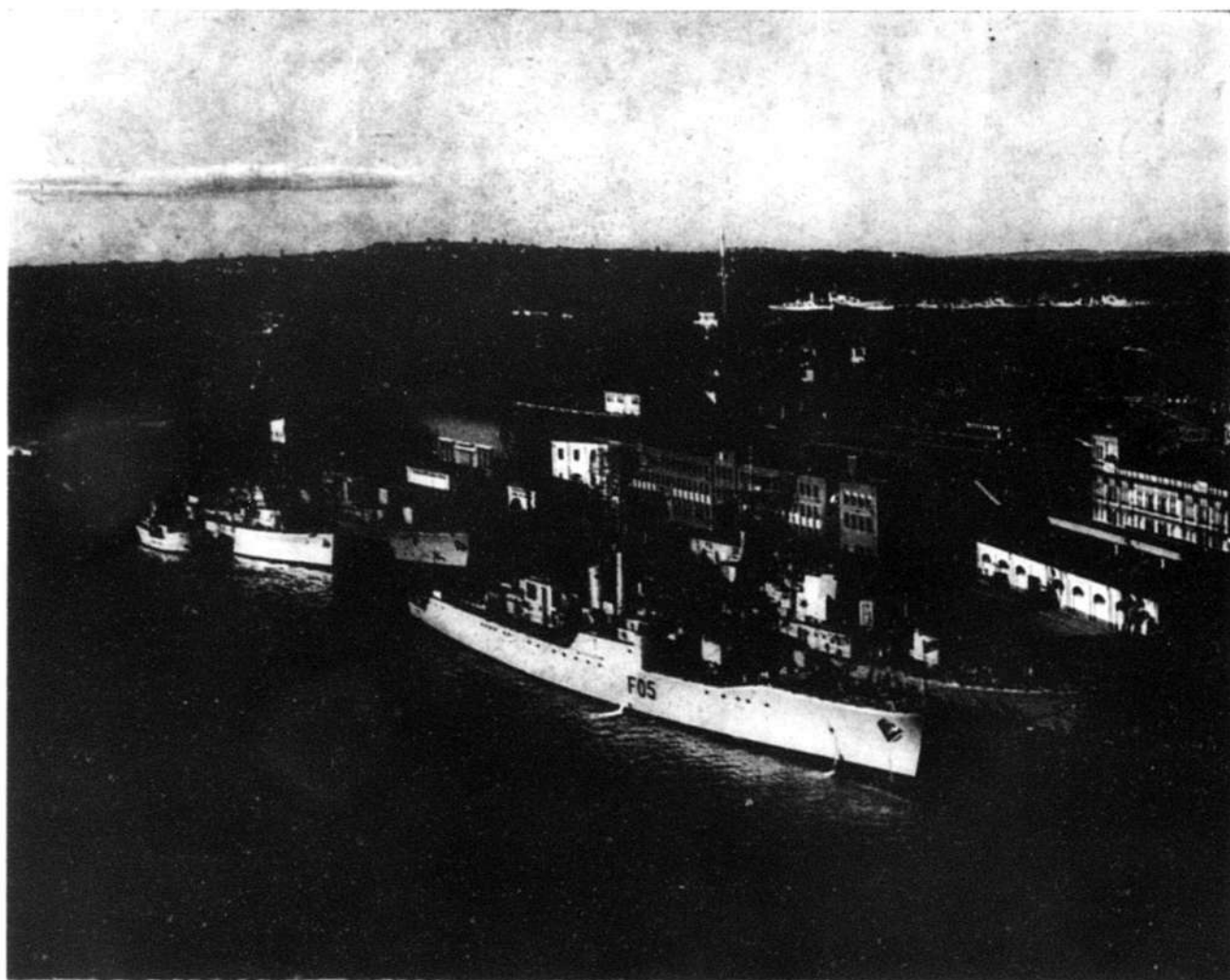


THE ^{359 Na} Navy

SEPTEMBER - OCTOBER, 1963

NAVY WEEK ISSUE



INCLUDING PROGRAMME of OPEN DAYS at

H.M.A.S. "WATSON"

7th OCTOBER, 1963

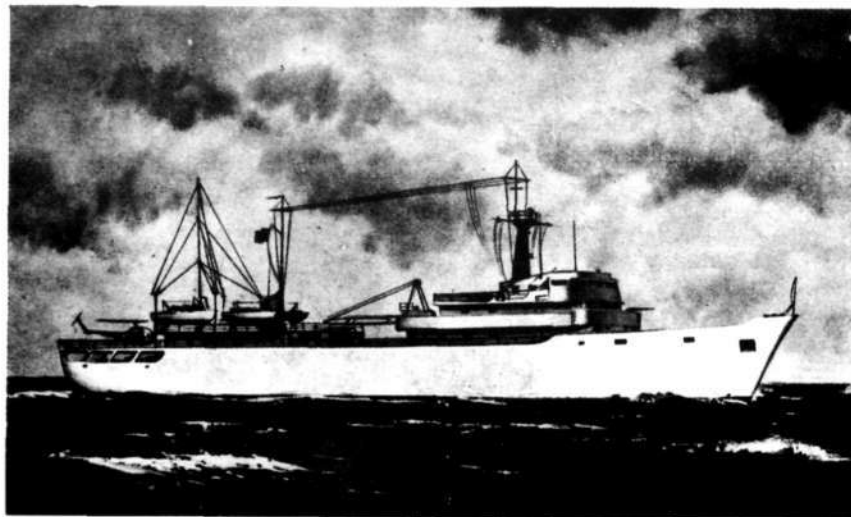
H.M.A. NAVAL ESTABLISHMENTS, GARDEN ISLAND

12th OCTOBER, 1963

2/-

5,000 s.h.p.

machinery for the new
HYDROGRAPHIC SURVEY VESSEL



Artist's impression of the R.A.N. Hydrographic Survey Vessel, H.M.A.S. "Moresby".

... for the Royal Australian Navy
is **diesel-electric**
by **'ENGLISH ELECTRIC'**

Over 55,000 s.h.p. of 'ENGLISH ELECTRIC' main propulsion and auxiliary marine installations are in service or on order for the Royal Australian Navy. 'ENGLISH ELECTRIC' offer complete turnkey contracts for complete installations, including auxiliary generating sets and all associated engineering equipment.

BATTLE OF THE NILE

Master's Medal

The medal reproduced here by courtesy of Mr. Kenneth C. Bruff Macdonnell, of Sydney, grandson of Mr. Bruff, Master of one of Nelson's ships, "Orion," at the Battle of the Nile, has come down to Mr. Macdonnell as a family legacy.

"Orion" carried 74 guns with a complement of 500 men and was commanded by Captain Sir James Saumarez, of Norman descent but born in the Island of Guernsey. A distinguished naval officer, he was a member of Nelson's Band of Brothers.

A commemorative victory medal in gold to Admirals and Captains engaged in naval actions was not exceptional, but the gift after the



Battle of the Nile of gold medals to Admirals and Captains, silver to Lieutenants and Officers ranking with them, copper - gilt to inferior officers and copper - bronze to the men by a private individual, Mr. Alexander Davison, an intimate friend of Nelson's, was exceptional. Mr. Davison was, in this case, agent for sale of the prizes. The device is remarkable in another way; the engraver is said to have made the mistake, on the reverse side, of showing the French Fleet at anchor with the British Fleet advancing to the attack and the sun setting in the East. The figure supporting Nelson's profile on the face of the medal is that of Hope.

This page is sponsored, in support of the Navy League of Australia, by

COUPLAND & WADDELL PTY. LTD.

Electrical & Mechanical Engineers

15-23 Day Street, Sydney

SEPTEMBER-OCTOBER, 1963



recognise her?



The outboard we mean!

If you can tear your eyes away from our shapely friend, you'll recognise the deluxe 40 h.p. PERKINS—glamour queen of the exciting new range of PERKINS outboard motors.

For those who are interested in vital statistics (and aren't we all?) here's how she measures up.

A "whisper-quiet" motor featuring a specially designed, downward-directed silencing system that gives her the purring qualities of a sewing machine.

... poppet valves exclusive to Perkins provide greater acceleration and outstanding fuel economy.

she has a combined push-button starter and choke and a battery-charging magneto alternator at no extra cost.

Yes, Perkins is the go-ahead outboard for 1963

— the outboard with the international reputation

— the outboard that leaves the competition wallowing in its wake

— the outboard that leads in marine engineering, dependability, economy and ease of starting—four good reasons for owning Perkins—apart from the fun you'll have.

And you can choose the power you

prefer—there's the superb 30 h.p., the versatile 18 h.p., the popular 6.5 h.p. and the lively 4.5 h.p.

Contact your local Perkins dealer or write direct to:

F. Perkins (Australia) Pty. Ltd.
Princes Hwy., Dandenong, Vic. Phone Dand. 2 0431

Branch Offices:
N.S.W.: 6 Chalder Ave., Marrickville, LA 8206
12 Water St. East, 5th, Brisbane, 4-4668
Q.L.D.: 793 Hay St., Perth, 23-2495

Distributors and dealers in all States

PERKINS

THE GO-AHEAD OUTBOARD

his friends call him "Lucky"...



Big Jim has the reputation all right. Never has to tell about the "one that got away," but seems to haul in a beauty every time he wets his line. That's luck if you like... or is it? Could be Jim's just a born fisherman with a keen nose for fish. Certainly luck plays no part in his daily work. Jim's a Bell's man—working with cold hard facts, figures and experience to make his contribution to industry and progress. If "Lady Luck" should happen along during the week, she's welcome because that simply means getting the answer to a problem faster. But, by and large, the vast Bell's organisation pays no attention to luck. We rely on "know-how"... on research... on the latest technological advances... on the wide experience of our many internationally-known associates in providing Australian industry with over 420 products and services... and to carry out such assignments as the design and layout of complete boiler house instrumentation, including Smoke Density Measuring and Controlling equipment, with full technical services available for steam trapping, air venting and thermostatic controls. We're as near as your phone and we'd be truly pleased to help you.



