RACV
All year round motoring service

Provides security for over 650,000 RACV members throughout Victoria

RACV HEAD OFFICE
123 Queen Street
Melbourne, 3000
Telephone: 60 0251

RACV Branches throughout Victoria

THE NAVY
The magazine of the Navy League of Australia
Registered for posting as a periodical — Category A

Vol 38
FEBRUARY-MARCH-APRIL, 1976
No 1

CONTENTS

Victorious — 1785-1970 ................................................. 3
Naval Reserve Cadet News ........................................... 5
The US Navy and the Future .......................................... 12
Book Reviews .......................................................... 19
The Navy League of the Future ....................................... 20
Perspectives on Australia ............................................... 22
Vic Division — Annual General Meeting ............................ 24

PLUS SUNDAY STORIES AND PHOTOGRAPHS
The views expressed in articles appearing in this publication are those of the authors concerned. They do not necessarily represent the views of the editor, the Navy League, or official opinion or policy.

Photographs appearing in this magazine are obtained from official sources and copies cannot be secured from the Navy League of Australia or Percival Publishing Co Pty Ltd.

All correspondence should be directed to the Honorary Editor
26 Wesson Road, Pennant Hills, NSW 2120, Australia
Telephone Enquiries — 84 7196 (evenings only)

THE NAVY LEAGUE OF AUSTRALIA

PATRON: His Excellency the Governor-General.

FEDERAL COUNCIL
President: Commander F. G. Evans, MBE, VRD, RANR.
Vice-President: Commodore T. J. D. Nightingale, OBE, VRD, RANR.
Secretary: Commander D. R. V. D. Brimble, MBE, VRD, RANR.
Honorary Treasurer: Mr W. G. Davidson. Honorary Auditor: Mr R. R. Weatherstone.

The views expressed in articles appearing in this publication are those of the authors concerned. They do not necessarily represent the views of the editor, the Navy League, or official opinion or policy.

Vol 38 FEBRUARY-MARCH-APRIL, 1976 No 1

CONTENTS

Victorious — 1785-1970 ................................................. 3
Naval Reserve Cadet News ........................................... 5
The US Navy and the Future .......................................... 12
Book Reviews .......................................................... 19
The Navy League of the Future ....................................... 20
Perspectives on Australia ............................................... 22
Vic Division — Annual General Meeting ............................ 24

PLUS SUNDAY STORIES AND PHOTOGRAPHS
The views expressed in articles appearing in this publication are those of the authors concerned. They do not necessarily represent the views of the editor, the Navy League, or official opinion or policy.

Photographs appearing in this magazine are obtained from official sources and copies cannot be secured from the Navy League of Australia or Percival Publishing Co Pty Ltd.

All correspondence should be directed to the Honorary Editor
26 Wesson Road, Pennant Hills, NSW 2120, Australia
Telephone Enquiries — 84 7196 (evenings only)

THE NAVY LEAGUE OF AUSTRALIA

PATRON: His Excellency the Governor-General.

FEDERAL COUNCIL
President: Commander F. G. Evans, MBE, VRD, RANR.
Vice-President: Commodore T. J. D. Nightingale, OBE, VRD, RANR.
Secretary: Commander D. R. V. D. Brimble, MBE, VRD, RANR.
Honorary Treasurer: Mr W. G. Davidson. Honorary Auditor: Mr R. R. Weatherstone.
Surfmats

FREE 'N EASY

GOT YOURS YET!

THREE SIZES
27" x 47" — $14.95
32" x 50" — $19.95
30" x 60" — $24.50

Mail Orders to MERRIN’S
141 Pacific Highway
Tweed Heads Sth, 2413
Phone: (075) 36 3744

Surfmats

ANOTHER MERRIN’S PRODUCT

THE NAVY
Feb/March/April, 1976

VICTORIOUS – 1785-1976

BY ROSS GILLETT

The first VICTORIOUS, built by Perry at Blackwall, was a third rate two-decker, boasting 74 guns. She was launched on 27 April, 1785, and measured 170 1/4 feet in length, with a 47 foot beam. VICTORIOUS I was present at the capture of Cape Good Hope in 1795, and participated in actions in the Malacca Straits in 1798. In 1803, she paid off for scrapping and was broken up in Lisbon in August of that year.

The second VICTORIOUS, like her predecessor, was a third rate, 74 gun ship. Built by Adams at Bucklers Hard, she was launched on 20 October, 1808. After participating in the disastrous Walcheren Expedition of 1809, fortunes changed when three years later she took part in an extremely successful single ship engagement off Trafalgar.

With the brig WEAZEL, VICTORIOUS blockaded the new French vessel RIVOLI and three other brigs in Venice. On 21 February, the French vessels made for the open sea, but were brought to battle by the British ships. In the ensuing five hour battle, the RIVOLI lost over 400 men and was forced to surrender. She was finally reduced to a crippled hulk. VICTORIOUS, although the victor, lost 27 men killed, and 99 wounded. In August, 1825, VICTORIOUS became a receiving ship. She was finally sold in 1862 and subsequently scrapped.

VICTORIOUS II was a Majestic class, pre-dreadnought battleship of 14,900 tons. She was laid down at Chatham on 28 May, 1894, launched on 19 October, 1895, and finally completed in November, 1896, at a cost of about 950,000 pounds. VICTORIOUS II’s main armament consisted of 4 x 12 inch 35 cal. and 12 x 6 inch 40 cal. guns. Smaller armament included 16 x 12 pdr. 12 x 3 pdr. 2 Maxim and 2 x 12 pdr. boat guns. In addition five 18 inch torpedo tubes were fitted, four being submerged and one being placed above water level at the stern. She measured 390 feet in length, with a 75 foot beam and 26½-27½ foot draught. Top speed was 14 knots and her radius at 10 knots was 470 miles.

VICTORIOUS began service in home waters, with later postings to the China Station and Mediterranean Sea. From 1904 to 1906, she acted as second-in-command of the Channel Fleet. In August, 1914, with her sister ships HANNIBAL, MAGNIFICENT and MARS, VICTORIOUS formed part of the 9th Battle Squadron. Up to January, 1915, VICTORIOUS and her sisters served in the Mediterranean.

With the introduction of the larger battleships of the Iron Duke, Queen Elizabeth and Royal Sovereign classes, the older pre-dreadnoughts were gradually taken out of first line service. Reduced to guardships by early 1915, VICTORIOUS and her three sisters lost their 12 inch turrets for installation in the Lord Clive class monitors. After being demoted to the Third Division Reserve Fleet, VICTORIOUS began duties as a troop transport. In March, 1916, she was fitted out as a dockyard repair ship and based at Longhope in the Orkney Islands.

VICTORIOUS remained at Scapa Flow, the Grand Fleet’s base, until 1919. The following year, she was renamed INDUS II. Sold on 19 December, 1922, to A. J. Purnes, she was again sold in April, 1923, to Stanlées of Dover for scrapping.

The fourth and most recent VICTORIOUS was an Illustrious class aircraft carrier, built by Messrs Vickers Armstrong Ltd. at Newcastle Upon Tyne. Authorised in 1936, VICTORIOUS IV was laid down on 4 May, 1937, launched on 14 September, 1939, and commissioned on 29 March, 1941.

Eight weeks after commissioning, VICTORIOUS received orders to join the search for the German battleship BISMARCK, which was running to Brest after having sunk the Royal Navy’s largest warship, the battlecruiser HOOD. Although only nine Swordfish and six Fulmars were being carried onboard, VICTORIOUS’ aircraft located the BISMARCK and inflicted one torpedo hit and one probable hit. This reduced the German’s speed and greatly helped in the final destruction by other Royal Navy units soon after.

After convoy work in the Arctic, VICTORIOUS ferried RAF Hurricane aircraft to relieve the position in Malta. Strikes were carried out against enemy positions on the Norwegian coast in the last months of 1941. In August, 1942, VICTORIOUS became flagship of Rear Admiral A. L. St G. Lyster, with her...
sister INDOMITABLE, and the older carrier EAGLE, she escorted an important convoy to Malta in late 1942.

Sailing to the Pacific theatre of war in the new year, VICTORIOUS joined in operations with the United States Navy. With a squadron of USN fighter aircraft embarked, she carried out several sweeps in the Coral Sea and south-west and mid-Pacific Oceans. During this period, her own torpedo bombers were operating from a USN flat-top. Returning to the Atlantic in 1944, VICTORIOUS, during April, was aided in operating from a USN flat-top.

Sailing to the Pacific theatre of war in the new year, VICTORIOUS joined in operations with the United States Navy. With a squadron of USN fighter aircraft embarked, she carried out several sweeps in the Coral Sea and south-west and mid-Pacific Oceans. During this period, her own torpedo bombers were operating from a USN flat-top. Returning to the Atlantic in 1944, VICTORIOUS, during April, was aided in operating from a USN flat-top.

Emerging in 1958, after eight years in dockyard hands, VICTORIOUS little resembled her former self. Reconstruction had made her 30 feet longer, as well as increasing her displacement. She now was armed with six twin 2 inch anti-aircraft guns and a single six-barrelled 40mm breech gun.

Recommissioned on 14 January, 1958, VICTORIOUS sailed for the Mediterranean on 28 September, for her first tour of duty. First port of call was Gibraltar, followed by Malta on 13 October. After visits to Toulon and Messina, she returned to Portsmouth on 14 January, 1959. Sailing again on 20 February, VICTORIOUS visited Oslo, Denmark and then followed on with a visit to Norfolk, Virginia, after participating in exercise "Riptide" with the US 2nd Fleet.

On 22 February, 1960, VICTORIOUS commenced a six month refit at Portsmouth, ending her first commission since the completion of reconstruction. After service in the Far East, including a one month deployment in the Persian Gulf, VICTORIOUS underwent a long refit from 2 April, 1962, to 12 June, 1963. Posted again to the Far East in 1963, she provided air search and support to the commando carriers ALBION and BULWARK in Malaysian and Indonesian waters. In May the following year, she visited Yokosuka Naval Base in Japan. VICTORIOUS, with squadrons embarked, left for Australia on 1 April, 1966, after completion of a five month refit. Following calls at Singapore, Hong Kong, Sydney and Perths, she made for the Suez Canal. Passing through the Egyptian waterway just prior to the 1967 Middle East War breaking out, she received orders to remain in Malta until the fighting had halted.

Arriving back at Portsmouth on 21 June, 1967, she began another refit to prepare her for further Far East service. However, on 11 November, VICTORIOUS suffered damage from a fire which blazed below decks from 6 am to 12:30 pm. In anticipation of her recommissioning VICTORIOUS's crew turned to cleaning up the damage. However, the Captain was informed on 23 November, 1967, that the old ship would not recommission as had been originally planned. She had been scheduled to serve until 1971.

At 7.05 pm on 13 March, 1968, VICTORIOUS's white ensign was lowered for the last time. She was sold in July, 1969, and left Portsmouth on the 11th of that month for the Shipbreaking Industries yard at Faslane on the Gare Loch in Scotland.

By July, 1970, all that remained of the once majestic aircraft carrier was a few feet of rusted metal floating on the water. VIC was no longer.

HMS VICTORIOUS after her 1966 refit. The sole survivor of a series of six fleet aircraft carriers. She was the first aircraft carrier in the Royal Navy to be fitted with a fully angled deck.
Naval Reserve Cadet News

PLAN FOR NEW-STYLE CADET CORPS

The Minister for Defence, the Honourable D. J. Killen, said on 15 January, 1976, that he had asked the Department of Defence to draw up a plan for a new system of service cadets. His statement follows —

"This honours the undertaking I gave during the election campaign to reverse the previous Government's decision to disband cadet corps. The new-style cadet corps will retain the essential virtues of cadet training, but will rely more heavily on voluntary support from the community.

Cadet training engenders many valuable qualities in young people. It fosters self-discipline, comradeship and loyalty — all qualities which we should try to develop in young people.

I believe the cadet corps of the Navy, Army and Air Force have made a very worthwhile contribution over the years, but this could be enhanced by giving interested organisations and members of the public a chance to accept more responsibility and develop initiatives for cadet training.

To be realistic we must also consider how much money and Service manpower the defence force can afford to devote to cadets. I have asked the Department of Defence to ensure that the new scheme it proposes is less demanding in both these areas.

