Tomahawk cruise missiles have been

deployed at the actual ceremony aboard Mis-

souri. It was early evening back home in the

States. The radio was suddenly the focal point

of Surrender, the fighting between Japan and

the Allied Nations. The Missouri's deck into an altar of

Serving the navies of the world.

Since 1857.
The China Connection

Calling all crew members of the "China Fleet" of World War II. Report to a national reunion in Adelaide on November 8.

That's the message being spread by two former crew members, Kevin "Fletch" Fletcher and Alan "Doc" Proleta. They have planned a national reunion for all crew members who worked in the China Fleet, but are having trouble contacting former comrades.

The China Fleet consisted of four ships - PING WO, WHANGPU, Po Yang and Yunnan which were borrowed by the Royal Australian Navy from the Chinese when World War II broke out.

Unfortunately the ugly looking vessels did not encounter violent action throughout the war. The crews sailed about New Guinea and the South Pacific, mooring wherever depots had to be built, installations repaired, or ships assisted. The following article describes the ships of the China Fleet.

HMAS POYANG

Type: Armament Store Issuing Ship

Tonnage (gross): 2,812 tons

Length: 296 feet, 10 inches

Breadth: 46 feet

Depth: 17 feet, 6 inches

Draught: 13 feet, 6 inches

Armament: 11 knots (maximum)

Speed: 11 knots (economical)

Machinery: 5 Cylinder engine. 425 NHP

Fuel: Oil

Displacement: 3,105 tons

Refrigerating capacity: 960 cubic feet

Built: 1922

Owners: China Navigation Company Limited

Builders: Scott Shipbuilding and Engineering Company, Greenock, Scotland

Tonnage (net): 2,353 tons

Speed: 11 knots (economical)

Type: Repair Ship

Displacement: 3,105 tons

Built: 1922

Armament: 1 11-inch gun

Owners: Indo-China Steam Navigation Co

HMAS PING WO

WHANGPU

WHANGPU was requisitioned by the Admiralty on 13 December, 1941, and was in Singapore being converted to a submarine depot ship when the imminent fall of Singapore forced her to leave. She left Singapore on 2nd February, 1942, and proceeded to Fremantle via Port Moresby and Beqa Island on 1st March, 1942.

In Fremantle WHANGPU was used as an accommodation ship for Dutch submarine and mine-warship crews until commissioned in the RAN on 1st October, 1943. She then sailed to Melbourne for fitting out as a mobile repair ship.

On completion of fitting out WHANGPU proceeded to New Guinea arriving on 9th May, 1944. She assisted in the conversion of the RAN base at Madang as well as carrying out her duties as repair ship.

Early in 1945 she was converted to a Naval Stores Issuing Ship and proceeded to Manus to carry out these duties.

She proceeded to Hong Kong in February, 1946, and after de-storing, was paid off to the Ministry of War Transport on 22nd April, 1946.

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**COMBAT FLEETS OF THE WORLD 1986-87**

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**REVIEW**

**AUSTRA.'S NAVY PAST, PRESENT AND FUTURE**

Published by CHILD & HENRY

The RAN celebrates its 75th Anniversary this year. In celebration of this great event CHILD & HENRY have put together an all-embracing history of Australia's sea defence.

No naval history is complete without reference to the beginning and this is covered in a study of the Royal Navy and the development of the colonial navies.

The role of both World Wars as well as Korea and Vietnam is dealt with in a concise list of its losses. The book includes a complete Fleet List of warships and major support vessels since 1911 and introduces us to the personalities, past and present, who helped form the Navy into the modern force it is today. Other chapters are devoted to the Fleet Air Arm. The price of Admiralty, other anniversaries and the Navy of the future is illustrated with over 150 black and white photographs. The informative book provides a greater insight into the Navy's role on the sea through a thorough understanding of its first seventy-five years. As only $12.95 it will form a valuable addition to your library. Thoroughly recommended.

**AUSTRALIA'S ARMED FORCES OF THE EIGHTIES**

Published by CHILD & HENRY

Edited by Ross Callet

Australia's Armed Forces of the Eighties is a comprehensive, well illustrated book giving details of the major equipments used by Australia's Armed Forces. The book is organised into three separate sections, one dealing with each of the services. Each of the sections starts with an introduction giving brief details on the organisation and major units of each service.

Unfortunately, in the case of the Royal Australian Navy and Royal Australian Air Force, there is no information given about the various types of missiles and bombs which are in service use. This does detract a little from what is otherwise an excellent indepth coverage of combat equipment. The information contained in each of the sections is supported by current manpower statistics and details as to badges of rank within the Armed Forces.

Each section is illustrated by a large number of high quality black and white photographs. These photographs have obviously been selected to best illustrate an individual weapon or to highlight some of the capabilities of the weapons and equipment.

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Not only are the world's major navies listed but so are the ships of Australia's Armed Forces. The book contains over 750 pages of detailed technical information. Because of the size of the publication it has not been possible to show all the ships in this class. The publication also contains information on Australia's Armed Forces and is an excellent reference work useful not only to the professional but also to the hobbyist and the enthusiast and represents good value for money.
The Royal Australian Navy 75th Anniversary Tankard & Plate

75th Anniversary 1911-1986

A LIMITED EDITION TRIBUTE IN SILVER—POLISHED PEWTER
TO A GREAT FIGHTING SERVICE

The Royal Australian Navy, since its establishment in 1911, has been an integral part of the military history of Australia. This page from a magazine or publication celebrates the 75th anniversary of the Navy, commemorating its service and contributions.

The page features an advertisement for a limited edition tribute to the Navy, presented in silver-polished pewter. The tribute includes a tankard and a plate, each engraved with the Navy's colors and insignia, reflecting the honor and tradition associated with the service.

The text provides details about the tribute, including its design, materials, and the significance of the anniversary. It mentions the tribute's limited edition status and the special nature of the collectors' item, emphasizing its value and rarity.

The Royal Australian Navy has a rich history, marked by significant events and achievements. This advertisement serves as a reminder of the Navy's role in Australia's history and its ongoing commitment to service and excellence.

The page also contains various visual elements, such as a map, a diagram, and text that highlight the Navy's contributions and milestones. The use of color and design underscores the importance of the anniversary and the tribute it represents.

In summary, this page is a tribute to the Royal Australian Navy's 75th anniversary, showcasing a limited edition item that celebrates the service's legacy and contributions. The advertisement is a testament to the Navy's enduring spirit and the respect it commands in the nation it serves.
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SOME PAGES MAY CONTAIN POOR PRINT, TIGHT BINDING, FLAWS AND OTHER DEFECTS WHICH APPEAR ON THE FILM