BELL'S

ASBESTOS AND
ENGINEERING
(AUSTRALIA) LTD.

Sydney, Melbourne, Perth, Brisbane, Adelaide, Townsville,
Kalgoorlie, Newcastle, Darwin, Hobart, Launceston, Burnie.

life at sea

is a good life, better than ever before, and in the Merchant Navy, more modern ships are appearing on the Australian Register each year.

In addition to operating its own fleet of cargo vessels, the B.H.P. Co. Ltd. has Australia's largest shipbuilding yard at Whyalla, thereby providing employment for a wide variety of trades and professions . . . producing the steel, building the ships, then sailing them, surely a wide-spread and vital national project.



THE BROKEN HILL PROPRIETARY CO. LTD.

The Navy-An Investment In Tomorrow

By the Minister for the Navy,

Senator The Hon. J. G. Gorton.

Do we really need a Navy? Are we getting our money's worth? I am sure that anyone posing such questions will find an affirmative answer by taking advantage of the open days at Naval establishments during "Navy Week".

However, I would like to take this opportunity briefly to examine both these questions.

Australia's geographical remoteness, and her absolute reliance on the sea, can leave no doubt about the need for a Navy. In time of war, the protection of the R.A.N. would be essential for the survival of a nation dependent on the sea for 99 per cent of her overseas supplies. Also, few troops and little equipment could be expected to arrive safely in overseas battle areas without a Navy escort.

As to value for money, the R.A.N. to-day is a highly-trained, mobile force, with a well-equipped Combat Fleet. This front-line force is made up of modern fighting ships, ranging from the aircraft carrier, H.M.A.S. MELBOURNE, to a squadron of some of the world's most advanced anti-submarine frigates.

Ships of the Combat Fleet are ready to go anywhere, anytime. Every hour of every day you can be certain that somewhere an R.A.N. warship is ensuring that it would be ready to meet the challenge.

In addition to the regular training programmes in Australian waters, the R.A.N. exercises with its SEATO allies. As much as half of the Combat Fleet is sometimes to be found on duty in South East Asia.

In peacetime, the R.A.N. makes a positive and significant contribution to Australia's national development through its hydrographic and oceanographic programmes. Development of new ports and new industries depends on the charts produced by the Navy's survey ships. Oceanography, meanwhile, is revealing the resources of the ocean.

NEW STRENGTH

This year has seen an important addition to Australia's anti-submarine arsenal with the commissioning of the Fleet Air Arm's first front-line squadron of "hunter-killer" helicopters. Also in the anti-submarine field, Australia is attracting world-wide interest with its new Ikara missile system.

This revolutionary anti-submarine missile, developed by scientists of the Department of Supply and the Royal Australian Navy, will also be installed in the R.A.N.'s new generation of destroyers.

The first of these Charles F. Adams Class destroyers, H.M.A.S. PERTH, was launched in the United States on September 26. We have already ordered three of these formidable, missile-aged warships, and two will be commissioned in 1965.

Training has begun this year for our own submarine squadron, and more support ships, such as an Escort Maintenance Vessel, will increase still further the mobility and self-sufficiency of the Australian Fleet.

Australians can rest assured that to-day's Navy, and the Navy of to-morrow, are the best that available money can buy.

Your Navy is an investment in the future — an insurance policy for a maritime nation.

SEPTEMBER-OCTOBER, 1963





Who put the cat in the cat-cracker?

This is hardly the right kind of cat for a cat-cracker — a cat-cracker being an important piece of oil refinery plant for making better petrol. The word "cat" is short for catalyst, a material which "cracks" heavy molecules and produces a petrol of high anti-knock quality.

Shell, as a rule, use an aluminium "cat" in the form of very fine powder like talc — tons of it—and out of Shell's cat-crackers come highly refined, super-charged ingredients which help make Super Shell the crack-a-jack petrol it is.

It's got to be good to be Shell



QC6349FF

THE NAVY

THE NAVY

Vol. 26

SEPT.-OCT., 1963

No. 4

The Official Organ of the Navy League of Australia

CONTENTS

| | Page |
|--|------|
| MESSAGE BY THE MINISTER FOR NAVY | 5 |
| MESSAGE FROM REAR-ADMIRAL GATACRE, B.E., D.S.O., D.S.C. AND BAR | 9 |
| THE NAVY'S NEW "HUNTER-KILLERS" | 11 |
| GOOD MEN — WELL TRAINED | 19 |
| OFFICERS IN THE MAKING | 20 |
| ROYAL AUSTRALIAN NAVAL COLLEGE | 21 |
| H.M.A.S. WATSON — OPEN DAY | 22 |
| LOCATION OF INSTALLATIONS | 23 |
| DISPLAY AT GARDEN ISLAND | 25 |
| NEW SHIPS FOR R.A.N. | 29 |
| SMOOTHER BIGHT PASSAGE | 35 |
| GUIDED MISSILE FOR R.A.N. | 41 |

Plus Sundry Stories and Photographs of H.M.A. Ships

Published by the Navy League of Australia

66 Clarence Street, Sydney, MA 8784. Postal Address, Box 3850, G.P.O.

Printed by Jno. Evans & Son Printing Co. Pty. Ltd., 486 Kent Street, Sydney. Phone: MA 2674.

THE NAVY LEAGUE OF AUSTRALIA

PATRON:

The Governor-General, His Excellency The Right Honourable Viscount De Lisle, V.C., P.C., G.C.M.G., G.C.V.O., Kt. of St. J.

FEDERAL COUNCIL:

President: Rear Admiral H. A. Showers, C.B.E.
Deputy President: Lieut. Cdr. J. B. Howse, V.R.D., R.A.N.V.R.
Secretary: Lieutenant L. Mackay-Cruise, R.A.N.R.

Queensland Division:

Patron: His Excellency, The Governor of Queensland,
President: Cdr. N. S. Pitley, M.B.E., V.R.D., R.A.N.R. (Retd.).
Hon. Sec.: G. B. O'Neill, Esq., Box 376E, G.P.O., Brisbane.

South Australian Division:

Patron: His Excellency, The Governor of South Australia.
President: F. N. Dunn.
Hon. Sec.: R. R. Sutton, Esq., 30 Pirie Street, Adelaide.

Tasmanian Division:

Patron: Vice Admiral Sir Guy Wyatt, K.B.E., C.B., R.N.
President: Cdr. A. H. Green, O.B.E., D.S.C., R.A.N. (Retd.).
Hon. Sec.: Lt.-Cmdr. J. C. Mahon, R.A.N.R., 11 Quorn Street, Sandy Bay, Hobart, Tas.

New South Wales Division:

Patron: His Excellency, The Governor of New South Wales.
President: Rear Admiral H. A. Showers, C.B.E.
Secretary: Lieut. Cdr. A. A. Andrews, M.B.E., R.A.N., 28 Royal Street, Chatswood, Sydney.

Australian Capital Territory Division:

President: Lt. Cdr. J. B. Howse, V.R.D., R.A.N.V.R.
Hon. Sec.: Lieut. Cdr. D. M. Blake, R.A.N.V.R., 60 Limestone Avenue, Ainslie, A.C.T.

Victorian Division:

Patron: His Excellency, The Governor of Victoria.
President: Captain A. N. Boulton.
Secretary: Miss E. C. Shortlocks, 528 Collins Street, Melbourne.

Northern Territory Division:

Patron: His Honour the Administrator.
President: O. J. Cameron, Esq.
Hon. Sec.: Mrs. V. M. Slide, c/o H.M.A.S. "Melville", Darwin, N.T.

Western Australian Division:

Patron: His Excellency, The Governor of Western Australia.
President: Roland Smith, Esq.
Hon. Sec.: R. A. Hannah, Esq., 182 Coode Street, Como, W.A.

AUSTRALIAN SEA CADET COUNCIL:

Navy League:
Rear Admiral H. A. Showers, C.B.E.
Lieut. Cdr. J. B. Howse, V.R.D., R.A.N.V.R.

Representatives of the Naval Board:
Director of Naval Reserves, Captain R. J. Robertson, D.S.C., R.A.N.;
Lieut. Cdr. E. D. Sandberg, R.A.N.

A Representative from each Navy League Division, also—
S.C. Cdr. L. E. Forsythe.
Lieut. Cdr. F. G. Evans, R.A.N.V.R.
Hon. Sec.: Lieutenant L. Mackay-Cruise, R.A.N.R.

SEPTEMBER-OCTOBER, 1963

7

A Company of the Vickers Group

★
**COCKATOO DOCKS &
ENGINEERING CO. PTY. LTD.**
★

Builders of Many of the Navy's Finest Fighting Ships

COCKATOO ISLAND, SYDNEY

TELEGRAPHIC ADDRESS: CODOCK

TELEPHONE: 82-0661

to sunny SOUTH AFRICA . . . or on to ENGLAND



Southern Cross & Northern Star

One Class travel in air-conditioned comfort with the latest in amenities.

- Every Cabin Air-conditioned
- Swimming Pools and Lido
- Tavern Night Club
- Large Sports Areas
- Children's Playrooms
- Elevators
- Orchestra
- Stabilizers

Single Fares to South Africa from £A111
Single Fares to England from £A188

Particulars from Authorised A.P.A.C. Travel Agents or

SHAW SAVILL LINE

8A CASTLEREAGH ST., SYDNEY. 'Phone 28 1828

THE NAVY

WELCOME -

MESSAGE FROM REAR ADMIRAL GALTFRY

GATACRE, C.B.E., D.S.O., D.S.C. AND BAR, FLAG

OFFICER IN CHARGE, EAST AUSTRALIA AREA



It is customary for the Navy to invite you, at this time every year, to see some of its Sydney shore establishments, some of its ships, and some of its activities.

You are indeed most welcome this year to H.M.A.S. WATSON, and to Garden Island.