The department will also study the objectives, organisation and training methods of the cadet corps. I hope it will be possible to devise a scheme which will provide for greater uniformity between the three cadet organisations than has been the case in the past.

I would welcome any suggestions from voluntary organisations interested in assisting the Services in the future administration of cadet activities."

Mr Killen further stated that he had asked the Department of Defence to submit proposals to him by the end of February. Although action to disband the Army and Air Force cadet corps, initiated by the previous Government, had been dropped, it would not be possible to recommend Army and Air cadet activities until plans for the new scheme had been drawn up.

VICTORIAN DIVISION

TRAINING CAMP — LAKE EPPALOCK

A report by the Senior Officer, Naval Reserve Cadets, Lieutenant Commander Alan Burrows, RANR.

An Annual Continuous Training Camp was held from 1-7 September, 1975, on a seven acre site on the shores of Lake Eppalock, Victoria. This site is part of TS BENDIGO and is often used for weekend training camps using the small facilities permanently located at Eppalock.

However, for this the first large scale camp held in Victoria other than at RAN establishments like HMAS CERBERUS and HMAS LONSDALE, the permanent buildings had to be significantly augmented. This was achieved by the staff at HMAS LONSDALE organising the loan of excellent and wide ranging equipment from the Army. This included tents for living and mess tents, field kitchens and refrigeration, lighting and generating motors and so on.

Total members in attendance were five Officers, eight Senior Instructors and 123 Cadets. All seven Victorian units sent contingents and the camp was visited during the whole period by Divisional Staff Officers, the Commanding Officer of HMAS LONSDALE, the Staff-Officer Cadets from HMAS LONSDALE and his Petty Officer assigned to Cadet Affairs.

Apart from a little rain, the weather was very good and all activities planned were carried out over the whole period. These were many and varied and the cadets learned a number of useful skills that can be adequately taught in this adventure-type camp.

There was sailing, canoeing, and boat-pulling along with lectures and practical exercises in bush survival and living off the land. All these activities are enjoyable and useful to the cadets and might well be instrumental in saving life at some later date.

All in all it was a splendid exercise and hopefully, others will follow. Everyone learned something and the camps in future should benefit from the experience gained in this, the first of its kind.

Its success was due to the efforts of many — HMAS LONSDALE's staff were extremely helpful and did much to ensure the achievements that were so evident at the camp's end.

The Officers and instructors themselves all made vital contributions for the enjoyment of all.

(Photographs accompanying this article are reproduced by courtesy of The Sun-News-Pictorial, Melbourne. Editor.)

F. Watkins (SA) & Co

SHIPS CHANDLERS & PROVIDORES

Agents for Navy Charts and Publications

65 ST VINCENT STREET
PORT ADELAIDE, SA, 5015
Telephone: 47 5900

With compliments and best wishes to all Naval Personnel from

WARWICK NURSING HOME

(T. R. P. & L. M. BLUNDELL)

49 KING WILLIAM ROAD
UNLEY, SA

Telephone: 74 2751

Feb/March/April, 1976

Page Six
Chief Petty Officer R. Skennerton of TS MELBOURNE in 14ft dinghy instructing cadets while Sub-Lieutenant H. Goodall of TS MILDURA maintains radio contact with other craft afloat on Lake Eppalock.

A couple of cadets getting “knotted up”.

A well supervised cadet rope climbing. Lieutenant Commander Alan Burrows, Senior Officer, Naval Reserve Cadets, Victorian Division, and Lieutenant Commander Jim Lundberg, Commanding Officer, TS BENDIGO and Officer-in-Charge of Lake Eppalock Camp.

Best wishes to all Navy personnel from the

Somerset Hotel

MINE HOST: ALLEN & RENE NICKOLLS

Air conditioned luxurious lounge
Counter lunches and teas
Congenial atmosphere

Fountain Motel Pty Ltd

(D. R. & O. M. DIX)

Modern self-contained units, dining room, fully air conditioned, television in rooms, swimming pool, ski boat for hire, telephones in all rooms

RENMARK AVE, RENMARK, SA

Phone: Renmark 86 6899

Help Legacy

197 Pulteney Street
Adelaide, SA
Phone: 223 2768
A Company of the Vickers Group

VICKERS COCKATOO DOCKYARD Pty Limited

BUILDERS OF MANY OF THE NAVY'S FINEST FIGHTING SHIPS

COCKATOO ISLAND SYDNEY

Telegraphic Address: CODOCK

Telephone: 82 0661 Telex: 21833

If you are between the ages of 13 and 18 years:

The Naval Reserve Cadets are administered by the Australian Naval Board.

The Naval Reserve Cadets provide for the spiritual, social and educational welfare of boys and to develop in them character, a sense of patriotism, self-reliance, citizenship and discipline.

Uniforms are supplied free of charge.

Cadets are required to produce a certificate from their doctor to confirm they are capable of carrying out the normal duties and activities of the Cadet Corp. If injured while on duty, Cadets are considered for payment of compensation.

Parades are held on Saturday afternoon and certain Units hold an additional parade once a week.

The interesting syllabus of training covers a wide sphere and includes seamanship, handling of boats under sail and power, navigation, physical training, rifle shooting, signalling, splicing of wire and ropes, general sporting activities and other varied subjects.

Instructional camps are arranged for Cadets and they are also given opportunities, whenever possible to undertake training at sea in ships of the Royal Australian Navy.

Cadets, if considering a sea career, are given every assistance to join the Royal Australian Navy, the Mercantile Marine or the Royal Australian Naval Reserve, but there is no compulsion to join these Services.

For further information, please contact the Senior Officer in your State, using the form provided below.

SOUTH AUSTRALIA: Staff Office Cadets, HMAS Encounter, PO Box 117, Port Adelaide, 5015.

VICTORIA: Staff Office Cadets, HMAS Lonsdale, Rouse Street, Port Melbourne, 3207.

TASMANIA: Staff Office Cadets, HMAS Huon, Hobart, 7000.

AUSTRALIAN CAPITAL TERRITORY: Staff Office Cadets, HMAS Watson, Watsons Bay, NSW, 2030.

TO: The Senior Officer, Naval Reserve Cadets.

I am interested in joining the Naval Reserve Cadets and would be pleased to receive further information.

NAME ___________________________________ SUBURB ___________________________________

STATE OR TERRITORY __________________________________ POSTCODE _______________________

PHONE No _______________________________ AGE AND DATE OF BIRTH _______________________

(Please Print Clearly)

Please address your envelope to the Senior Officer, Naval Reserve Cadets, in your State or Territory - see list of addresses above.
DD943 USS HULL a destroyer of the Forrest Sherman class commissioned in 1958. Ships of this class were the first US destroyers of post World War II design. During 1974 she was experimentally fitted with an 8 inch gun forward to determine the feasibility of installing a major calibre gun in destroyer type vessels — for shore bombardment.

The United States Navy is so, a number of major decisions will be taken. These decisions will have strategic, tactical and material effect upon Australia. Changing strategic circumstances, domestic politics, and the demise of a large number of old ships are all contributory factors: • The neutralisation of the Strategic Nuclear Deterrent • The emergence of the Russian Navy as a multi-ocean offensive fighting force. • A change in the balance of US domestic political power. • The hulls and machinery of the last of a large number of World War II type ships, upon which the US and a number of her allies have depended for the bulk of their escort, MCM and submarine forces, are finally wearing out. Since the fifties, the Russians have had sufficient superiority in submarines and mines, over escort forces and MCM forces, to cripple the trade of the Democracies. Although some deeper thinkers have questioned the reliability of the approach, most Western strategists have assumed that this threat has been neutralised by clearly expressing their intention of treating an attack upon trade as "casus belli" for the use of the Western strategic nuclear strike force. This situation has changed fundamentally. If the US uses nuclear weapons against Soviet cities, the Russians have the ability to hit back at the major cities of the Democracies with a smashingly unacceptable nuclear blow. Admiral Gorshkov, the "Jacky Fisher" of the Soviet Navy, has added to the very strong defensive Russian Navy a multi-ocean offensive fighting force. Built around a fleet of SAM and SSGW armed submarines, destroyers and cruisers, this force is large when measured in terms of firepower and numbers of ships. When considered in terms of firepower available for the strategic offensive, after defensive commitments have been met, the new Russian Oceangoing Fleet is immense. Put simply, the US Navy is still numerically larger than that of the Russians, however, when each is related to their strategic tasks, the Russians have a substantial surplus strength, whereas the USN has a shortage. If the Russians attacked Atlantic, Pacific or Mediterranean trade, those Democracies with nuclear deterrents (the US, France and the UK) would not dare respond with a nuclear attack. The West would just have to fight it out, with conventional weapons, on, over and under the oceans. One of the big questions is whether the West has the strength to do that.

On top of all this, the US domestic political situation has changed. The
reasons for this are many and varied. Suffice it to say that defence appropriations are having a far more difficult passage through Congress, and the USN can no longer rely on the availability of conscripted manpower.

During the fifties and sixties, the US and the United Kingdom both had a large number of World War II ships (escorts, submarines and minelayers) in reserve, for more than they could man themselves. Although the RAN did not do so, many other allies could and did purchase or borrow ships from what was, for all practical purposes, an inexhaustible pool.

The last of these ships are now disappearing, finally obsolete or worn out. the other allies recognise this, as the new building programmes of Brazil, Greece, Turkey, Argentina and others show. Australia is the odd man out - we are the country that cancelled the three ship DDL programme in favour of two smaller ships arriving later. We are the country that has laid no new keel for a fighting ship since 1965.

**OTHER FACTORS**

In making their major decisions, the US must take into account other factors common to most maritime powers.

**USSTONWALL JACKSON SSBN 614,** a nuclear powered fleet ballistic missile submarine (FBM) of the Lafayette class. Originally fitted to carry Polaris A-3 missiles she was subsequently converted to carry the Poseidon G-3 missile (15 tubes).

Today, weapons systems are more expensive than hulls and machinery. Weapons systems become obsolete faster than hulls and machinery.

Maritime power decision makers tend to identify the weapons systems they want, where and for how long. When this choice has been made, the necessary hulls and machinery can be designed.

Ship designers must allow space in new hulls not only for today's latest weapons systems but also for the systems that may have to be installed at the ship's half-life modernisation 12 to 15 years after the ship is completed — that is, 20 to 25 years after initial design work starts.

All over the world manpower costs are rising. In the Democracies, this tends to apply more than in totalitarian countries. In the US, this trend is accentuated by the withdrawal of conscripted manpower. The US Navy is having to attract manpower from other forms of Government Service and free enterprise. This is expensive in terms of pay and conditions. Better allof living conditions can only be provided at the expense of space for weapons, or by building bigger hulls.

Another major question concerns the future of the manned aircraft. There are authorities who maintain that the days of the manned military aircraft are numbered, and that the successful development of the SAM missile, Polaris and Poseidon ICBM systems are the first stages of this. Other authorities argue that the change will not spread to tactical aircraft and there are a multitude of opinions in favour of manned stages in between the two extremes.

**STRATEGIC ATTACK CARRIER, TACTICAL Saper, OR BOTH?**

In the thirty years since World War II, the prime strategic role of the US Navy has been the projection of offensive striking power overseas in the furthest reaches of the earth — to allies (eg in South East Asia or DE 1074 USS HAROLD E. HOLT, an ocean escort ship fitted with Sea Sparrow basic point defence missile system.

the Eastern Mediterranean) and merely by its presence stabilising the situation in an area of tension.

The spearhead in this projection of force has been the attack carrier striking force. This force has enabled the USN to despatch overwhelming airpower in both the strike and support of troops roles, thousands of miles from their homeland. Initially, the force was built around modernised World War II type Essex and Midway class carriers. Slowly, but surely, most of the Essex class have been replaced by the Forrestal (steam) and Enterprise (nuclear powered) carriers. This process is still going on, with the Midway class past their thirtieth birthday and a decision regarding their replacement falling due.

With the change in their strategic situation, the USN's high opinion of the potential of these craft is demonstrated by the fact that a further 23 are building and yet another twelve are under development.