In H.M.A.S. WATSON'S "open day" on Monday, 7th October, you will see a largely modern naval establishment which provides for training in anti-submarine, radar, navigation and aircraft direction, and naval cookery. The Naval Chapel on the cliff overlooking the entrance to Sydney Harbour has remarkable novelty and delight.

During the week 7th-12th October the massed bands of the R.A.N. will give several recitals and concerts, and will participate in the Waratah procession. We are sure you will share our great pride in our bands. They have performed with much distinction in many parts of the world.

Garden Island will be opened for your inspection on Saturday afternoon, 12th October. What was once an island off Potts Point is no longer an island, but is joined to Potts Point by the Captain Cook Graving Dock

and surrounding reclamation. We call the whole area — the former island and the wartime reclamation — Garden Island. It is a naval base complex consisting of the largest naval dockyard in the Southern Hemisphere, various alongside berths for ships, a hydrographic office which produces charts embodying the work of our busy survey ships, naval stores and stores accounting, the Area Superintending Accountant and his important organisation, a sick-bay, a dental surgery, a chapel, a signal station, and so on. The establishments on Garden Island largely provide the maintenance and logistic support needed by our seagoing ships to keep them at sea and in good shape. During your visit to Garden Island, various demonstrations by ships, submarine, helicopters, divers and firefighters will be given for you.

Rear-Admiral McNicol has invited you to inspect his flagship, H.M.A.S. MELBOURNE, which will be in dry dock. This aircraft carrier is small and of very limited capability compared with the modern carriers in some other navies. Even so, she is a most valuable part of Australia's defence posture. You will find MELBOURNE is virtually a mobile township with its own air base.

She has all the components of a township — accommodation, stores dealing with hardware, clothing, victuals, school, church, hospital, bank, post office, and even gaol cell! She has her air-base, facilities for aircraft repair and maintenance, control for operation of aircraft, assisted by modern radar and meteorological forecasting aids. This modern air-base has the mobility and the freedom of operation conferred by the seas and oceans in which she operates. It would take hundreds of fixed air-bases ashore to match the geographic coverage which an aircraft carrier's mobility affords; aircraft carriers do not have a fixed address at which long-range missiles can be aimed.

The afternoon in the Dockyard will feature also a ceremonial performance of hauling down the colours at sunset. This moving ceremony and expert performance by the massed bands will start at 3.45 p.m., and should not be missed.

It is our sincere hope that you will enjoy your visit with us, that you will approve of the arrangements we have made to welcome and to interest you, and that you will judge from your experience that your Navy is worthy of your confidence and support.

SEPTEMBER-OCTOBER, 1963

REGULAR SAILINGS
FOR . . .
UNITED KINGDOM
AND THE
CONTINENT

. . . taking wool,
refrigerated and general
cargo.
Excellent accommodation
for limited number of
saloon passengers.



For further particulars contact:

PORT LINE LTD.

(INC. IN ENG.)

50 YOUNG STREET, SYDNEY. 27 5301



OR AGENTS:

GIBBS BRIGHT & CO. PTY. LTD. (INC. in Vic.), 15 Hamilton St., Sydney. 2 0548
Also at Brisbane, Melbourne, Adelaide, Fremantle, Hobart and Newcastle
A. G. WEBSTER & WOOLGROWERS LTD., Launceston
THE AUSTRALIAN ESTATES CO. LTD., Rockhampton
ASSOCIATED SHIPPING AGENCIES PTY. LTD., Townsville

J. S. COULTHART & SON

(Proprietor, D. COULTHART)

BUILDERS AND CONTRACTORS

Specialising in

ALL TYPES BUILDING CONSTRUCTION
COMMERCIAL — INDUSTRIAL — DOMESTIC

Contractors to the Royal Australian Navy

60 JERVIS STREET, NOWRA

Telephone: Nowra 22528

THE NAVY'S NEW "HUNTER-KILLERS"

Anti-Submarine Helicopters Successful in First Exercise



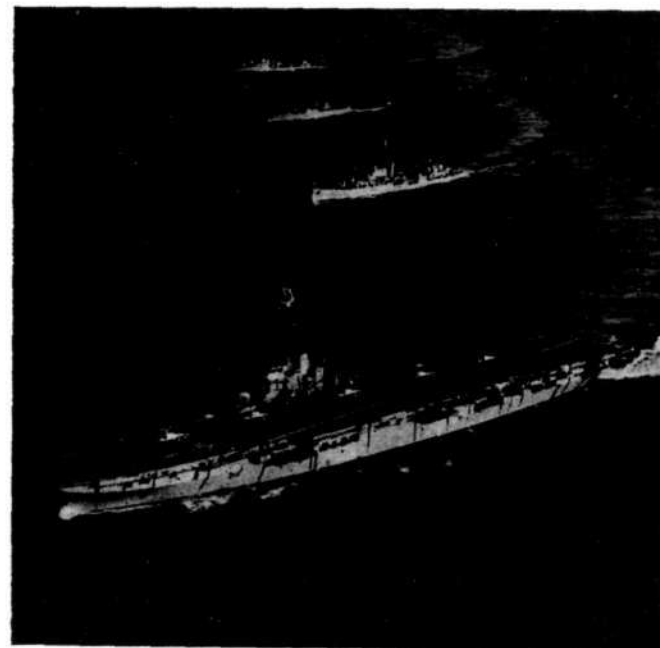
**COMBINED
EXERCISE
"CARBINE"**

Above: Preparing for a sortie during Exercise "Carbine," members of a helicopter crew are briefed by the Commanding Officer of the new Front-Line "hunter-killer" Squadron, Commander George McC. Jude, of Melbourne.

The Royal Australian Navy has begun a new chapter in anti-submarine warfare.

The helicopter, which has emerged as one of the most successful weapons against the modern submarine, is now in operational service with the Fleet Air Arm, and is an integral part of the R.A.N.'s anti-submarine force.

The Navy's new front-line squadron of "hunter-killer" helicopters, embarked in the carrier H.M.A.S. MELBOURNE, has just completed its first comprehensive test in realistic operational conditions. The heli-



Right: H.M.A.S. MELBOURNE (nearest the camera) the N.Z. cruiser ROYALIST, the frigate PARRAMATTA and the destroyer ANZAC.

SEPTEMBER-OCTOBER, 1963



**Just as in NELSON'S Day,
Rum is a Navy Tradition!**



**A TRADITION WORTHY OF
ONLY THE BEST**

OLD COLONIAL

**UPHOLDS THE NAVY'S
STANDARDS WITH A FINE
BLEND OF SMOOTH,
WARMING, AND SATISFY-
ING RUM**

**TALLERMAN & CO. PTY. LTD.
60 YORK STREET, SYDNEY — BX 3411**

WATSON CRANE PTY. LIMITED

- **MANUFACTURERS AND DISTRIBUTORS OF**
All Standard and Special Brassware Fittings, including the "WATCRANE" Spring Cock, for the Plumber and Hot Water Engineer.
- **SUPPLIERS of**
Full range of Gunmetal, Cast Iron and Steel Valves for Water, Air, Oil and Steam; Baths, Basins, Lowdown Suites, Heaters and "IDEAL" Hot Water Boilers.
- **ELECTROPLATING SPECIALISTS in**
Chrome, Silver, Nickel, Cadmium and Tin.
- **FOUNDERS of**
Non-ferrous Castings and Hot Pressings, etc., in Brass, Gunmetal, Phosphor Bronze, Aluminium Alloys.
- **DIE MAKERS**

WORKS AND FOUNDRY:
Fairfield Street, Villawood, N.S.W. 'Phone: 07-7171

WAREHOUSE:
1037-1047 Bourke Street, Waterloo, N.S.W. 'Phone: 69-5761

copters played a major part in escorting the troop carrier, H.M.A.S. SYDNEY, from Brisbane to Hervey Bay in the recent joint services maritime exercise, "Carbine".

The exercise was an opportunity for all concerned to adjust themselves to the new role of the helicopter in the Fleet Air Arm.

"Carbine" proved a rugged first test for the Wessex helicopters. Storms, rain and high winds were a challenge to the all-weather capabilities of the machines.

Despite the weather, the helicopters maintained constant sorties. Using their "dunking" sonar, they made many contacts with the lurking submarines.

Choppers' Role

Flying in relays from the carrier the helicopters make an important contribution to the protection of a convoy. They can virtually take the place of a frigate or a destroyer in the convoy's anti-submarine screen.

The helicopters normally work closely with the warships below, and are in direct voice contact with them. The hovering "hunter-killers" are often assigned to work with individual ships in the submarine screen.

Hovering above the sea, the helicopter lowers its sonar equipment into the water to search for the submarine. It is not just a listening device, but an active detector, sending out probing signals that can seek out even the modern, silent submarine.

A "dip" of about four minutes is usually enough, and then the "chopper" is off to a new position in a carefully-defined search pattern.

As well as operating with warships in the submarine screen,

**Right: A/S Helicopters over
H.M.A.S. MELBOURNE.**



SEPTEMBER-OCTOBER, 1963

AUSTER AEROPLANES

All Models Available
ex stock

Service, Overhauls and Spare Parts
available at Attractive Prices.

AUSTERSERVE PTY. LIMITED

P.O. BOX 11, BANKSTOWN, N.S.W.

Telephone: 70-1242

Blue Star Line

Regular sailings of fast and modern ships
to the United Kingdom, Continental and
East Coast North American ports taking
Wool, General and Refrigerated Cargo.
First-class accommodation for a limited
number of passengers.



Full information regarding freight, passage
rates and sailing dates from

BLUE STAR LINE

(AUST.) PTY. LIMITED

359-369 Queen Street, Brisbane
Phoenix House, 32-34 Bridge St., Sydney
454-456 Collins Street, Melbourne
198 North Terrace, Adelaide



TRUST. Vessels negotiating
harbours trust navigation lights for
safe passage. These lights operate on
acetylene gas supplied by C.I.G. This
is one of the many ways C.I.G. Industrial
Gases and Equipment help the Royal
Australian Navy.

Helping to make
Australia great



THE COMMONWEALTH INDUSTRIAL GASES LIMITED
138 BOURKE ROAD, ALEXANDRIA, N.S.W.

CIG/82.39A
THE NAVY

the speedy helicopters can be
used to carry out sweeps ahead
of the convoy.

The mobility of the helicopter
keeps the submariner guessing
... he is never quite sure when
or where the sonar ball will be
lowered into the sea. The heli-
copter, equipped with lethal,
homing torpedoes, is a strong
deterrent to the submariner.
The Wessex machines are speci-
ally designed for anti-submarine
work, and can fly by day or
night.

On making contact with a sub-
marine, the helicopter immedi-
ately alerts the ship with which
it is working, and a concentrated
hunt and attack gets under way.
The necessary sea and air forces
are called in to help corner the
intruder.

H.M.A.S. MELBOURNE, with
her helicopters in the immediate
protective screen, and Gannet
anti-submarine aircraft carrying
out patrols well ahead of the
convoy, constitutes a formidable
weapon in modern anti-sub-
marine warfare.



Helicopters hover over submarine H.M.S. TRUMP. If the sub-
marine was below the surface, the helicopter would locate it with
Sonar equipment lowered into the water.





(R.M.S. 'QUEEN ELIZABETH'—WORLD'S LARGEST LINER—GROSS TONNAGE 83,673 • LENGTH 1,031 FT. • BREADTH 118 FT.)

'Sail the Atlantic Fairway with Cunard'

The extra personal values of an Atlantic crossing with Cunard can't be measured by the modest amount you pay for it. Where else in the world (except in the stabilizer-equipped superliners 'Queen Elizabeth' and 'Queen Mary') could you find such a tension-free existence? Savour the flawless hospitality and gourmet offering of the sophisticated wonderland; room acres of broad sports decks.



Enjoy informal invitations and congenial company wherever you go among the many spacious public rooms. Swim, dance, party-go . . . discover leisureed new uses for unpressured hours. It's all part of Cunard's First Class mood as you cross the Atlantic. It's a holiday mood. A mood that lasts for five wonderful days, dispels cares, creates enchantment—the extra value in every Cunard ticket!

CUNARD

Getting there is half the fun . . . go . . .

Consult your local Travel Agent or PORT LINE LTD. (Inc. in Eng.), 50 Young St., Sydney. DALGETY & NEW ZEALAND LOAN LTD., 15 Bent St., Sydney; also BRISBANE, MELBOURNE, ADELAIDE and PERTH.

HUGHES BROS. PTY. LTD.

BUILDERS AND CONTRACTORS

CONTRACTORS TO THE R.A.N.

Phone: Wollongong J 0347

SHELL HARBOUR RD., PORT KEMBLA

THE NAVY

DIESEL AND STEAM TUG OWNERS

(Distinguishing Marks: GREEN Hulls, BLACK Funnels)

CONTRACTORS TO THE ADMIRALTY

DIESEL TUGS

Sydney Cove
Farm Cove
Manly Cove
Sirius Cove

STEAM TUGS

Heros
Heroic
Heroine
Himma



Phones:

27 5071

27 5072

Cables:

"FENWICK"

J. FENWICK & CO. PTY. LIMITED

UNION HOUSE, 247 GEORGE STREET, SYDNEY

And at 11 Watt Street, Newcastle, and c/o Adelaide S.S. Co. Ltd., Port Kembla, N.S.W.

Old Sea Dogs know the Softest Berth

SEA-FOAM

Mattresses and Pillows

There's nothing like the "asleep in the deep" comfort of these super-comfy mattresses. In fact, it's a dog's life if you haven't got one.

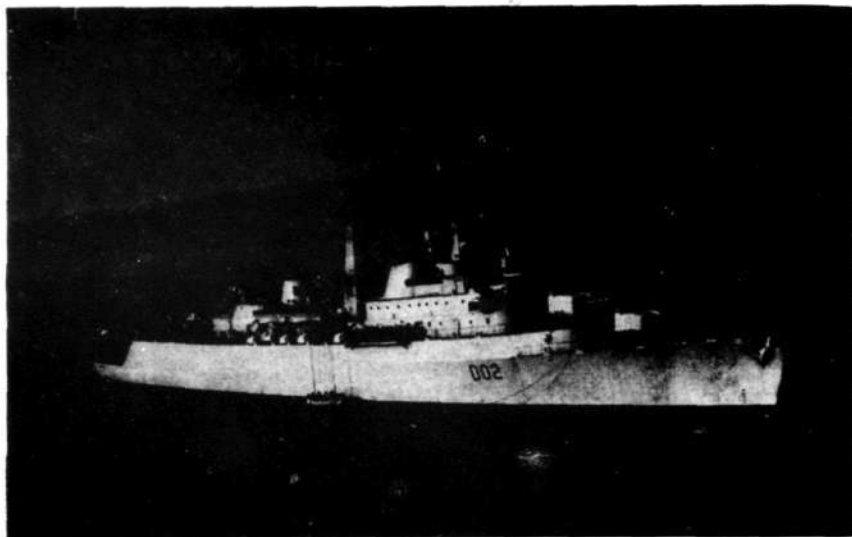
Manufactured by:

SEA-FOAM PTY. LTD.

58 MAY STREET, ST. PETERS

PHONE: LA 3972

SEPTEMBER-OCTOBER, 1963



H.M.S. DEVONSHIRE — the first Guided Missile Destroyer to enter service with the Royal Navy

CAMMELL LAIRD have built famous ships of all types for the Royal Navy since 1840.

Two 'Oberon' Class Submarines have recently been completed and a third vessel of this class is under construction.

...and now CAMMELL LAIRD have been entrusted with the construction of two submarines equipped with Polaris missiles, the first ships of the Royal Navy to be armed with strategical nuclear weapons.

CAMMELL LAIRD
& Co (Shipbuilders & Engineers) **Ltd • Birkenhead**



Shipbuilders to the World

The Navy Depends On

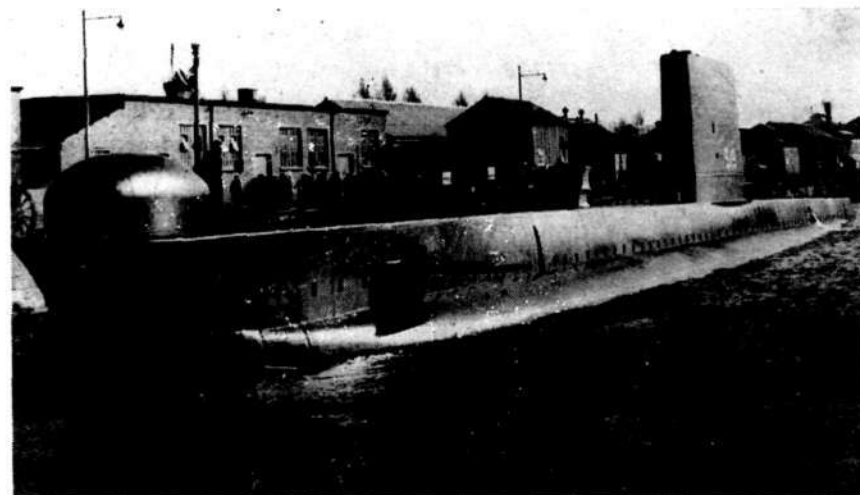
GOOD MEN ■ WELL TRAINED

In this missile age, much publicity is given to the advances made in the design of weapons and equipment, but less public attention is given to the men who will maintain and control them.

In the Navy, each new item of equipment is more advanced than its predecessor, and requires a higher degree of skill and knowledge to work it. The searchlight, for example, which was maintained by a man with only a rudimentary knowledge of electricity has been superseded by radar, which requires for its maintenance, a detailed knowledge of electronics.

This trend has affected the Navy in two ways — firstly educational and aptitude standards for entry have been raised and secondly the training of the modern sailor is lengthy and thorough.

It has been said in the past that the greatest single factor in war has been "the man" and in the future this will be more than ever true.



A new and exciting branch of the R.A.N. will come into being with the acquisition of four Oberon Class submarines. A tender of £8.2 million for the first two was recently accepted.

OFFICERS IN THE MAKING

All large organisations pay great attention to the selection and training of their senior executives — this is certainly so in the case of the R.A.N.'s officers.

Each year, about 600 boys apply for some 50 vacancies at the Royal Australian Naval College — the Navy's officer training school. They have many hurdles to jump before they are finally selected.

Applicants for the Junior Entry (aged 14½-16½) first sit for an examination at Intermediate level (Junior in Queensland and Western Australia). Those who pass are called up for medical examination and preliminary interview. Those who survive are then interviewed by a Selection Board, and finally the top 25 or 50 are selected.

The Senior Entry applicants have to negotiate a similar course, except that the public matriculation examination takes the place of the special College entrance examination.

What sort of boy is successful in gaining admission to the College? Does he have to be a genius and a superman? The answer is, of course, no. Entrants to the Naval College must be of sound constitution and have reasonable eyesight—future seaman officers, particularly, must have good eyesight. Apart from that, the successful candidate for the Naval College is usually a lad who is following the academic course at his school and doing well in maths, English and the sciences. He is the sort of boy who is chosen as a school prefect and who enjoys sport without

necessarily being an expert.

Training at the College, which lasts 1½ years for the Senior Entry, and 3½ years for the Junior Entry, is mainly academic, as the final graduation examination is more advanced than the Australian matriculation standard. However, subjects such as Seamanship and Navigation, are also studied, and give the course a naval character.