There are authorities who maintain that the days of the manned military aircraft are numbered, and that the successful development of the SAM missile, Polaris and Poseidon ICBM systems are the first stages of this. Other authorities argue that the change will not spread to tactical aircraft and there are a multitude of opinions in favour of manned stages in between the two extremes.

**STRATEGIC ATTACK CARRIER, TACTICAL Saper, OR BOTH?**

In the thirty years since World War II, the prime strategic role of the US Navy has been the projection of offensive striking power overseas in the furthest reaches of the earth — to allies (eg in South East Asia or DE 1074 USS HAROLD E. HOLT, an ocean escort ship fitted with Sea Sparrow basic point defence missile system.

DE 1074 USS HAROLD E. HOLT, an ocean escort ship fitted with Sea Sparrow basic point defence missile system.

the Eastern Mediterranean) and merely by its presence stabilising the situation in an area of tension.

The spearhead in this projection of force has been the attack carrier striking force. This force has enabled the USN to despatch overwhelming airpower in both the strike and support of troops roles, thousands of miles from their homeland. Initially, the force was built around modernised World War II type Essex and Midway class carriers. Slowly, but surely, most of the Essex class have been replaced by the Forrestal (steam) and Enterprise (nuclear powered) carriers. This process is still going on, with the Midway class past their thirtieth birthday and a decision regarding their replacement falling due.

With the change in their strategic situation, the USN's high opinion of the potential of these craft is demonstrated by the fact that a further 23 are building and yet another twelve are under development.

There are authorities who maintain that the days of the manned military aircraft are numbered, and that the successful development of the SAM missile, Polaris and Poseidon ICBM systems are the first stages of this. Other authorities argue that the change will not spread to tactical aircraft and there are a multitude of opinions in favour of manned stages in between the two extremes.

**STRATEGIC ATTACK CARRIER, TACTICAL Saper, OR BOTH?**

In the thirty years since World War II, the prime strategic role of the US Navy has been the projection of offensive striking power overseas in the furthest reaches of the earth — to allies (eg in South East Asia or
The aircraft carrier USS CONSTELLATION an improved Forrestal design, she is an attack carrier of the Kitty Hawk class. Fitted with 2 twin Terrier surface-to-air missile launchers.

The US Navy has been making considerable less effort in the field of mine counter measures, as has been pointed out in extensive discussions in recent issues of United States Naval Institute Proceedings. This may seem surprising, as it was the United States Navy that demonstrated the effective of the mine as recently as the total stoppage of trade in North Vietnam, 1972-73. Some of the 39 guided missile destroyers in service are armed with surface-to-surface guided weapons, all being primarily anti-aircraft ships. However, as with the cruisers, there are plans to equip some of these ships with the STANDARD SSGW.

A further 52 are building or in reserve. The first of the 39,300 ton-multi-purpose ships, USS TARAWA, is just entering service. Her four sisters will be able to provide the helicopter and VSTOL capability specified as necessary by the Secretary of Defence, apart from landing over 1800 troops and equipment across the beach.

Other ships in service include seven 17,000 ton helicopter assault ships which could, with relatively minor modification, provide the limited helicopter and VSTOL capability mentioned earlier. Fourteen LPDs and 23 Dock Landing Ships, and a number of other craft complete the US Navy’s non-considerable amphibious warfare strength.

Whilst this force represents considerable strength in terms of amphibious warfare, the size of her fleet necessary to mount an opposition landing by a division of troops during World War II should not be forgotten.

Some successful and original work has been carried out on missile (HARM) armed hydrofoils, whilst six ASHEVILLE class fast attack craft have been fitted with two launchers each for a modified STANDARD SSGW.

The geography of the United States — we cannot afford to be less well prepared than the Japanese, who have not only a large force of modern guided missiles, but also a much larger fleet of warships. The US must therefore ensure that it has a sufficient number of ASW forces which can maintain a high level of readiness, and at the same time, be able to provide a high degree of protection against potential threats from both land and sea.

THE EFFECTS ON AUSTRALIA

In the United States, the defence debate is growing. It is for the US to decide how much they spend on their own defence, and how much of this defence funds should be divided between various weapons systems. Although this decision is for the US to make, they will have a considerable effect on their allies — not least Australia. Some of these consequences will be strategic. The ANZUS Treaty is a cornerstone of Australia's Alliance. Assuming that all political boundaries are respected, and that the US Congress would be willing to risk escalation and send forces to aid an ally, the US Navy would be expected to provide support. Australia has doubts as to whether the US Navy has the capability to deal with any threat by SSGW armed fast attack craft. It may be that the USN assumed that their SSGWs could deal with SSGW armed submarines before they launched their cruise missiles.

In either case, the USN's current modernisation and construction plans indicate the USN may have to reassess their strategy. Although these decisions are for the USN to make, they will have a considerable effect on their allies — not least Australia.
"The Civilian Arm of the Navy"

The principal objective of the Navy League of Australia is to stress the vital importance of Sea Power to the Commonwealth of Nations and the military role played by the Royal Australian Navy.

The League supports the Naval Reserve Cadets who are administered by the Royal Australian Navy, which Service provides technical sea training for boys who intend to serve in the Naval or Merchant Services, also to those sea-minded boys, who do not intend to follow a sea career, but who given this knowledge will form a valuable reserve for the Naval Service.

We invite you to swell our ranks and so keep up to date with Maritime news and to keep an eye on the increasing weight of informed public opinion. The Navy League will then become stronger and exercise an important influence in the life of the Australian Nation.

The League consists of Fellows and Associates. All British subjects who support the objectives of the League are eligible, for on an even footing. Members receive copies of the League's magazine "The Navy."

THE NAVY LEAGUE OF AUSTRALIA
Application for Membership

To The Secretary,
The Navy League of Australia, (Division).  

Sir,

I am desirous of becoming a Member of the Navy League of Australia with whose objects I am in sympathy.

(Mr.)
Name (Mrs.).
(Miss)
(Rank)

Please Print Clearly.

Street.
Suburb.

State:

Postcode:

Signature:

Date:

Enlosed is a remittance for $5.00 being my first annual subscription.

AFTER COMPLETION, THIS FORM SHOULD BE DISPATCHED TO YOUR DIVISIONAL ADDRESS ABOVE.

THE GREAT NAVAL RACE
Anglo-German Naval Race 1900-1914

BY PETER PADFIELD

362 pages, including index, bibliography, reference notes and twelve pages of black and white photographs. Published by Hamish Hamilton, MacGibbon & Sons Pty. Ltd., London.

Our copy supplied by Hicks Smith & Sons Pty. Ltd., Sydney.

Price $17.30

Reviewed by: SHTANDARD

Much has been written about the results of the naval rivalry which existed between England and Germany in years prior to the First World War, however, detailed publications concerning the nature and reasons for that same rivalry have, prior to now, been relatively scarce. Peter Padfield's book examines the events and personnel concerned with this troubled era, and in so doing has not only built up a competent and interesting picture of the naval race itself, but has shown the reader why the Germany of the Kaisers and Great Britain attempted to outbuild each other with regard to capital ships and other heavy units for their respective fleets.

Bearing in mind the title of this book, the text begins by discussing in detail the political and social fabric of imperial Germany at the end of the last century together with the period. Those who were prominent in this period are also covered here closely scrutiny. This includes the dedicated Admiral von Tirpitz; Kaiser Wilhelm II himself who, on many public occasions, delivered bellicose, nationalistic speeches which were a source of diplomatic embarrassment in many quarters within Germany; and Heinrich Tramitz, Professor of History at the University of Berlin and archivist of the concept of State power.

It was people such as these who had such a major influence on the creation and growth of an ocean-going German Fleet worthy of the name. Obviously, England had her equivalent ideas and people who were concerned with the maintenance of her overall maritime supremacy in the face of this new European challenge, and textual balance is preserved by an equally full coverage of England's policies and naval growth.

The author maintains that the personalities behind the naval armaments race and not the warships themselves brought on the First World War. Balkan politics and the reader's opinion on this issue notwithstanding; he will find much food for thought in this excellently researched work. Herein lie the seeds of the book's few faults. The sinuous complexity of this history leads the reader, of necessity, along many tortuous paths which are occasionally made difficult to navigate because of needlessly long and poorly punctuated sentences. This often makes reading passages in order to absorb their full context. Fortunately, the author's many merits overshadow its faults, and it therefore deserves space on the bookshelves of the serious naval student or historian.

...GHOST OF THE ATLANTIC...

The Kronprinz Wilhelm 1914-1919
BY EDWIN P. HOYT
60 pages. Price $8.90
Published by Arthur Barker Limited, London.

Our copy supplied by Hicks Smith & Sons Pty. Ltd., Sydney.

Reviewed by: SHTANDARD

This book is concerned with the First World War career of the ex- North German Lloyd passenger liner "Kronprinz Wilhelm" from the time she sailed out of New York harbour under sealed orders on the evening of 3 August, 1914, to the date of her scrapping in 1923, by which time she had become, because of internment, the American troop-transport "ON STEUBEN."

The good qualities of this work are quite apparent. The author, a trained journalist, has written an easy-to-read, competently researched and lively sea-yarn which fulfills its intentions to the letter. Even though the KRONPRINZ WILHELM was far from being a top-scoring armoured merchant cruiser, the text is convincing, the commanding officer leaves the reader in no doubt as to why she became known to the allies as the "Ghost of the Atlantic."

However, those few criticisms that are necessary concern; in the main, sins of omission; and this reviewer feels they should be noted.

Firstly, there is not one photograph or drawing of the ship anywhere in the book. The story deserved at least a frontispiece and perhaps some detail photographs in addition to the many drawings which were included.

Secondly, no details at all are given of those ships; career following her completion and prior to her war service, was well known, however, this information such as this is much sought-after today.

Thirdly, no explanation is forthcoming as to why such a large and speedy vessel should be fitted with the puny main armament of only two, 3.4-inch guns, and a single light machine-gun on the bridge. In any case, why was such a vessel chosen for her given task? Her fuel problems were immense. She was designed for the Europe-New York run only, as such, carried only enough coal for her given task? Her fuel problems were immense. She was designed for the Europe-New York run only, as such, carried only enough coal for the seven days steaming at top speed, ie. 3500 tons. At the conclusion of the war, she was seen only as such, carried only enough coal for the seven days steaming at top speed, ie. 3500 tons. She was then seen only as a monument, a reminder of the war. The story that this vessel made could have been so much greater, as such, carried only enough coal for the seven days steaming at top speed, ie. 3500 tons. She was then seen only as a monument, a reminder of the war. The story that this vessel made could have been so much greater.
The Navy League of the Future

Any advance planning by the League must take note of current pressures for reduction of Government spending, the unilateral declaration of independence by the Government of 1972, when the Naval Defence Act was amended, and the foreshadowed abolition of the Naval Reserve Cadets.

The past five years were certainly a period of change but the traumas have provided some useful experience, and above all, the League has survived. The actual articles of association of the company do not require any urgent amendment but the objectives and future commitments certainly do.

Support for the Navy is implicit in our existence, and although the RAN may not need us, Australia needs the Navy, and as motivated citizens we will continue to emphasise this point privately and in public.

Some States have well informed members who provide relevant pro-Navy comment to the media whilst others limit themselves to letters to the Editor.

Increased use of "The Navy" magazine as a vehicle for civilian as well as Service opinion would not only inform League members of their affairs, but get through to the Service with long term benefits to both sectors.

Finally, there is the involvement with the Cadet movement and this aspect needs the closest scrutiny.

Naval participation could be limited to providing facilities for Annual Camps and access to ships and establishments for instructor courses.

The status and capacity of the Navy League of Australia varies so much in each State it is difficult to provide a universal formula for substituting the League of the future, but writing from Queensland in January, 1976, it is suggested that if Defence wishes to continue its involvement then the current rents for Navy League of Australia facilities are a good basis for discussion.

Whatever the future it is hoped the Government will negotiate locally rather than maintain the past remote-controlled and occasional direction to the man and women who provide the basic work force for any youth movement.

The form, size and functions of the Sea Cadet Corps of the future must be the subject of another article.

The Navy League

The Navy League of Australia.

It would be helpful to the Editor and Postal Office if you would kindly complete the form provided below prior to moving from the postal address registered with the Navy League, thereby ensuring that "The Navy" reaches you on time. Fellow of the Navy League should also advise their Divisional Secretary of any change in status or postal address. (Refer page one for address.)