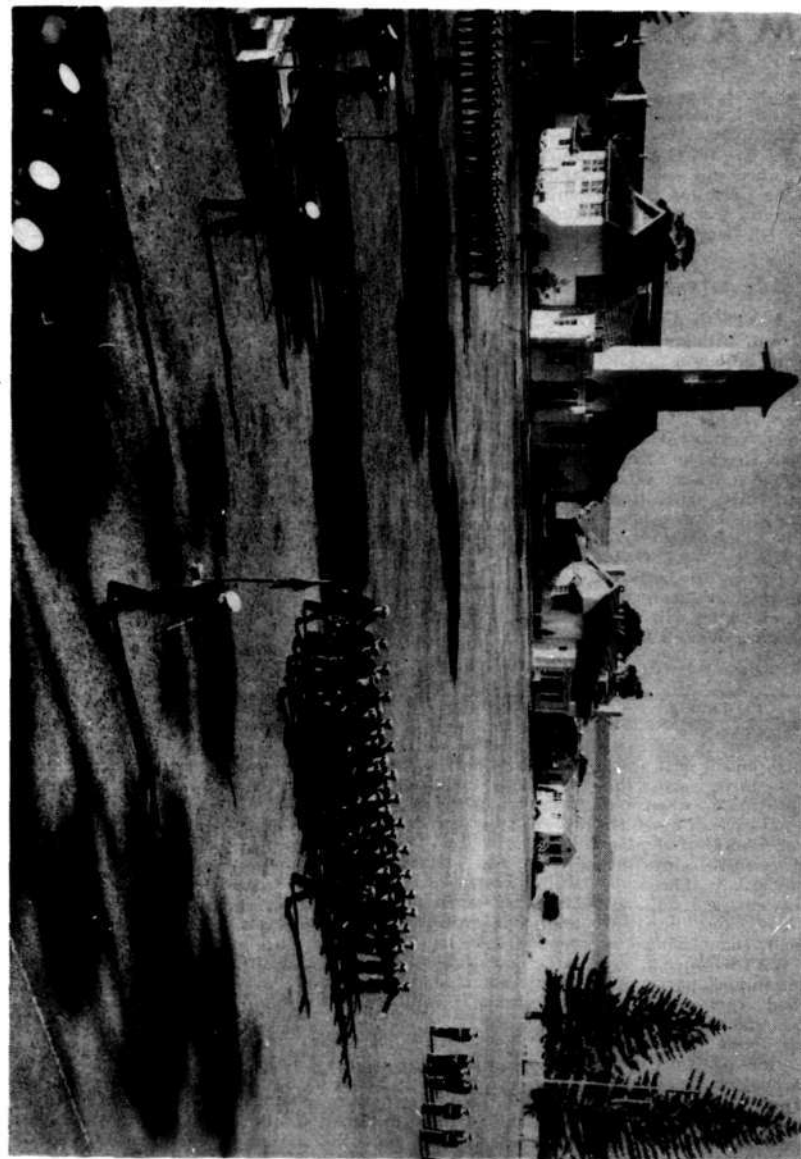
After leaving the College, the young officer spends 12 months at sea before going to England for further study. Training in England lasts for two to four years, and may include a degree course of the London University.

Since the training of officers is so lengthy and expensive, it is not surprising that every care is taken to select the right boys.

MIDSHIPMEN TAKE A SIGHT



Forty-one Midshipmen recently underwent a four-week training cruise to the Barrier Reef in H.M.A.S. ANZAC. The picture shows R. Fairbairn, of Newcastle; D. J. Shaw, Melbourne; J. Lutze, Manly; N. E. Smith, Perth; and I. F. McGrath, of Burra, S.A.; taking a sight of the sun.



THE ROYAL AUSTRALIAN NAVAL COLLEGE

H.M.A.S. WATSON — OPEN DAY

7th October, 1963

The first major function during the 1963 Navy Week in Sydney will be at H.M.A.S. WATSON, when this establishment will be open for public inspection from 1 p.m. to 5 p.m., on Monday, 7th October.

HOW TO GET THERE

H.M.A.S. WATSON is located at South Head, with an Army establishment adjoining. The entrance gates are in Cliff Street, Watson's Bay. Buses from Central Railway (Eddy Avenue), Bridge Street, corner of Park and Elizabeth Streets, and Kings Cross terminate at Watson's Bay, approximately 300 yards from the entrance gates. Naval buses will then be available to take you to H.M.A.S. "WATSON".

Visitors arriving by private car should drive through the entrance gates. They will then be directed along Watson Drive to a car park.

SHORT HISTORY OF H.M.A.S. "WATSON".

The establishment first commenced in the early years of the Second World War, when the need arose for a school in which to train operators of Radar, which had recently come into service in the R.A.N. The establishment was enlarged considerably in 1944, and in 1945 it was officially commissioned as H.M.A.S. "WATSON".

In the meantime, navigation training had commenced at "WATSON", and the two types of training were combined, under the title of Navigation Direction School.

The Torpedo Anti-Submarine School, which has been located at Rushcutter Bay, moved into its fine new building at "WATSON" in 1956, and, following this, new accommodation buildings, dining hall galley and amenities buildings for all ratings, plus a new Administration building, have been completed.

The new Chapel will also be open for inspection during the afternoon.

TORPEDO ANTI-SUBMARINE DISPLAYS AND DEMONSTRATIONS

1.—Within the School there will be displays of torpedo anti-submarine equipment. Anti-submarine attack teams will show visitors how submerged submarines are detected and the sequence of events leading up to attacks by anti-submarine mortars.

2.—Perhaps the most spectacular events will be the anti-submarine mortar firings and the diving demonstrations by Naval clearance divers.

3.—Visitors will see at first-hand how the mortars are fired, in exactly the same way as in anti-submarine ships of the Royal Australian Navy.

4.—Naval clearance divers will demonstrate in Lady Bay how they enter the water and are retrieved by a fast-moving boat so that they may carry out their mission in enemy waters and make good their escape as quickly as possible.

NAVIGATION DIRECTION DISPLAYS

In the Action Information Training Centre and Radar Block available radar sets will be

operating. Here, the visitor may witness how ships and aircraft are located by radar, and their movements plotted, so that the captain of a ship can see immediately the disposition of friendly and enemy forces, and make his plan for attack.

BAND MARCHING DISPLAY

During the afternoon, the Naval Band will play incidental music on the parade ground, immediately in front of the Amenities Building.

REFRESHMENTS

Around the establishment visitors will find refreshment stalls to cater for their immediate requirements, and afternoon tea may be obtained in the Amenities Building at 3.30 p.m.

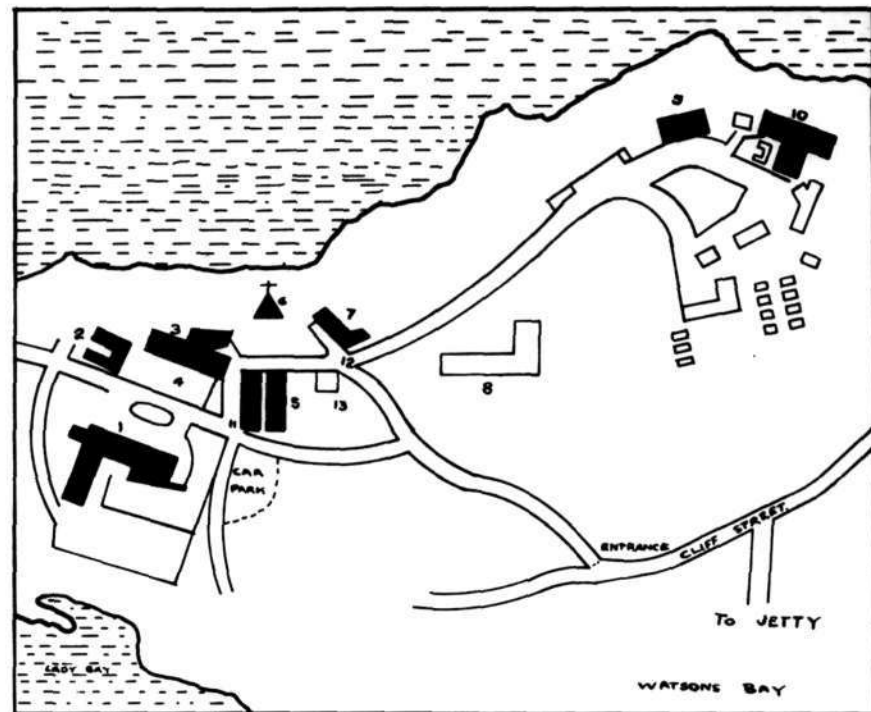
RATINGS' ACCOMMODATION AND AMENITIES

The lower floor of the northern Junior Ratings' Accommodation Block will be open, so that visitors may see the comfortable living conditions in H.M.A.S. "WATSON".

Inspection of the first floor of the Amenities Building shows how pleasantly ratings may spend off-duty hours, with provision for wet and dry canteens, billiard and reading rooms, and television. On the ground floor of this building is a modern galley and first-class dining hall, with a seating capacity of 400.

CINEMA

The cinema in the T.A.S. School will be operating throughout the afternoon, showing a film titled "This Is Torpedo Anti-Submarine".



HELICOPTERS

A scout helicopter will be on display, and will be used to drop clearance divers in Lady Bay. It will operate from 2 p.m. to 2.15, and from 3.30 p.m. to 3.45 p.m. The scout will be used for survey work, operating from H.M.A.S. MORESBY, a new survey vessel.

A Wessex helicopter, which is probably the most up-to-date anti-submarine helicopter in the world, will fly over H.M.A.S. "WATSON" during the afternoon, and will give a display at 2 p.m. in Lady Bay.

Programme of Displays

Anti-Submarine Attack Demonstrations

1.45 p.m., 2.15 p.m., 2.45 p.m., 3.15 p.m., 3.45 p.m., 4.15 p.m.

Teams will show how attacks on submarines are made, using underwater detecting devices. The demonstration will take place in the T.A.S. School.

Anti-Submarine Mortar Firings

1.15 p.m., 2.30 p.m., 4 p.m.

These firings will simulate attacks on enemy submarines, and will take place at the rear of the T.A.S. School.

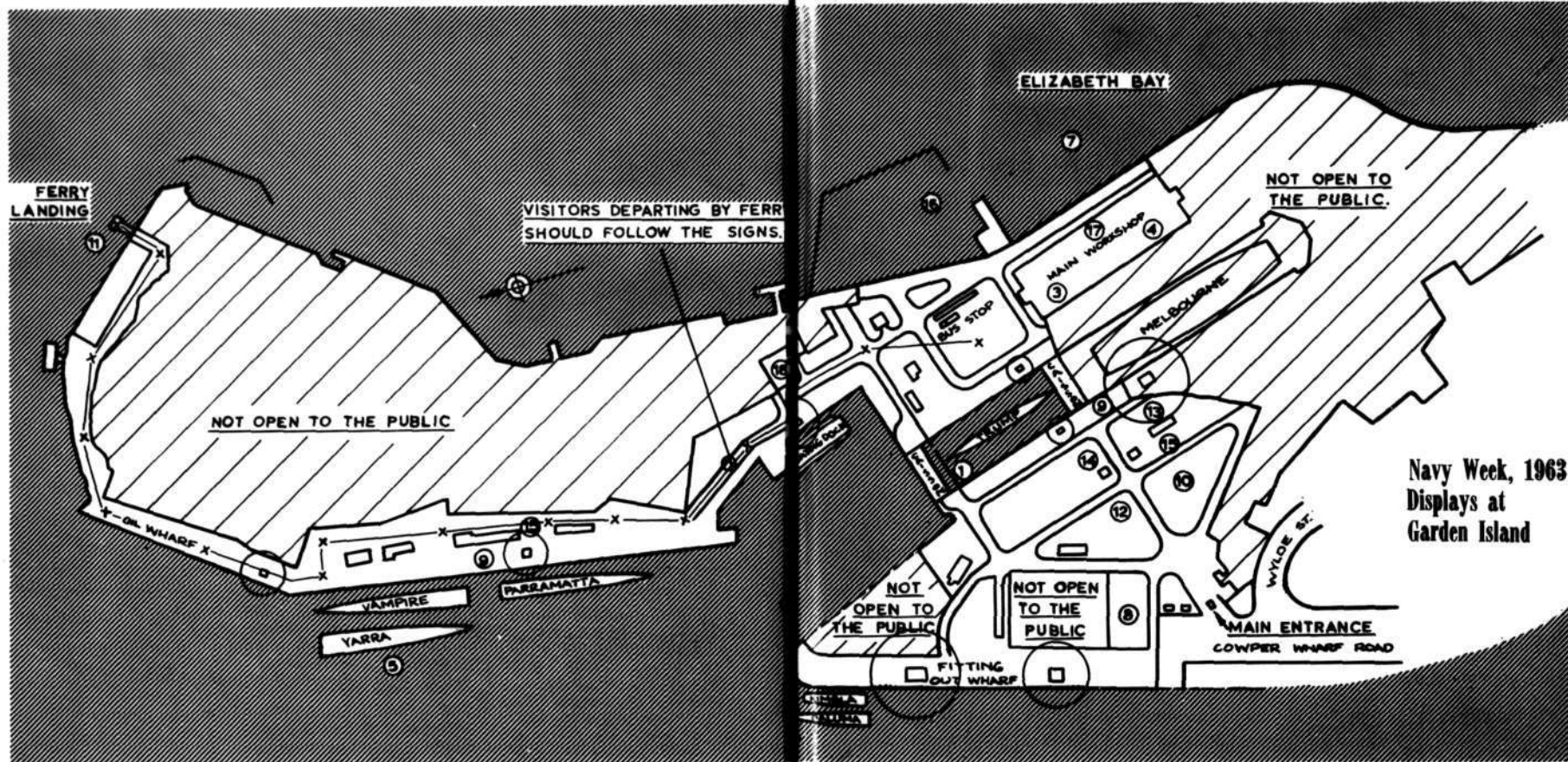
Clearance Diving Demonstrations

1.45 p.m., 3.15 p.m.

Clearance divers will simulate action in clearing an enemy beach-head of obstructions. This will take place in Lady Bay, at the rear of the T.A.S. School. The divers will be dropped from boat and helicopter.

Location of Installations

1. Torpedo Anti-Sub. School.
2. Chiefs and Petty Officers' Accommodation.
3. Amenities.
4. Parade Ground.
5. Junior Ratings' Accommodation.
6. Chapel.
7. Administration Building.
8. Wardroom.
9. Action Information Training Centre.
10. Radar Block.
11. First Aid Post.
12. Lost Children.
13. Helicopter.



Navy Week, 1963
Displays at
Garden Island

PROGRAMME OF EVENTS

| | | | | |
|------|---|------|--|------|
| P.M. | | 2.40 | Helicopter winching display in Woolloomooloo Bay with M.C.D.T. | 4.15 |
| 1.30 | Dockyard gates to be opened. | | Diver "drop and pick up" drill, south of South East Pound. | 4.30 |
| | Dockyard and H.M.A. Ships open to visitors; crane rides commence. | 2.50 | Display by four Wessex helicopters. | 4.45 |
| 1.45 | Helicopter winching display in Woolloomooloo Bay with M.C.D.T. | 3.00 | H.M.A.S. YARRA fires A/S mortars. | 4.50 |
| | | 3.15 | H.M.S. TRUMP, diving and surfacing. | 5.00 |
| 2.00 | H.M.S. TRUMP, diving and surfacing. | 3.30 | Ceremonial sunset by Band. | 5.10 |
| 2.25 | H.M.A.S. YARRA fires A/S mortars. | 3.45 | Diving display in South East Pound. | 6.00 |
| 2.30 | Diving display, South East Pound. | | H.M.A.S. YARRA fires A/S mortars. | |
| | Fire-fighting display. | 4.10 | | |

Key To Garden Island Displays

1. Submarine diving and surfacing — outer Captain Cook Dock.
2. Floating dock.
3. Main workshops.
4. Apprentices' display.
5. H.M.A.S. YARRA fires anti-submarine mortars.
6. Helicopter and diving display.
7. Navy clearance divers — "drop and pick up" drill.
8. Fire-fighting display.
9. Crane rides.
10. Ceremonial sunset — massed bands.
11. Ferry landing, Ferry Wharf G11.
12. Lost children.
13. Ladies' rest room.
14. First aid.
15. Ladies' toilets.
16. Clearance diver, South East Pound.
17. Film screening.
18. Dockyard chapel.
19. Sail loft.



BOYS! This is your chance
to take part in Australia's Naval programme
and learn an interesting and useful trade.

NAVAL DOCKYARD APPRENTICES

PARENTS Here is an opportunity for your son to be apprenticed and receive training in all branches of Naval Repair and Refitting work in the largest and best-equipped Naval Yard and Dry Dock in the Southern Hemisphere.

APPRENTICESHIP is available at Garden Island Dockyard, Sydney, controlled by the Commonwealth Government, under conditions which will enable you not only to become an efficient tradesman, but give you the opportunity of qualifying as a Draughtsman in Mechanical or Electrical Engineering, or Ship Construction. The period of apprenticeship is for 5 years, and subject to satisfactory progress, Technical College fees will be paid by the Commonwealth Government.

RATES OF PAY are in accordance with the Arbitration Court Award made between the Department and the Trade Unions. On completion of the first year, an additional weekly payment is made, subject to satisfactory progress. Three weeks' annual leave and liberal sick leave are granted, and an allowance is payable to apprentices who are obliged to live away from home owing to distance.

ELIGIBILITY Age limit is 15 years and under 17 years at date of taking up appointment. A satisfactory pass at the Intermediate Certificate examination is desirable, but not essential.

VACANCIES exist for the following trade apprenticeships: Fitter and Turner, Electrical Fitter and Mechanic, Radio Tradesmen, Boilermaker and Welder, Shipwright and Boatbuilder, Ship's Plumber, Painter and Moulder, Copper-smith, Enginesmith, Motor Mechanic, Sailmaker, Sheetmetal Workers.

APPLICATION must be made on the form prescribed. For application form and copy of conditions of entry, apply to your District Employment Office, or the General Manager, Garden Island Dockyard, Sydney, by letter, or telephone FL 0444, Extension 325 (Mr. Kimber). Closing date is 15th November, 1963.

H.M.A.S. VAMPIRE—Daring Class Destroyer



H.M.A.S. VAMPIRE is at present undergoing a refit after six months' service with the Strategic Reserve in the Far East. She has two sister ships in the Royal Australian Navy, VOYAGER, refitting in Melbourne, and VENETTA, serving in the Far East.

This space kindly donated with the compliments of . . .

LAWRENCE MOTORS

NORTH AND BERRY STREETS,
NOWRA

Specialising in the sales and servicing of new Holdens, also Nowra's most exclusive range of used cars.

Trade-ins Accepted — Highest Prices
Given — Finance Arranged

Phone: 2-0264
After Hours: 2-3408

BEGG & GREIG PTY. LTD.

Marine, General and Electrical
Engineers

20 ERSKINE STREET, SYDNEY
29-1208 29-7087

After Hours:

D. W. REED JW 4095
C. D. WILKS 44-5959

24 Hr. Service in following Trades:
BOILER MAKERS, FITTERS, ELECTRICIANS,
MACHINISTS, PLUMBERS and COPPERSMITHS,
SHIPWRIGHTS and JOINERS,
PAINTERS and DOCKERS

**PREVENT
CORROSION
WITH
Wailles Dove ...**



EPIMASTIC

A Bituminous Epoxy Coating, "Epimastic" is ideally suited to protecting metal and concrete surfaces. Epimastic is a two-pack coating consisting of base and catalyst.

W & S J. Wildridge & Sinclair Pty. Ltd.
SYDNEY BRISBANE MELBOURNE

THE KINGS HOTEL

(Mrs. K. BONVENTI, Licensee)

Cnr. KING and PITT STREETS,
SYDNEY

- Haven of Naval Personnel
- Ladies' and Gents' Lounge
- Entertainment Provided

Telephone: BL 1095

THE NAVY

NEW SHIPS FOR R.A.N.

H.M.A.S. MORESBY New Survey Ship

Nearly 5000 people saw Mrs. G. G. O. Gatacre, wife of the Flag Officer-in-Charge of East Australia area, Rear-Admiral Gatacre, launch H.M.A.S. MORESBY at the State Dockyard on the 7th September, 1963.