CHANGE OF ADDRESS

Important notice to Subscribers to "The Navy" and Fellows of the Navy League of Australia.

To: The Editor,
"The Navy" magazine,
P.O. Box 3070,
NSW, 2120, Australia.

(Please Print Clearly)

Mr. ____________________________
Name: ____________________________
Mrs. ____________________________
Miss ____________________________
Rank ____________________________

Present address:

To "The Navy"

I enclose $4.40 being subscription to "The Navy" magazine within Australia for 1¼ years (refer notes below).

SUBSCRIPTION FORM

Name: ____________________________
Street: ____________________________
Suburb: ____________________________
State: ____________________________
Postcode: ____________________________

Date: ____________________________
(please Print Clearly)

Please make cheques, postal orders or money orders payable to "The Navy League".

Subscriptions commence in January of each year and a subscription reminder notice is forwarded to current subscribers. Annual Subscription (Australian Dollars) within Australia $2.50 — Beyond Australia $4.00 (airmail) — $7.00 (air mail).

Please tick the following box (tick only one box): I will be moving from the above postal address on: ____________________________

to reside at: ____________________________

New address:

State: ____________________________
Postcode: ____________________________

Signature: ____________________________

NOTICE OF CHANGE OF ADDRESS

Fellows of the Navy League do not forget to also advise change of address to your Divisional Secretary. (Refer page one for address.)

NOTICE TO ADVERTISERS

The Trade Practises Act, 1974 came into force on October 1, 1974. There are important new provisions in the Act which contain strict regulations on advertising and all advertisers and advertising agents are advised to study these provisions carefully. It can be an offence for anyone, in trade or commerce, to engage in conduct "misleading or deceptive". In particular Section 53 contains provisions which make it an offence to publish or cause to be published in connection with the supply of goods or services or in connection with the promotion, sale, offer for sale, hire or letting of goods or services, statements concerning the existence of, or amounts of, price reductions, the supply or use of goods or services, or any other matter.

Penalties: For an individual $5,000; for a corporation $10,000. In a summary conviction, the court may, in connection with the offence of any act or omission which may be taken to be misleading, statements concerning the existence or effect of any warranty or guarantee, or in connection with the supply of goods or services or in connection with the promotion of goods or services, make or publish, in connection with the existence or effect of any warranty or guarantee, or in connection with the supply of goods or services or in connection with the promotion of goods or services, make or publish any false or misleading statements concerning the existence or effect of any warranty or guarantee.

NOTICE TO ADVERTISERS

The Trade Practises Act, 1974 came into force on October 1, 1974. There are important new provisions in the Act which contain strict regulations on advertising and all advertisers and advertising agents are advised to study these provisions carefully. It can be an offence for anyone, in trade or commerce, to engage in conduct "misleading or deceptive". In particular Section 53 contains provisions which make it an offence to publish or cause to be published in connection with the supply of goods or services or in connection with the promotion, sale, offer for sale, hire or letting of goods or services, statements concerning the existence of, or amounts of, price reductions, the supply or use of goods or services, or any other matter.

Penalties: For an individual $5,000; for a corporation $10,000. In a summary conviction, the court may, in connection with the offence of any act or omission which may be taken to be misleading, statements concerning the existence or effect of any warranty or guarantee, or in connection with the supply of goods or services or in connection with the promotion of goods or services, make or publish, in connection with the existence or effect of any warranty or guarantee, or in connection with the supply of goods or services or in connection with the promotion of goods or services, make or publish any false or misleading statements concerning the existence or effect of any warranty or guarantee.

In case of doubt consult your lawyer.
Periscope on Australia
by Grommet

Sailors, soldiers and airmen farewelled the retiring Chairman Chiefs of Staff Committee, Admiral Sir Victor Smith, at a special parade in Canberra on 21 November, 1975.

A 100-man Guard of Honour drawn from the three Services, with the Band of the Royal Military College, Duntroon, mounted outside the Department of Defence Building at Russell at 2.15 pm.

The parade was attended by the Secretary of the Defence Department, Sir Arthur Tange, Chief of Naval Staff, Vice Admiral H. D. Stevenson; Chief of the General Staff, Lieutenant General F. G. Hassett; and Chief of the Air Staff, Air Marshal J. A. Rowland.

Admiral Smith was born in Sydney in 1913 and entered the Royal Australian Naval College 14 years later. He left the college in 1930 and received further training in the United Kingdom and Australia. Promoted Lieutenant in 1936, Admiral Smith specialised in aviation and joined the Fleet Air Arm in 1937.

During World War II, Admiral Smith was awarded a Mention in Despatches for air torpedo attacks on the Scharnhorst; he later received the Distinguished Service Cross with bar and Bar; was appointed Commander of the Order of the British Empire; and received the American Legion of Merit.

During the war he specialised in command of air patrols and antisubmarine patrols in the Western Approaches and the Mediterranean. Promoted Lieutenant-Commander in 1944, he was awarded the Distinguished Service Cross in the United Kingdom and the United States.

Admiral Smith was appointed Commander of the 2nd Fleet, with headquarters at Pearl Harbour, Hawaii, in 1945. He left the Fleet in 1946 and took part in the atomic tests at Bikini Atoll, the United States, in 1946 and 1947. In 1948 he was appointed Commanding Officer of the Fleet Air Arm in the United Kingdom. Promoted Commander in 1952, he was awarded the Distinguished Service Cross in the United Kingdom and the United States.

Admiral Smith was appointed Commanding Officer of the 1st Fleet, with headquarters at Pearl Harbour, Hawaii, in 1953. He left the Fleet in 1955 and was appointed Commanding Officer of the 2nd Fleet, with headquarters at Sydney, in 1956. In 1957 he was appointed Commanding Officer of the 1st Fleet, with headquarters at Sydney, in 1958. In 1960 he was appointed Commander of the United States Seventh Fleet, with headquarters at Tokyo, Japan, and left the Fleet in 1961. In 1962 he was appointed Commanding Officer of the 2nd Fleet, with headquarters at Pearl Harbour, Hawaii, and left the Fleet in 1963. In 1964 he was appointed Commander of the United States Seventh Fleet, with headquarters at Tokyo, Japan, and left the Fleet in 1965. In 1966 he was appointed Commanding Officer of the 1st Fleet, with headquarters at Pearl Harbour, Hawaii, and left the Fleet in 1967. In 1968 he was appointed Commander of the United States Seventh Fleet, with headquarters at Tokyo, Japan, and left the Fleet in 1969. In 1970 he was appointed Commander of the United States Seventh Fleet, with headquarters at Tokyo, Japan, and left the Fleet in 1971. In 1972 he was appointed Commanding Officer of the 1st Fleet, with headquarters at Pearl Harbour, Hawaii, and left the Fleet in 1973. In 1974 he was appointed Commander of the United States Seventh Fleet, with headquarters at Tokyo, Japan, and left the Fleet in 1975. In 1976 he was appointed Commanding Officer of the 2nd Fleet, with headquarters at Pearl Harbour, Hawaii, and left the Fleet in 1977.
It is only six months since my last annual report, for as you know, we have brought this annual general meeting forward, so that it more sensibly relates to the 12 months ended 30 June, 1975. I will, therefore, comment mainly on the future rather than retrace old steps.

The only things I want to mention, positively, are the encouraging results of our financial year. Our income for 1975 has been about $4 million a year and this is an indication of the support we are receiving from the public.

The emphasis about the past is that our finances have improved. We are now able to operate at our present strength and are making a very positive contribution, largely in the property field, to provide suitable quarters for the cadet units. We are making a contribution to the RAN, and so intends, to make a very positive contribution, largely in the property field, to provide suitable quarters for the cadet units. There are naturally a number of other areas where we can help. For example, there will be need to cover costs of administration, travel, stores, victuals etc., for the cadets to remain a viable organisation, which it is.

At this point we are not sure what the actual date is for the cut-off of government support, and when this comes, how much the Navy, albeit most willing to assist, will be permitted to do so in tangible ways. Negotiations have been underway for some weeks now. It is going to become complicated, particularly on the property side, for this is still not resolved in Victoria at least. No rents have been received, although due, from 1st January, 1973, so we have firstly to get these monies in, and then be probably involved in dismantling what has not been fully assembled, in the properties area. From the cut-off point of government support, most of the seven units in Victoria should be able to operate for some months on what they will have in hand. Things like uniforms, stores, boats, should be retained. We have to work hard, however, for the time which won't be too far distant when the units will need replacements of many worn items and additional equipment for new recruits as the cadet force, hopefully continues to grow. Where these requirements will be sourced has also to be negotiated, but wherever it is, money will be needed.

Another expense to be met will be that of travelling costs. For some time now, contributing factors to the successful operation of the RNC have been combined unit camps at HMAS CERBERUS, at Lake Eppalock and what have recently become beneficial and popular, unit-to-unit visits. The return fares from any unit which wants to retain the NRC and is, no the units themselves have, in varying degrees, local committees working for them, you can readily see, that we have many future fields where the NL can support and help maintain the cadets. It is, of course, too soon to make concrete plans and recommendations as there are many unknown factors to be resolved. Much will depend on our continuing negotiations with the Government, the Navy and elsewhere.

In any event, perhaps this will be the incentive for us to become a very active organisation. I can only commend to you all that you get right behind the League and rely upon help to keep our fine cadet corps in being.

It has, after all, been one of our main responsibilities starting in the 1920's. While the emphasis of my remarks in this report has been on the place of Naval Reserve cadets in our scheme of things, and which I believe is our most important charge, one should not overlook the other role of the Navy League. As you know it expresses views from time to time on national issues, mainly of a defence and maritime nature, and on specific naval matters contained within the ambit of its abilities and knowledge. Such are generally received as objective comments on specific naval matters contained within the ambit of its abilities and knowledge. This is our most important charge.

In conclusion, I wish to thank all those who have worked hard and contributed to the League's welfare and advancement and to express my appreciation of the support of my colleagues in committee.

ALAN H. BURROWS,
President.
An entirely new concept in Life Assurance!

Now, for a level premium you get growing cover that helps cope with inflation.

INFLATION AND THE BUDGET

Both can affect the type of Life Assurance you will require in future. With inflation affecting you on one side, and the new Taxation Rebate system on the other, there is a real need for a new type of Life Assurance policy. Greater Pacific Life has developed such a policy. It is called, simply, GROWTHMASTER. This specially developed policy puts the emphasis on pure life cover in a pattern suited to the needs in a typical family. At the same time it provides some protection against inflation.

GROWTHMASTER: A COMPLETELY NEW CONCEPT

“Growthmaster” is a completely new concept in term assurance designed to provide protection in a pattern which corresponds to the typical cycle of family needs over the breadwinner’s working life. “Growthmaster” combines a level premium with automatic growing cover during the period in which you expect inflation and family responsibilities to increase your need for cover. Following this, is a ten year period of level cover while your need for cover is stabilising. This is followed by reducing cover to age 65 by which age cover ceases.

KEY FEATURES OF GROWTHMASTER

1. During the period of growing cover. the sum assured increases at the end of each year by 10% of the initial sum assured
2. The growing cover continues until the age selected by you from five alternatives—ages 35, 40, 45, 50 and 55. Thereafter cover is level for ten years and then reduces to nil by age 65
3. Cover is available against death only or against death or earlier total and permanent disablement
4. Premiums are level and cease at age 60, which is five years earlier than the cessation of cover
5. Once three years’ premiums have been paid, the policy acquires a surrender value. This, however, may be small, as there is no savings element in the policy
6. The policy carries an option which enables you to convert the cover existing from time to time to a conventional assurance policy prior to age 60. Without further evidence of health being required.

COMPANIES PLEASE NOTE

Growthmaster is ideal for “Key-Man” Life Assurance

ACT NOW!

Telephone your nearest Greater Pacific Life office or your Greater Pacific Life agent to arrange a presentation of the Growthmaster. Based on our comprehensive and informative brochure. Even if your normal assurance advisor is not a Greater Pacific agent we would gladly arrange for him to provide you with this unique policy.
I am now able to announce to the House details of a new scheme which each Service should have in operation by September this year.

Three factors were important in shaping this new scheme. The first is, in my belief and I am sure this is a belief shared by all Honourable Members, that we have an obligation to do all we can to encourage young people to develop the qualities of leadership, discipline, self-reliance and loyalty which the previous cadet training schemes fostered.

Secondly, the Government wishes to see greater involvement of schools and the community generally in cadet training.

The third consideration was one of cost. In a period when the Government must rigorously examine every facet of its expenditure the cost effectiveness of expenditure at this level on cadet training obviously demanded close scrutiny. This is particularly so at the present time when priority in defence expenditure must be given to equipment and the infrastructure essential to an adequate basis for expansion of our defence capability.

The scheme which the Government has approved retains the essential virtues of cadet training while at the same time seeking to ensure the maximum efficiency within the resources available. It will encompass both school and community sponsored units.

Features of future Commonwealth financial assistance are:

- provision of an appropriate military uniform;
- full Defence Force support for annual camps of up to 7 days for all cadets. At these camps leadership, challenge and training are the keys to cadet development;
- reimbursement of up to an average of $10 per cadet to schools and sponsoring authorities for travel costs associated with annual camps;
- payment of annual allowance to cadet instructors.

Under the new scheme the Navy, Army and Air Force will retain their individual identities: a desire which was strongly expressed in the submissions of individuals and community groups and is shared by the Government.

This is stressed in our decision to adopt a common aim for all three organisations, which has been formulated bearing in mind the fact that the organisations will be funded from the Defence Vote, and that the public submissions received strongly favoured the maintenance of a military flavour in cadet activity.

The aim is to be as follows: "The common aim of the Australian Services' Cadet Schemes is, by predominantly voluntary effort, better to equip young people for community life by fostering initiative, leadership discipline and loyalty through training programmes also designed to stimulate an interest in a particular Arm of the Defence Force."

Besides introducing a common aim the Government has also decided that there should be a greater degree of commonality among the three Services' cadet schemes particularly in the nature of the Commonwealth assistance.

The Naval Reserve Cadets system will continue. A ceiling of 4000 cadets, which is an increase of about 1500, which will enable the Navy to maintain a similar proportion of cadets compared to Service strength by the Air Force. The total number of Permanent Naval Force personnel supporting naval cadet units will remain at 11 as under the previous scheme.

Naval cadets will also receive the same training as before which includes small boat safety, trips to sea with naval ships and navigation.

Both Navy and Air Force Cadets will be paid an annual allowance. The level of that allowance and the conditions under which it will be paid is a matter that will be examined by the established Defence machinery for pay and conditions of service.

Cabinet service for girls will be given consideration after the new scheme is properly established and then the Government would welcome submissions on the matter.

At current prices the scheme will cost approximately $1.5m for Army Cadets, $1.9m for the Air Training Corps and $640,000 for the Naval Reserve Cadets. This is a substantial amount but represents a reduction of some $5.5m on the previous scheme at 1973 prices.

I believe the community support necessary to make this scheme a success will be forthcoming, and once again cadet training will make a worthwhile and positive contribution to the physical and mental development of Australia's young people.

As with Army units the Air Training Corps and Naval Reserve Cadets will rely heavily on volunteer instructors, trained by the parent Service.

This will provide a very rewarding part-time activity for men who wish to become involved in an active and stimulating form of youth work which the Government believes is essential to the character building of Australian youth.

Cabinet officer/cadet instructors will be paid an annual allowance. The level of that allowance and the conditions under which it will be paid is a matter that will be examined by the established Defence machinery for pay and conditions of service.

Cabinet service for girls will be given consideration after the new scheme is properly established and then the Government would welcome submissions on the matter.

At current prices the scheme will cost approximately $1.5m for Army Cadets, $1.9m for the Air Training Corps and $640,000 for the Naval Reserve Cadets. This is a substantial amount but represents a reduction of some $5.5m on the previous scheme at 1973 prices.

I believe the community support necessary to make this scheme a success will be forthcoming, and once again cadet training will make a worthwhile and positive contribution to the physical and mental development of Australia's young people.

His Excellency the Governor of New South Wales inspecting a Guard of Naval Reserve Cadets.

Aim of the movement is to develop in youth the attributes of good citizenship, promote physical fitness, and stimulate interest in the armed forces of Canada.

There are now 62,000 cadets enrolled in 966 cadet corps, from the east coast of Newfoundland to Vancouver Island, and as far north as Cambridge Bay.

Highlights of the year for cadets are the summer camps, athletic and training activities, exchange visits to the USA and European countries, and air cadet camps across the country.

Under the new scheme, the Navy, Army and Air Force will retain their individual identities: a desire which was strongly expressed in the submissions of individuals and community groups and is shared by the Government.

Three (actors were important in the previous cadet training schemes is, by providing space and stimulating interest in the armed services.

His Excellency the Governor of New South Wales inspecting a Guard of Naval Reserve Cadets.

Aim of the movement is to develop in youth the attributes of good citizenship, promote physical fitness, and stimulate interest in the armed forces of Canada.

There are now 62,000 cadets enrolled in 966 cadet corps, from the east coast of Newfoundland to Vancouver Island, and as far north as Cambridge Bay.

Highlights of the year for cadets are the summer camps, athletic and training activities, exchange visits to the USA and European countries, and air cadet camps across the country.

The scheme which the Government has approved retains the essential virtues of cadet training while at the same time seeking to ensure the maximum efficiency within the resources available. It will encompass both school and community sponsored units.

Features of future Commonwealth financial assistance are:

- provision of an appropriate military uniform;
- full Defence Force support for annual camps of up to 7 days for all cadets. At these camps leadership, challenge and training are the keys to cadet development;
- reimbursement of up to an average of $10 per cadet to schools and sponsoring authorities for travel costs associated with annual camps;
- provision of an appropriate military uniform;
- full Defence Force support for annual camps of up to 7 days for all cadets. At these camps leadership, challenge and training are the keys to cadet development;
- reimbursement of up to an average of $10 per cadet to schools and sponsoring authorities for travel costs associated with annual camps;
Join the
NAVAL RESERVE CADETS

If you are between the ages of 13 and 18 years:

The Naval Reserve Cadets are administered by the Australian Naval Board.

The Naval Reserve Cadets provide for the spiritual, social and educational welfare of boys and to develop in them character, a sense of patriotism, self-reliance, citizenship and discipline.

Uniforms are supplied free of charge.

Cadets are required to produce a certificate from their doctor to confirm they are capable of carrying out the normal duties and activities of the Cadet Corps. If injured while on duty, Cadets are considered for payment of compensation.

Parades are held on Saturday afternoon and certain Units hold an additional parade one night a week.

The interesting syllabus of training covers a wide sphere and includes seamanship, handling of boats under sail and power, navigation, physical training, rifle shooting, signalling, splicing of wire and ropes, general sporting activities and other varied subjects.

Instructional camps are arranged for Cadets and they are also given opportunities, whenever possible, to undertake training at sea in ships of the Royal Australian Navy.

Cadets, if considering a sea career, are given every assistance to join the Royal Australian Navy, the Mercantile Marine or the Royal Australian Naval Reserve, but there is no compulsion to join these Services.

For further information, please contact the Senior Officer in your State, using the form provided below:

SENIOR OFFICERS, NAVAL RESERVE CADETS:
NEW SOUTH WALES: Staff Office Cadets, HMAS Watson, Watsons Bay, NSW, 2030.
QUEENSLAND: Staff Office Cadets, HMAS Morton, Box 1416T, GPO Brisbane, 4001.
WESTERN AUSTRALIA: Staff Office Cadets, HMAS Leeuwin, PO Box 56, Fremantle, 6160.
SOUTH AUSTRALIA: Staff Office Cadets, HMAS Encounter, PO Box 117, Port Adelaide, 5015.
VICTORIA: Staff Office Cadets, HMAS Lonsdale, Rouse Street, Port Melbourne, 3207.
TASMANIA: Staff Office Cadets, HMAS Huon, Hobart, 7000.
AUSTRALIAN CAPITAL TERRITORY: Staff Office Cadets, HMAS Watson, Watsons Bay, NSW, 2030.

TO: The Senior Officer, Naval Reserve Cadets.
I am interested in joining the Naval Reserve Cadets and would be pleased to receive further information.

NAME: ____________________________

STREET: ____________________________ SUBURB: ____________________________

STATE OR TERRITORY: ____________________________ POSTCODE: ____________________________

PHONE No. ____________________________ AGE AND DATE OF BIRTH: ____________________________

(Please Print Clearly)

Please address your envelope to the Senior Officer, Naval Reserve Cadets, in your State or Territory — see list of addresses above.

Page Four
THE NAVY
May/June/July, 1976

Page Five
THE NAVY
May/June/July, 1976
Australia needs more airfields

...at sea

SEA HARRIER
Helicopter deck versatility...fixed-wing strike aircraft potential.

HAWKER SIDDELEY AVIATION
Hawker de Havilland

The Indian Ocean and Australian Strategy
By A.W. Grazebrook

During the past two or three years, much has been said in Australia on the subject of the presence of super-power maritime forces in the Indian Ocean. In spite of all the attention given this subject, many commentators have ignored some very basic points.

A number of factors are relevant to Australian Strategy in the Indian Ocean:
- Strategic Mobility
- The development of the Cockburn Sound Naval Operating Facility.
- Super-Power strength and potential strength in the Ocean.
- The increasing maritime strength of Indian Ocean Regional Powers.
- The distances between key Indian Ocean Strategic Points.
- The balance of power, and control of Southern Africa.

To be effective in the Indian Ocean, armed forces must demonstrate maritime force - it must be capable of fighting over long distances on, over, or under the sea. Probably the most significant aspect of maritime power is its mobility - not only tactical mobility, but, perhaps in this case, more significant, strategic mobility.

** Strategic Mobility and Afloat Support **

One particular aspect of the strategic mobility of maritime power, that seems to have been largely ignored in much of the recent public comment. Much attention has been paid to bases - particularly naval bases. We have been told that the Russians have naval bases in Singapore, Somalia, Aden, Bangladesh, and elsewhere. Concern has been expressed, in both the USA and a number of Indian Ocean nations, at the United States plans to build a naval base at Diego Garcia.

A largely ignored, but very important aspect of the comment on bases is that both super-powers involved can deploy substantial maritime power on extended periods in the Indian Ocean without bases. The controversial bases which would be involved are: US bases in the Gulf, and the USSR bases in the Mediterranean and Indian Ocean.

The US bases in the Gulf are probably better placed for a deployment than any Soviet naval force in the Indian Ocean. Even with military bases, both the US and the USSR are able to provide substantial maritime forces into the Indian Ocean at short notice. The rapidity of redeployment, and the extent to which maritime forces can be deployed by either power suggests the extent of the Indian Ocean virtually unlimited storage, availability of civilian technicians, and so forth.

The lack of bases will not deny the Indian Ocean to substantial maritime forces of the USA and USSR.

** The Operational Mobility of Maritime Power **

Much of the public comment and dispute over the number of warships either the USA or the USSR has in the Indian Ocean also ignores another fundamental aspect of maritime power - its operational mobility.

It is largely irrelevant whether or not either super-power has a task force in the Indian Ocean at a given time. If either power lacks a task force, there and they can conceive a need for such a task force, a major force can be deployed by either power into the Indian Ocean within three weeks. The USSR can move such forces from their Mediterranean Fleet through the Suez Canal; from their Atlantic Fleet around the Cape of Good Hope, or, as they have done frequently, from their Far East Fleet through the Malacca Straits.

Similarly, the USA can move substantial maritime forces into the Indian Ocean at short notice. One effect of this is to make any agreement between super-powers to withdraw their maritime forces from the Indian Ocean virtually meaningless. Quite apart from the difficulty of policing such an agreement, either power could have major naval forces back in the Indian Ocean in a very short period.

During World War II, there were many examples of rapid strategic redeployment of maritime power. The movement of US carrier forces from the Coral Sea to the Midway Area in May/June, 1942, is one example. Another is the deployment of the British Force H from Gibraltar for the assault on Madagascar in 1942.

The rapidity of redeployment, and the extent to which maritime forces can operate with afloat support, has been greatly improved as a result of...
extensive practical experience in the
Pacific during World War II and since
That experience and expertise has
now been built into the second
generation of US afloat support craft.