MORESBY, of 2300 tons, is the R.A.N.'s first ship designed specially for survey work, and will rank among the most advanced vessels of her kind in the world.

She is fitted to operate her own helicopter, has advanced electronic equipment for surveying in all conditions, and will carry small auxiliary boats fitted with echo-sounders. H.M.A.S. MORESBY will have long range and endurance, and will incorporate high standards of amenities for her crew of some 120 officers and men.

H.M.A.S. MORESBY will have a speed of 18 knots and a range of 10,000 miles, and will cost £2 million.

The main diesel electric propulsion machinery for the new ship was designed to give the maximum flexibility for survey operation, enabling direct control of the engines from either the bridge or the engine-room.

The complete machinery was supplied by "English electric", and consists of three 2000-b.h.p. diesel engines, which are directly coupled to three main electric generators each of 1330 kilowatts output. These generators supply the power to two 2500 shaft horsepower propulsion motors, which drive the twin propellers.

At a ceremony after the launching Navy Minister Senator Gorton said H.M.A.S. MORESBY will replace H.M.A.S. BARCOO and

H.M.A.S. WARREGO, at present carrying out surveys for the Navy.

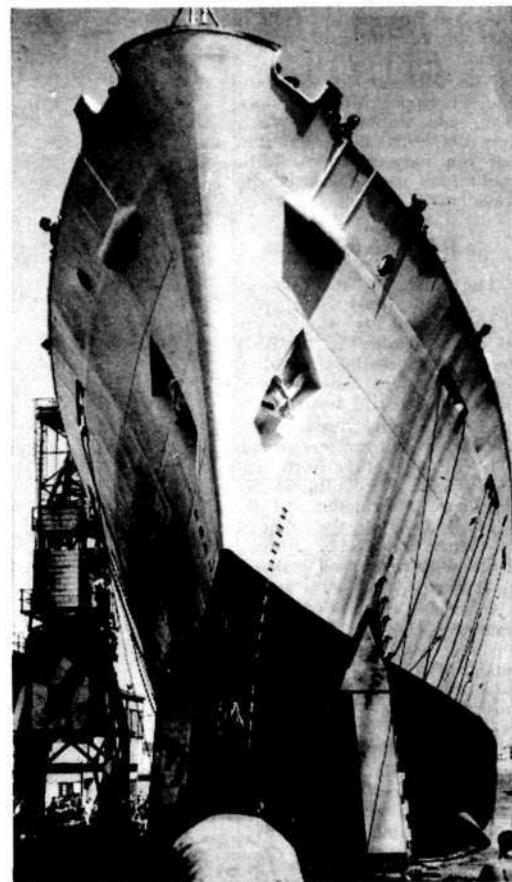
"MORESBY will have the inspiring task of mapping safe passages for Australian and other countries' vessels.

"The Navy has enough work to employ two other similar

ships. The three vessels could be kept in operation for decades."

Senator Gorton said that the State Dockyard was to be congratulated on the launching of H.M.A.S. MORESBY, the 58th ship built at the Dockyard.

(Continued on page 25)



SEPTEMBER-OCTOBER, 1963

H.M.A.S. MORESBY—(Cont.).

He believed the work carried out at the Dockyard under the direction of Mr. H. Harding, Dockyard Director, was equal to that of any shipyard in the world.

The Minister for Shipping and Transport, Mr. H. Opperman, said shipbuilding was a very competitive industry, but he felt the industry in Australia could look to the future with confidence.

H.M.A.S. PERTH

The first of the Charles F. Adams Class destroyers, H.M.A.S. PERTH, was launched on September 26 by Lady Beale, wife of the Australian Ambassador to the United States (Sir Howard Beale).

The launching ceremony, at Bay City, Michigan, was attended by the Chief of the Australian Naval Staff, Vice-Admiral Sir Hastings Harrington, C.B., C.B.E., D.S.O., and the Chief of the United States Navy's Bureau of Ships, Rear-Admiral William A. Brockett.

Another of the guided missile destroyers, H.M.A.S. HOBART, is under construction by the same firm in Bay City (the Defoe Shipbuilding Company), and a third, H.M.A.S. BRISBANE, is on order from the United States.

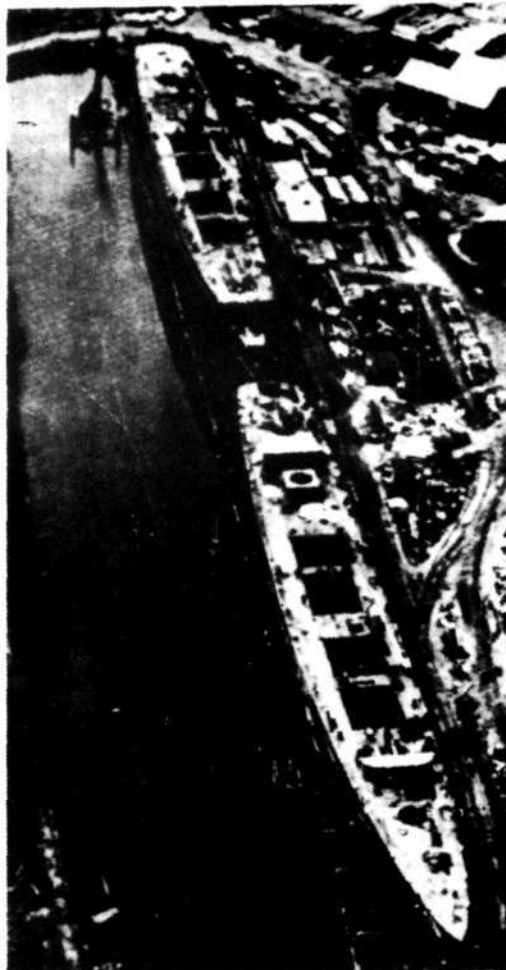
The new H.M.A.S. PERTH perpetuates the name of the Second World War cruiser lost in action in Sunda Strait in 1941.

The Charles F. Adams Class destroyer is a powerful, all purpose ship with a speed exceeding 35 knots and with great endurance.

It has Tartar supersonic sea-to-air missiles, an anti-submarine missile system, and hard-hitting 5-inch guns.

The complex, missile-age destroyers cost in the region of £20,000,000 each.

PERTH and HOBART are due to commission in the United States with Australian crews in 1965, and will "work-up" in American waters before their delivery voyage to Australia.



H.M.A.S. PERTH (foreground), and H.M.A.S. HOBART under construction in Bay City, Michigan.



CH313 28

Beer only for barbecues?

Good beer belongs anywhere there's an appetite. The same cool sharpness that adds so much to an outdoor grill is equally enjoyable with any dish. Nothing's too good for beer. Its zest and coolness are welcome whether your chef is Paris-trained or just the next door neighbour.

Whatever you're eating, whatever the occasion, ask for beer. You'll add to your pleasure!

CARLTON & UNITED BREWERIES LTD.

MARITIME MAINTENANCE PTY. LTD.

For:

- Rust Elimination
- Tank Cleaning
- Flame Scaling
- Cleaning and Painting

and
All forms of Ships' Husbandry
and Service

Consult:

**MARITIME
Maintenance
Pty. Ltd.**

SHELL HOUSE, SYDNEY
25-1159 (Day), 82-3640 (Night)

· BRETT ·

is still the leading name in

CANVAS

For:—

- Tents
- Boat Covers
- Ships' Canvas
- Flags and Bunting
- Blinds and Awnings
- Life Jackets and Buoys
- All Canvas Goods

Consult:—

**E. H. BRETT & SONS
PTY. LTD.**

4 Brett Avenue, East Balmain
82-0711 Sydney 82-0711

Shipping and General Tank Maintenance Service

Shipping and Industrial Rigging, Ship Repairs, Painting, Maintenance of Tanks, Boilermaking, Blacksmithing, Manufacturers of Wire and Rope Slings, Marine Fitters and Turners, Shipwrights, Plumbing Survey and Certification of Gear (Testing Capacity to 50 Tons).

Telephone: 29-6125

PROMPT ATTENTION TO ALL ENQUIRIES.

60a DAY STREET, SYDNEY

After Hours: 96-7533, 51-6214

Brantford Constructions Pty. Ltd.

Builders of Quality Homes

Joinery Works

Plans and Specifications Prepared

Free Quotations and Advice

16 JAMES STREET, HORNSBY

Phone: 47-3554

After Hours: 44-6216

BRAMLEY'S BAKERY

BERRY STREET, NOWRA
JUNCTION STREET, NOWRA

Contractors to the R.A.N.

- Bread Baked Oven Fresh Daily on Premises
- Delivery Service Available Throughout the Area

For Trade Inquiries
Phone 2-2098



A Guided Missile Destroyer of the Charles F. Adams type, H.M.A.S. PERTH should look like this when she arrives in Australia.

NICOL BROS. PTY. LTD.

ALL CLASSES OF STEAM, DIESEL
AND GENERAL ENGINEERING
BOILERMAKERS, OXY-ACETYLENE
AND ELECTRIC WELDERS
PLUMBING AND ELECTRICAL WORK

10-20 WESTON ST., BALMAIN EAST

'Phones: 82-0367 (3 lines)

After Hours: 76-9385, 86-3225, 36-5708

LETTER TO THE EDITOR

"I would very much like to correspond with an Australian Sea Cadet who collects naval badges. I have a large collection of Royal Naval cap ribbons, but alas! only one H.M.A.S., that being Lonsdale. I would be able to swap many R.N. badges in exchange for Australians'.

"I would be very grateful if you could perhaps place my enquiry in the Australian Sea Cadet magazine.

"I am a Sea Cadet myself.
"WILLIAM M. BEMISTER,
"28 Warwick Gardens,
"Kensington, London W.14,
"England."

Compliments to "The Navy" and all R.A.N. Establishments.

KIRBY BOOK COMPANY PTY. LTD.