INDIAN OCEAN DISTANCES
A recent Australian Defence
Minister once remarked that "Some
commentators seem to forget the
effect of the enormous distances of
the Indian Ocean. The distances are
substantial indeed (a fact often
obscured by Mercator's projection as
Admiral Somerville once complained).

When one considers the strategic nuclear, naval, and Central European
Front Balances together, it is apparent that significant changes in Soviet
capabilities have occurred in the past 15 years. The Soviets have come from
the unsophisticated, continually armed forces of the post World
War II days to clear military superpower status in the 1970's.

There is powerful momentum in Soviet military programmes and in
the emerging pattern of external projection of Soviet power.

However, the distances are not
insuperable. Taiwanese fishing
vessels have little difficulty in
operating off our coast 2500 miles
from their home ports.

World War II submarines operated
from Fremantle right up into the
China Sea. A modern 1000-ton
diesel-electric submarine has a range four
times the distance from Ceylon to
Fremantle.

A light carrier task force with a
replenishment at sea capability, based
on the other side of the Indian Ocean,
would have sufficient range to
operate in our maritime area for
extended periods. During World War
II, converted German merchantmen
laid mines off the Victorian Coast.

There is no doubt that the Indian
Ocean is a moat - one of the largest
in the world. However, moats can be
crossed and, perhaps more pertinent,
many critical battles have been fought
to prevent or permit the crossing of
such moats.

SOUTHERN AFRICA AND
THE INDIAN OCEAN
Since well before the turn of the
century, Western naval bases in
Southern Africa have been secure -
secure as a basis for the safety of
western trade around the Cape of
Good Hope.

These bases - primarily
Simonstown in South Africa, but also
other ports - were used extensively
during World War II for defence
against submarines and surface
warships.

Since 1967, the closure of the Suez
Canal has increased greatly the
amount of trade passing around the
Cape of Good Hope. During this
period, the economy of scale of ships
has reached a point where many craft
are too large to pass through the
reopened Suez Canal.

Whilst there are plans to widen the
Suez Canal, these will not bear fruit for
many years - even assuming that
the political instability of the Middle
East neither retards the plans nor re-
closes the Canal.

The size of the newer merchant
ships, coupled with the probability
that no wise power or business will
rely upon the Suez Canal being both
open and their ships permitted to
pass, make it probable that the Cape
of Good Hope shipping routes will
remain at least as vital to Australian
trade during the next decade as they
have been since 1967.

In these circumstances, Australian
strategists could be wise to examine
the future of Southern Africa, with
particular reference to the probable
political hue of the power or powers
in control of that part of the African
Continent. This is not a matter of one
or another approach to apartheid. It is
a case of taking an objective and
pragmatic approach to Australian
strategy.

At the present time, those in
control of Southern Africa are very
far from hostile towards Australia.
Should that situation change, and a
power antipathetic or hostile to
Australia gain control of Southern
Africa and, perhaps, the Southern
African Armed Forces, it would be a
matter of vital concern to Australia.

The Soviet Force has become
smaller with the retirement of large
numbers of diesel submarines.
However, the Soviets retain a 2.3-to-1
advantage in attack submarines.

The Soviets have 20% greater
numbers of major surface combatants
- aircraft carriers, cruisers.
The strength of the South African Maritime Forces is substantial. Expansion and modernisation plans, already underway, will add to the potency of those forces. At present these are comprised of:

3 ASW helicopter armed Type 12 frigates.
2 old ASW helicopter armed destroyers.
3 older frigates.
3 modern French built submarines.
1 ocean-going Fleet Replenishment ship.
10 MCM vessels.

Modernisation and expansion plans involve the acquisition of:
- 2 French built 1200 ton AGOSTA Class patrol submarines.
- 6 South African built SSGW armed frigates.
- A number of SSGW armed fast attack craft, to be built in South Africa.

Whilst distance, and the type of forces involved, make it unlikely that they could be used in any form of attack upon Australia, or her maritime approaches, these forces have an ability to both secure and attack trade on the high seas in the region of the Cape of Good Hope.

SOVIET FREIGHT RATES AND AUSTRALIA'S INDIAN OCEAN TRADE

The recent, greatly increased Soviet activity in the ocean freight market has attracted much attention in the commercial world. Little comment has been forthcoming on the strategic aspects.

The enormous and still expanding Soviet merchant fleet is now attacking the Western Nations' ocean freight market. With the planned economy's disregard for cost structures and the need for profitability, the Russians are breaking into some of the world's freight markets by undercutting the Shipping Conference's agreed freight rates.

Shippers, many of whom feel they have been victims of freight rate cartels, are sorely tempted by the cheaper Russian freight rates.

If Russia pushes hard enough to gain a significant market share on major trade routes, she can bankrupt or force off a particular route.

Western shipping companies.

The Australian trade, much of which is carried in foreign bottoms, could become a prime target for the Russians' marketing, perhaps aided by the fact that there is relatively little national flag shipping with its attendant loyalty customers.

Recent developments in the freight market demonstrate that the Russians have every intention of competing for the Australian trade.

The likelihood is that there will be more and more Russian flag vessels in the Indian Ocean and, perhaps, more and more Russian warships to protect them.

COCKBURN SOUND

The availability of the operating facility in Western Australia will release significantly the operational availability of Australia's surface and underwater forces in the Indian Ocean.

Whilst that same facility may well be of use to our Allies, the justification for its construction rests squarely upon the RAN's needs and not those of our Allies. The Government's acceleration of work at Cockburn Sound is likely to be welcomed by those commentators who appreciate the growing significance of the Indian Ocean to Australian strategy.

The outcome of the Government's recently annouced study regarding further development of Cockburn will be awaited with interest.

With the compliments of...

OASIS HEALTH SALON
Relax in our sauna rooms follow with a body massage by one of our skilled staff. Luxurious air conditioned private suites.

Telephone: 221 9620
1st Floor Civic Arcade
65 ADELAIDE STREET, BRISBANE, QLD
(Opp City Hall)
Instant boiling water always available with a Whelan Electric Automatic Boiling Water Unit. Economical, clean, safe, efficient. In all sizes from 1½ to 100 gals. Suitable for all requirements from small motels to large industrial canteens.

Laurie Whelan Industries Pty Ltd
20 LAMBERT AVENUE
NEWTOWN, GEE LONG
Telephone: (052) 21 7882

Kindly sponsored by...

J. W. CARTER & SONS
REAL ESTATE AGENTS
295 WILLIAMSON STREET
BENDIGO, VIC
Telephone: 43 4694

OVERSEAS DESIGNS TO COMPETE FOR AUSTRALIAN PATROL BOAT ORDER

Of the eleven shipbuilders (two British, one German, one French, one Swedish and six Australian) invited to tender for project definition study contracts relating to the supply of the new class of patrol craft, designs from Britain and West Germany have been selected to compete for a reported $70 million order for new patrol craft for the Royal Australian Navy.

Although overseas designs have been selected the new patrol boats with the exception of lead craft (expected to enter service 1979) will be built in Australia giving an important boost to the Australian shipbuilding industry.

The designs selected are from Brooke Marine of the United Kingdom (PCF420) and Lurssen Werft of the Federal Republic of Germany (variant of the FPB45). Readers should refer to the May-June-July, 1975 edition of this magazine for complete details of the classes selected.

The PCF420 is 42 metres long and displaces about 220 tonnes. It is a development of the proven PCF375 patrol craft in service in the Persian Gulf and Africa.

Patrol craft of the FPB45 type are in service with a number of navies throughout the world. It is 45 metres long and displaces about 250 tonnes.

The main armament of both designs has yet to be selected, but it will include a modern general purpose close range gun.

The designs were chosen to compete for the Australian order after evaluation of proposals from numerous Australian and overseas shipbuilders. Both designs are variations of modern, well-proven designs, and are well suited to Australia's special requirements.

Australia's present force of 12 Attack Class Patrol Boats are hard pressed to patrol Australia's 20,000 kilometre coastline, and the prospect of a 320 kilometre economic resources zone makes it imperative that more patrol boats are built with a better range and sea-keeping qualities than the present Attack Class.

The two designs will be evaluated following project definition in Australia which would provide detailed information on the costs and capabilities of the craft.

Following evaluation late this year a decision will be made on the craft to be acquired, numbers to be built and the Australian shipbuilder.

Australian shipbuilders under consideration are:
• Vickers Cockatoo Dockyard Pty Ltd;
• North Queensland Engineers and Agents Pty Ltd;
• Carrington Shipyard Pty Ltd in association with de Havilland Marine Ltd;
• Dillingham Shipyard (WA) Pty Ltd.

Project definition will provide costs for construction of 10 craft and options for up to a further five.
A View of Our Hydraulic Pipe Bender used on the Replacement of the sea Water Cooling System for HMAS Moresby using Copper-Nickel Alloy Piping and installed to the Exacting Revised RAN Specifications

We are PROUD to be associated with the refit of HMAS Moresby at Fremantle, WA, as Sub-Contractors to Dillingham Shipyards and take this opportunity to thank the staff of the PNO and personnel aboard HMAS Moresby for their valued assistance.

The principal objective of the Navy League of Australia is to stress the vital importance of Sea Power to the Commonwealth of Nations and the important role played by the Royal Australian Navy.

The League supports the Naval Reserve Cadets who are administered by the Royal Australian Navy, which Service provides technical training for boys who intend to serve in the Naval or Merchant Services, also to those sea-minded boys who do not intend to follow a sea career, but who given this knowledge will form a valuable reserve for the Naval Service.

We invite you to swell our ranks and so keep up to date with Maritime Affairs to help to build an ever-increasing weight of informed public opinion. The Navy League will then become widely known and exercise an important influence in the life of the Australian Nation.

The League consists of Fellows and Associates. All British subjects who support the objectives of the League are eligible for membership.

Members receive copies of the League's magazine "The Navy".

The principal objective of the Navy League of Australia is to stress the vital importance of Sea Power to the Commonwealth of Nations and the important role played by the Royal Australian Navy.

The League supports the Naval Reserve Cadets who are administered by the Royal Australian Navy, which Service provides technical training for boys who intend to serve in the Naval or Merchant Services, also to those sea-minded boys who do not intend to follow a sea career, but who given this knowledge will form a valuable reserve for the Naval Service.

We invite you to swell our ranks and so keep up to date with Maritime Affairs to help to build an ever-increasing weight of informed public opinion. The Navy League will then become widely known and exercise an important influence in the life of the Australian Nation.

The League consists of Fellows and Associates. All British subjects who support the objectives of the League are eligible for membership.

Members receive copies of the League's magazine "The Navy".

We invite you to swell our ranks and so keep up to date with Maritime Affairs to help to build an ever-increasing weight of informed public opinion. The Navy League will then become widely known and exercise an important influence in the life of the Australian Nation.

The League consists of Fellows and Associates. All British subjects who support the objectives of the League are eligible for membership.

Members receive copies of the League's magazine "The Navy".

We invite you to swell our ranks and so keep up to date with Maritime Affairs to help to build an ever-increasing weight of informed public opinion. The Navy League will then become widely known and exercise an important influence in the life of the Australian Nation.

The League consists of Fellows and Associates. All British subjects who support the objectives of the League are eligible for membership.

Members receive copies of the League's magazine "The Navy".

THE NAVY LEAGUE OF AUSTRALIA

Application for Membership

To: The Secretary, The Navy League of Australia, (Division).

Sir.

I am desirous of becoming a Member of the Navy League of Australia with whose objects I am in sympathy.

(Mr) (Mrs) (Miss) (Rank)

Please Print Clearly.

Street

Suburb

State

Postcode

Signature

Date

Enclosed is a remittance for $6.00 being my first annual subscription.

AFTER COMPLETION, THIS FORM SHOULD BE DISPACHTED TO YOUR DIVISIONAL SECRETARY.

NOTE LIST OF ADDRESSES ABOVE.

CONTRIBUTIONS INVITED

The editor invites petitions to submit illustrations, photographs and press cuttings related to naval and maritime matters and/or relevant content should be submitted with credit to contributors. See subscribe page for details.

The Editor does not accept any responsibility for material submitted by other contributors. Any return or damage is at the expense of the contributor.

May/June/July, 1976

THE NAVY

Page Fifteen
PRINCE CHARLES PIPPED ABOARD HIS FIRST COMMAND

Prince Charles is piped aboard HMAS BRONINGTON as the vessel's new captain — his first command — at the Rosyth Naval Base in Scotland. Bronington, a 360-ton Ton class mine-hunter, is part of the Royal Navy's 1st Mine Countermeasures Squadron based at Rosyth and will be mainly operating in northern British waters. She has a ship's company of four officers and 33 ratings.

The Prince, a lieutenant in the Royal Navy, is the first member of the Royal Family to command a Royal Naval vessel since 1950 when his father, the Duke of Edinburgh, was captain of the frigate MAGPIE in the Mediterranean Fleet.

He entered the Royal Navy in September 1971 after having served at the Royal Air Force College, Cranwell, where he obtained his wings, making a solo flight in a Jet Provost training aircraft and co-piloting a supersonic Phantom. His naval career has included an extensive period as a pilot in an operational helicopter squadron.

JOINT OPERATIONS SHIP — HMAS TOBRUK

The memory of the "Rats of Tobruk" and the men of the RAN who supported them will be perpetuated in the name of a new naval ship. HMAS TOBRUK, which is expected to join the Fleet in 1980, will be a joint operations ship capable of carrying several hundred soldiers, battle tanks, artillery, and other equipment.

The 6000-tonne ship is designed to operate in undeveloped areas with minimal or non-existent port facilities. It will unload by launching small and driving vehicles ashore through its bow doors, or by using its landing craft, helicopters, pontoons, or amphibious vehicles.

NEW CLASS OF FISHERY PROTECTION VESSEL FOR ROYAL NAVY

HMS KINGFISHER, the first of a new class of patrol vessel specially built for the Royal Navy, sets sail on her first fisheries protection patrol from Rosyth, Scotland. Her patrol will cover the North Sea and the English Channel areas.

The 120-foot long, 190-ton vessel will primarily operate in coastal regions, although eventually, Britain's North Sea oil rigs could also form part of her patrol. Three more vessels of the type — the Bird class — are being built for evaluation in fishery protection, the first ship specifically built for this role by the Royal Navy. Until now, fishery protection in coastal regions has been carried out by coastal mine sweepers.

The KINGFISHER is armed with a Bofors gun mounted aft and two machine guns on the bridge, and her speed is in the region of 20 to 24 knots.

LAUNCH OF BOFORS ROCKETS AND IKARA MISSILE FROM BRAZILIAN FRIGATE NITEROI

The Brazilian frigate NITEROI, first of four 3500-ton Vosper Thornycroft Mark 255 under construction at the company's Woolston, Southampton, shipyard, is now undergoing contractor's sea trials. Recently the armament of this ship, which is to the anti-submarine version of the Mark 10 design, was given trials on ranges in the English Channel, to prove that structure adjacent to the weapon launchers was not damaged by blast. The photographs show the launching of one of the Bofors 37-mm medium-range A/S rockets (left picture) and of an Ikara long-range A/G guided weapon (right picture).

SURVEILLANCE OF TAIWANESE FISHING VESSELS

A Royal Australian Navy Tracker aircraft on a fisheries surveillance patrol flies low over a Taiwanese fishing boat off the west Australian coast. The Trackers, which have been primarily concerned with monitoring the activities of Indonesian traditional fishermen off the north-west coast, have completed their task and left Broome to return to their base at Perth, on June 12, 1976. Increased patrols by RAAF long range maritime patrol aircraft, and RAN patrol boats will continue to provide surveillance of the large Taiwanese fishing fleet gathering off Western Australia.

Page Sixteen

THE NAVY

May/June/July, 1976

Page Seventeen
I wish to announce the Government’s decision to acquire two Guided Missile Frigates for the Royal Australian Navy. The ships will be procured from the United States Navy construction programme for Guided Missile Frigates. These ships were previously known as Patrol Frigates and are now called the “FFG-7, Oliver Hazard Perry Class”. The two ships will be in service by 1982.

The “sail-away” cost for the two ships as procured from the United States is $A195m in January 1976 prices. The total project investment cost, including helicopters, spares, test equipment, ammunition and so on, for the two ships has been estimated at $A330m in January 1976 prices.

Members will be aware that in our pre-election “Defence Policy” we said that we would give priority to a pre-election “Defence Policy” we said that the DDL programme can no longer be considered because of costs and prospective delays. It might be remembered that at the time of the Coalition Government’s approval in 1972 the DDL was to include essentially the same weapons and sensor capability as the then Patrol Frigate. There were some other unsatisfactory features in the design, which the DDL was commissioned to correct.

An invitation is extended to all yachting enthusiasts for inspection and demonstration of either PACIFIC 7 or SOUTHERLY 23.

May/June/July, 1976
Best Wishes to all Members of HMAS Cerberus from

Des Fidler

HASTINGS HOUSE OF FURNITURE

- Furniture
- Floor Coverings
- Electrical Goods

LARGE RANGE

Special attention given to all Navy Fund Loans

77 HIGH STREET
HASTINGS, VIC
Telephone: 79 1642

Navy has demonstrated that the ship will have the performance that it needs in service.

Substantial effort has been exerted by US and Australian authorities in developing an adequate level of Australian industry participation against an FFG purchase. Provided Australian industry is sufficiently competitive, there is a good prospect of Australian industry participation against the ship acquisition. In this regard we will be supported by the US Department of Defence and I have directed that my Department make every effort to increase the scope of participation.

The United States Navy FFG Programme consists of a lead ship (prototype) and a series of follow-ships. The lead ship was funded in the United States Budget for fiscal year 1973 and is now under construction. The first three follow-ships were funded in fiscal year 1975. The United States 1976 Defence Appropriation Bill which includes funds for a further six ships was signed by the President on February 9, 1976. In the proposed budget for fiscal year 1977 presented to Congress on January 21, 1976, the United States Department of Defence has sought funds for a further eight follow-ships. The total projected US programme is 70 ships including the lead ship.

The FFG Programme is in a very highly developed state with all weapon and ships systems thoroughly researched and tested at a very considerable expense. The fact that systems have been proved at sea prior even to the building of the lead ship is a strong assurance of the success of the programme. We are joining this programme on very advantageous conditions. Because it is a major United States Programme we will reap the benefit of concurrent procurement with the United States and the economics of scale.

In all, the Government is satisfied that the Navy's present needs for destroyer acquisition will be met by the procurement of the two Guided Missile Frigates and that they will prove adequate to enhance the Navy's destroyer force when they enter service. Whilst these ships
aims at achieving economies through prefabrication, and the US programme of hull and superstructure are constructed and running costs. The design of the FFG-7 class, both in terms of construction and running costs, is extremely difficult for a ship to be determined.

THE ROLE OF THE FFG-7 CLASS IN THE RAN

Although the FFG-7 class is scheduled to come into service about the time the RAN's present Daring-class destroyers are due to reach end of their useful lives, the new ships will not be intended simply to replace the older vessels represented by the Daring class. Ships VAMPIRE and VENDETTA are specialised gunnery ships, having six 4.5 inch guns each. The FFG-7 class ships are intended to enhance existing capabilities, such as area air defence, and to provide the RAN with ships having modern capabilities that does not possess in its present destroyer fleet—armed helicopters for surveillance and strike against suitable targets, and surface-to-surface missile capability. Both these capabilities mean that the ships can be used in a wide range of modern naval warfare roles, including patrol craft.
THE RAN’S BLACKEST DAY

April 12, 1924, has often been described as the RAN’s blackest day. On that day, the nation’s first capital ship, the Indefatigable class battle cruiser AUSTRALIA, was towed out of Sydney Harbour and ceremonially sunk in accordance with the principles of the Washington Naval Treaty of that year. Although only eleven years old, AUSTRALIA had not been included in the total of fifteen capital ships allowed to be retained by the Royal Navy under the Treaty, and as a result of this was listed for disposal.

Escorted by the cruisers MELBOURNE BRISBANE and ADELAIDE and the destroyers ANZAC and STALWART, AUSTRALIA headed out of Sydney on her last voyage a little after noon. At 2:30 pm the skeleton crew on board opened the sea-cocks and hurriedly joined the waiting ships boat of BRISBANE. Watched by live tonnes loaded with mourners, the AUSTRALIA, complete with her White Ensign and Australian Flag slowly sank to the bottom. Originally laid down in June 1910 by J Brown & Co Ltd, Clydebank, AUSTRALIA was launched on October 25, 1911, and completed in June 1913. After undergoing builders trials, AUSTRALIA left British waters and made for Sydney via the Suez Canal, arriving in Australia in September.

On October 4, 1913, she lead the new Australian Fleet into Sydney Harbour for the first time. This fleet included the cruisers ENCOUNTER, SYDNEY, and MELBOURNE, and the destroyers PARRAMATTA, YARRA, and WARREGO. Admiralty pressure was brought to bear on the Federal Government that the AUSTRALIA be transferred to the British Fleet since the vessel served no worthwhile part in Pacific defence. Arguments for and against the transfer were still being debated when war broke out on August 4, 1914.

Mr Winston Churchill, First Lord of the Admiralty, put forward plans that the RAN flagship be transferred to the Atlantic station, but continued local fears of the German armoured cruisers SCHARNHORST and GNEISENAU under Von Spee, led to AUSTRALIA being deployed to New Guinea waters. With Vice-Admiral Pataly in command, AUSTRALIA began the futile search for Von Spee’s Squadron. Joining up with the MELBOURNE, both ships sailed for New Caledonia, arriving on August 21, 1914. With the MONTCALM, an old French armoured cruiser, completed in 1904, the two Australian warships escorted a New Zealand Expeditionary Force to Samoa.

After returning to the search for Von Spee around Fiji, AUSTRALIA received orders to proceed to the North Sea. On her way to England in January 1915, she intercepted and sank the German ship ELENORE WORMANN off the Falkland Islands. Upon her arrival in English waters, she became Flagship of the 2nd Battlecruiser Squadron. A collision with her sister ship, NEW ZEALAND, in 1916, robbed the AUSTRALIA of her chance of participating in the Battle of Jutland. Experiments in handling aircraft were begun in 1917, and in December of that year, she successfully launched aircraft from her decks.

AUSTRALIA continued patrol duties in the North Sea, searching for enemy vessels until armistice was declared. With the SYDNEY and MELBOURNE, she attended the surrender of the German High Sea Fleet in the Firth of Forth on November 21, 1918, her task being the acceptance of surrender from the German Battlecruiser HINDENBURG. On June 15, 1919, she returned to Sydney and again became RAN Flagship until being paid off to reserve at the end of 1921. Of her sister ships, NEW ZEALAND, scrapped in 1922; served mainly with the Royal Navy, and INDEFATIGABLE was lost at Jutland due to a lack of armour protection.

STATISTICS

Displacement: 21,300 tons (full load)
Dimensions: 590’ x 80’ x 30’
Armament: 8 x 12”, 14 x 4”, 1 x 4”, 2 x 3”, 4 x 3 pdr, 5 x MG
Machinery: Parsons Turbines
Speed: 25 knots
Radius: 6300 miles at 10 knots
Complement: 820
HARRIER CARRIER PROPOSAL

A feasibility study carried out by Vosper Thornycroft in consultation with Hawker Siddley Aviation has resulted in the preparation of an outline design for a completely new type of warship, specifically of the size capable of acting as a base for the Sea Harrier V/STOL (vertical/short take-off and landing) aircraft. The ship is also suitable for carrying eight Sea King A/S helicopters, or a mix of helicopters and Harriers totalling eight aircraft.

The basic concept of the HARRIER CARRIER is that it should be the smallest and cheapest autonomous warship capable of making full use of the unique operational capabilities of the Sea Harrier aircraft. The ship is specifically designed for the Sea Harrier aircraft. The unique capabilities of the Harrier stem from its specially developed Pegasus engine which provides vectored thrust by rotating the four exhaust nozzles and from aircraft's control system which enables it to hover. The thrust can be directed vertically for vertical take-off and landing, horizontally for forward flight and laterally for horizontal flight at up to high subsonic speeds and in intermediate directions for short take-off runs. The Sea Harrier is being designed for use in the fighter reconnaissance and air-surface role.

The Royal Navy version is designated HARRIER CARRIER. This is a ship which has all the characteristics of a small warship with the advantages of an helicopter carrier. Its design will enable the Harrier to be used for the Navy's entire flying programme and to be operated in conjunction with short take-off aircraft. The design is based on the successful experience of the Sea Harrier and the small frigate model which has already been used to carry out the first operational trials of Harriers from flight decks. The Sea Harrier is capable of carrying air-to-air and anti-submarine warfare against a wide range of threats. The HARRIER CARRIER is being designed to provide a suitable environment for the operation of the Harrier aircraft in this role.

The ship has a displacement of about 6000 tons and is designed to operate at up to 25-30 knots in the range of 80-90 miles, and in many cases this would be an acceptable compromise. The HARRIER CARRIER would be capable of operating in company with small radar picket ships, which would give advance warnings of approaching air targets. The ship will be designed to operate with a complement of some 500 officers and men, and will have a hangar deck to accommodate eight Sea Harrier aircraft.

All design aspects of the HARRIER CARRIER have been carefully considered to ensure that the ship is capable of carrying out the full range of missions required. The layout of the ship is optimised to meet the requirements for Carriers flight deck aircraft and helicopters to be used for the Navy's entire flying programme and to be operated in conjunction with short take-off aircraft. The design is based on the successful experience of the Sea Harrier and the small frigate model which has already been used to carry out the first operational trials of Harriers from flight decks. The Sea Harrier is capable of carrying air-to-air and anti-submarine warfare against a wide range of threats. The HARRIER CARRIER is being designed to provide a suitable environment for the operation of the Harrier aircraft in this role.

The ship has a displacement of about 6000 tons and is designed to operate at up to 25-30 knots in the range of 80-90 miles, and in many cases this would be an acceptable compromise. The HARRIER CARRIER would be capable of operating in company with small radar picket ships, which would give advance warnings of approaching air targets. The ship will be designed to operate with a complement of some 500 officers and men, and will have a hangar deck to accommodate eight Sea Harrier aircraft.
The new equipment, designed to overcome the "Donald Duck" effect that an oxy-helium mixture has on a diver's speech, made its first public appearance at the Oceanology International '75 exhibition at Brighton during March, 1975.

DS034 supplements the successful Type 023 speech processor which has been tested in actual and simulated dives to 1500 feet and incorporates a number of new features making it especially attractive to the offshore oil and gas market as well as for naval applications throughout the world.

Up to four divers can be connected to one of the new processors which can be used for inter-diver, diver-to-surface and surface-to-diver communications. The processor can be operated in either the simplex or duplex modes dependent on the type of diver-"umbilical" link. An effective loudspeaker or headset can be used for monitoring communications and facilities for tape-recording are also available.

To ensure maximum clarity of speech at all times the equipment is fitted with adjustable voice expansion control. This control is used to match the voice expansion ratio to the oxygen-helium mixture. A switch is provided to override the ratio control which, when operated, will revert the processor to the ratio of 1:1 to give normal intercom facilities. A new "fail-safe" power supply system is incorporated in the DS034 processor if the mains supply fails the DS034 automatically switches to its internal battery supply to maintain standby operation.

The DS034 processor and simplex or duplex switch routes the processed speech back to the diver's earpiece or, in the simplex mode, to one of the new processors which can be used for inter-diver, diver-to-surface and surface-to-diver communications.

The equipment can be used in its own free-standing, sealed-lead acid battery housing or mounted in a standard 483mm (19") rack. All controls, inputs and outputs are arranged on the top panel. A junction box connected to the output socket on this panel carries outlets for up to four divers. The mains supply is backed up by a float-charged nickel cadmium battery ensuring ten hours operation in the event of mains failure. Safety locks in the control switches safeguard divers and operators from high voltage. The diver link can be switched to two wire simplex or four wire duplex. In the simplex mode the two wire link is changed from "up only" to "down only" by the operator's pressel. In the duplex mode the four wire link routes the processed speech back down to the diver's earpiece to enable the unit to be used as a diver-to-diver intercom when the operator's pressel is not in use.

An expansion control ranging from 1:1 to 3.5:1 is provided and an expansion switch which, in the off position, sets expansion to 1:1 without disturbing the dial setting. An internal/external speaker switch routes the processed speech to an internal or external speaker without disturbing the path to the operator's earpiece or, in the duplex receive mode, to the diver's earpiece.

Auxiliary input socket wiring can be used to parallel two divers at the processor terminals or can be used to connect a tape recorder into the system. The on-off switch consists of two separate switches mechanically linked to switch off the ac supply and isolated dc supply separately to prevent ac high voltage from hazards to the diver. The equipment operates from a 240v or 115v 48-65Hz supply.
New Anti-Fouling Underwater Paints
Saving Time and Money

A successful long-term programme to develop and evaluate anti-fouling underwater paints to meet the particular problems of Australian conditions has resulted in the saving of thousands of dollars in recent years.

The programme has meant the time at sea between expensive dry docking periods can be lengthened.

The Navy, the Australian paint industry, the CSIRO and particularly the Defence Standards Laboratories have developed jointly an oleo-resinous paint system which — when used in conjunction with an anti-corrosive primer — extends the fouling-free life of ships' hulls by preventing the early attachment and growth of marine organisms such as barnacles.

Further research is expected to produce improved coating systems which will extend the fouling-free life of ships to meet a proposed three year interval between dry dockings.

The Department of Defence has established and operates a paint immersion and testing facility at Garden Island Dockyard in Sydney. Another facility is at Innisfail, Queensland, at the Joint Tropical Research Unit which is administered by the Department of Supply and the UK Ministry of Defence. A reciprocal testing programme is also current at these two sites with US Naval paint systems while other navies have been invited to participate in this work.

The Commonwealth Paint Committee through the verification testing of the Naval Paint Laboratory at Garden Island Dockyard controls the establishment of underwater paint standards and has a useful role in maintaining the quality of all paints used for anti-fouling application in the RAN.

THE NAVY LEAGUE OF AUSTRALIA
(NEW SOUTH WALES DIVISION)

Annual General Meeting

Notice is hereby given that the Annual General Meeting of the Navy League of Australia (New South Wales Division) will be held at 5.30 pm, Monday, 30th August, 1976, in the Conference Room, 2nd Floor, P & O Australia Limited, P & O Building, 55 Hunter Street, Sydney (access by way of Castlereagh Street entrance).

BUSINESS

1. Apologies.
2. Confirmation of Minutes of Annual General Meeting held 29th August, 1975.
3. To receive the Committee's Annual Report — presented by the President, Lieutenant Commander E. Bryden-Brown, VRD, RANR.
4. To receive the Balance Sheet and Accounts — presented by Mr R. I. Rae, FCA, Honorary Treasurer.
5. Election of Executive Committee —
   The following gentlemen offer themselves for re-election:
   Lieutenant Commander E. Bryden-Brown
   Commander R. O. Albert
   Rear Admiral G. J. B. Crabb
   Mr D. P. Trickett
   Commander Keith Adams
   Mr Malcolm Longstaff
   Mr A. R. Webber
   Mr M. McCullagh
   Commander R. A. Denovan
   (FURTHER NOMINATIONS WILL BE RECEIVED)
6. Future of the Naval Reserve Cadets and the role of the Navy League — remarks by the President, Lieutenant Commander E. Bryden-Brown.
7. Question time.
8. General Business.

AT THE CONCLUSION OF FORMAL BUSINESS, LIGHT REFRESHMENTS WILL BE SERVED

Box 1719,
GPO Sydney.
NSW 2001

Dennis P. Trickett,
Honorary Secretary.
30th July, 1976
B. F. GOODRICH AUSTRALIA LTD
144 Camberwell Road, East Hawthorn — 82 8261
“Sales and Service”

ABBOTSFORD: B. & T. Tyres. 70 Nicholson Street — 419 3120
ALTONA: Complete Tyre Service Pty Ltd, 86 Millers Rd — 314 8613
AIRPORT WEST: Eddie’s Tyre Service, Cnr Moore Rd and Harper St — 338 1255
ASCOT VALE: Jax Tyres (Vic) Pty Ltd, Cnr Mt Alexander and Ormond Rds — 37 8781
BAYSWATER: Joseph Brians Tyre Service, 40 Bay St — 729 3231
CARLTON: Doran’s Tyre Service Pty Ltd, Cnr Nicholson and Elgin Sts — 347 8366
CHELTENHAM: M. S. McLeod Ltd, 1297 Nepean Hwy — 550 1133
CITY: Akron Tyre Co Pty Ltd, 472 Elizabeth St — 347 3111
CITY: Ensign Tyre Stores, 740 Elizabeth St — 347 7155
COBURG: Complete Tyre Service Pty Ltd, 717 Sydney Rd — 35 7753
COLLINGWOOD: Murray’s Tyre Service, 124 Johnston St — 41 5527, 41 2954
CROYDON: Ensign Tyre Stores, 184 Mt Dandenong Rd — 723 0381
DANDENONG: M. S. McLeod Ltd, 182 Dandenong Rd — 791 8255
EAST BENTLEIGH: Regal Tyre Service Pty Ltd, 250 East Boundary Rd — 579 1781
EAST HAWTHORN: B. F. Goodrich Australia Ltd, 144 Camberwell Rd — 82 2243, 82 2293
     82 2309, 82 2359
EAST MALVERN: Cost Tyre Service, 851 Dandenong Rd — 211 3658
ELSTERWICK: M. S. McLeod Ltd, 42 Glen Eira Rd — 53 4388
FERNTREE GULLY: Select Tyre Service Pty Ltd, 28 Burwood Hwy — 758 3644
FRANKSTON: Frankston Tyre Service, 41 Beach St — 783 2427
FRANKSTON: Southern Tyre Service, 26 Overton Rd — 783 5231
GLEN WAVERLEY: Waverley Tyre Service Pty Ltd, 338 Springvale Rd — 560 7003
HAWTHORN: Malvern Tyre Service Pty Ltd, 705 Burwood Rd — 82 2355
HUNTINGDALE: Monash Tyre Service Pty Ltd, 1295 North Rd — 544 4735
KEW: Rex Tyre & Auto Services Pty Ltd, 110 Denmark St — 86 8856
MITCHAM: Safeway Wholesalers, 12 Thornton Cr — 874 7454
MOORABBIN: Duncan’s Tyre Service, 831 Nepean Hwy — 97 2881
NORTHCOTE: Northcote Tyre Service, 386 High St — 48 5156
NORTH MELBOURNE: Kevin Donnellan Performance Tyres, 1 Errol St — 32 8369
NORTH RICHMOND: Collingwood Tyre Service Pty Ltd, 3 Hoddle St — 41 7665
PRAHRAN: Ensign Tyre Stores, 434 Chapel St — 24 7812
PRESTON: Ensign Tyre Stores, 865 High St — 478 2830
RICHMOND: Jax Tyres (Vic) Pty Ltd, 132 Burnley St — 42 7084
RINGWOOD: Jax Tyres (Vic) Pty Ltd, 49 New St — 870 3406
     Mackey’s Tyre Service Pty Ltd, 67 Maroondah Hwy — 870 0699
SPRINGVALE: Monash Tyre Service (Springvale) Pty Ltd, 192 Springvale Rd — 546 8033
SUNSHINE: Complete Tyre Service Pty Ltd, Sun Cr — 311 5120
WEST MELBOURNE: M. S. McLeod Ltd, Old Footscray Rd — 68 2294
WERRIBEE: Werribee Tyre Service, 7 Bridge St — 741 3215
Experience is our strength

... a strength developed through 25 years of designing, testing and building aluminium boats for work and pleasure, from 9 ft dinghies to 50 ft cruisers. As one of the largest boat manufacturers in the Southern Hemisphere, we have developed a series of proven hulls that can be powered and fitted to solve your water transport problems. For more information contact our office or franchised dealer.

de Havilland Marine - big in aluminium boats.

de Havilland MARINE

DIVISION OF HAWKER DE HAVILLAND AUSTRALIA PTY LIMITED

Head Office: Milperra Road, Bankstown, N.S.W. 2200, Australia. Phone: 77 0111.