362 MILITARY ROAD, CREMORNE. PHONE: 90-5248.

The Kirby Book Company, well known throughout all R.A.N. Establishments. We feature Encyclopaedias, Dictionaries, Motor Manuals, and all Educational and Technical Books.

Available on small deposit, immediate delivery, and balance by easy monthly instalments.



H.M.A.S. STUART, a fast anti-submarine frigate of 2,800 tons, which was built at Cockatoo Docks and commissioned on 28th June, 1963.

Sydney Slipway & Engineering Co. Pty. Ltd.

SLIPWAY OPERATORS
SHIP REPAIRERS



MARINE AND
GENERAL ENGINEERS

123 Darling Street, Balmain, N.S.W.

Telephone: 82-1482, 82-1506

★ THE FAMOUS Rock & Roll Hotel

*All are Welcome to the famous Rock!
Favourite Drinking Spot of all Naval
Personnel.*

2 BOURKE STREET
EAST SYDNEY

FA 5109

FA 5109

NAVY SEEKS SMOOTHER BIGHT PASSAGE

Passenger liners might one day enjoy smoother crossings of the Great Australian Bight as a result of an investigation to be carried out by a frigate of the Royal Australian Navy.

The Minister for the Navy, Senator Gorton, said recently that during the next two months a training-oceanography frigate, H.M.A.S. GASCOYNE, would undertake a number of important projects off the southern coastline of Australia. One of these would be a comparison of weather conditions in the Bight.

While steaming through the shallower water at the top of the Bight, GASCOYNE would compare weather and sea conditions with those reported by vessels using the normal shipping route.

Senator Gorton said there were theories that ships could avoid the notorious southern rollers if they took a more northerly course through the top of the Bight. GASCOYNE'S investigations, and on-the-spot comparison of conditions, could provide useful data on the weather and sea patterns.

H.M.A.S. GASCOYNE will conduct a variety of research during her current cruise, which began from Sydney in mid-September. Off the east Australian coast, she is carrying out an oceanographic programme for the C.S.I.R.O., studying the environment of the ocean at the start of the tuna season.

The frigate will then visit a number of islands off the southern coastline to check on habitation, flora and fauna, and to make sketch surveys to improve navigational charts of the area.

The islands to be visited are in the Nuyts Archipelago on the eastern side of the Great Australian Bight, and in the Recherche Archipelago to the west.

On the return passage to Sydney, GASCOYNE will continue the C.S.I.R.O. oceanographic research off the eastern coast. The frigate, under the command of Lieut.-Commander R. J. Rust, is due back in Sydney on the 18th November.

H. G. THORNTHWAITE PTY. LTD.

H. G. Thornthwaite Pty. Ltd. announce the appointment of H. Rowe & Co. Pty. Ltd. as agents in Victoria for Santon Rotary Switches.

H. Rowe & Co. Pty. Ltd. replace the previous agents, Mar-weight Equipment Pty. Ltd.

Rowe's will carry large stocks in Melbourne for immediate delivery.

ALWAYS ASK FOR —

"OCEAN" Table Salt

A Product of Sea and Sunshine

1 lb. PACKETS

PLAIN OR IODIZED AT GROCERS
EVERYWHERE.

Distributors:

OCEAN SALT PROPRIETARY LTD.

Telephone: BW 9252

HOLIDAYS ARE FUN-FULL DAYS WHEN YOU PLAN THEM THROUGH ANSETT-ANA HOLIDAY SERVICE

We'll book your accommodation, plan scenic tours, hunting and fishing expeditions, arrange an Avis drive-yourself car — in fact, *everything* for your pleasure and convenience. Have a happy holiday!

CONTACT YOUR TRAVEL AGENT OR NEAREST ANSETT-ANA OFFICE ABOUT THIS FREE SERVICE.



**TRAVELLING
OVERSEAS?**

Wherever you go . . .

By **LAND**

By **SEA**

By **AIR**

BOOK THROUGH UNION TRAVEL SERVICE

For business or pleasure you can arrange all your bookings by major shipping, airlines or bus service — through Union Travel Service.

Complete 'tailor-made' itineraries can be arranged to suit

your individual needs including hotel accommodation. Let Union take the headaches out of travel.

Call and see us about the many wonderful holiday cruises available.

FOR BUSINESS OR PLEASURE CONSULT



**UNION
TRAVEL SERVICE**
UNION STEAM SHIP Co. of N.Z. LTD. (Inc. in N.Z.)

"Union House,"
247 George St.
Tel.: 2-0528

Cor. Pitt Street and
Martin Place.
Tel.: 25-3023.

Branches and Agencies throughout Australia and N.Z.

V. E. Osborne Pty. Ltd.

We are proud to have carried out the steam, insulation, pipework, turbines and ventilation on the H.M.A.S. Parramatta and the Stuart, now under construction at Cockatoo Dockyard.

The Company was appointed by the P. & O. Company to do all lagging work on their ships in the Port of Sydney.

**SYDNEY'S LEADING SPECIALISTS IN STEAM INSULATION,
REFRIGERATION AND ACOUSTICS**

MARINE WORK OUR SPECIALTY

4 St. Mary Street, East Balmain

Telephone: 82-4446

THE UNITED SHIP SERVICES PTY. LTD.

88-102 Normanby Road, South Melbourne,
Victoria, Australia.

**MELBOURNE — GEELONG —
PORTLAND**
and all Victorian Ports

The largest organisation in Victoria for the fabrication and installation of fittings for every description of cargo. Bulk grain fittings a speciality. Dunnage Supplied. Holds cleaned. Decks caulked. All trades available and include:

Shipwrights, Carpenters, Joiners,
Dockers, Painters, Riggers

Telephone: MX 5231
Telegrams and Cables: "UNISTEVE,"
Melbourne

INTERESTED IN SHIPS?



Then why not join the
WORLD SHIP SOCIETY ?
(N.S.W. BRANCH)

- Regular monthly meetings
- Films, Slides, Talks, etc.
- Visits to Ships
- Marine Photography

Write to :
Hon. Secretary, World Ship Society,
64 Parr Parade, Dee Why, N.S.W.

With compliments to the R.A.N. and
Australian Navy League from

INDUSTRIAL ELECTRIC CO. PTY. LTD.

**GENERAL CONTRACTORS AND
ENGINEERS**

CONTRACTORS TO THE R.A.N.

*Specialising in Motor Re-Winds and
Electrical Repairs*

403 ENMORE RD., MARRICKVILLE

Phone 51-6873

Skipper your own

HALVORSEN



on your next holiday

You leave all your worries ashore when you board a Halvorsen cruiser from Bobbin Head. Swim, fish or just relax along the calm and tranquil waterways of the Hawkesbury, Cowan and beautiful Pittwater. Easy to handle Halvorsen Cruisers are fully equipped, and boats sleeping up to 9 are available by the day or for as long as you please. Book now for your next holiday (Summer or Winter).

Write or phone for full details

Hire a
HALVORSEN
Cruiser

Halvorsen Boats, P.O. Box 33, Turramurra. Phone: JJ 1227.
Halvorsen cruisers are built by Lars Halvorsen Sons Pty.
Ltd., contractors to the Royal Australian Navy.
Distributors for Chrysler and B.M.C. marine engines.
Dealers for Johnson outboard motors. L.H.83.42a

JUBILEE OF NAVAL POLICE

The Navy's own police force, the Naval Dockyard Police, is celebrating its 50th anniversary.

The Minister for the Navy, Senator Gorton, said that the Force was first established in May, 1913, to carry out guard duty at Naval establishments.

The original 39 members of

the Force were responsible only for Naval establishments in Sydney. Today, the Naval Dockyard Police has a strength of 349 officers and men serving in N.S.W., Queensland, Victoria, Western Australia, and the Australian Capital Territory.

The Dockyard Police claims fame as the last, if not the only, branch of the R.A.N. to travel on horseback. Horse patrols were used in some places up until 1952. However, the horse

has now given way to two-way radio patrol cars in the task of guarding Naval installations.

Members of the Dockyard Police are recruited from serving and former members of the Naval Forces. They were uniforms similar to R.O.N. Petty Officers, with a police-style cap. They are trained by the Naval Dockyard Police's own instructors, and selected members study at the Australian Police College.

The Naval Board has sent a message of congratulation to the Dockyard Police on its jubilee.

Big Navy Job for Sydney Dockyard

The Minister for the Navy, Senator Gorton, has announced that the Cockatoo Dockyard and Engineering Company of Sydney will build a big, new escort maintenance vessel for the Royal Australian Navy.

The estimated cost of the 14,500-ton ship was £5.3 million.

Senator Gorton said the Company was already working on initial preparations for building the ship, and it was expected that the keel would be laid in February next year.

The ship would be fully fitted out to act as an advanced base for the repair of damage to escort ships; and for the maintenance and repair of weapons and machinery, and the complex electronic equipment in modern destroyers and frigates.

Senator Gorton said the new escort maintenance vessel would make an important contribution to the mobility and self-sufficiency of the Australian Combat Fleet.

THE NAVY



Stokes Badges

*Designers and makers of the finest
badges and medals for over 100 years*

STOKES' EXPERIENCED ARTISTS WILL DESIGN A BADGE FOR
YOUR CLUB, SCHOOL OR SOCIETY, COMPLETELY FREE OF CHARGE

CONTACT MR. LITTLE

Stokes (Australasia) Ltd.,

322 ALBERT STREET, BRUNSWICK, VICTORIA—38 2106

SS 2895

"Enzactin"

Brand of Triacetin

(glyceryl triacetate)

FOR EFFECTIVE ANTIFUGAL THERAPY

Without Irritation

in the prevention and treatment of superficial dermatophytes,
particularly ATHLETE'S FOOT, RINGWORM OF THE
SCALP.

"Enzactin" Cream is:

- Non-irritating • Non-sensitising • Odourless
 - A discovery of the Wisconsin Alumni Research Foundation.
- Supplied in 1-ounce tubes, each gramme containing 250 MG. glyceryl triacetate (also available as Powder or Aerosol Spray). A Standard package for clinical evaluation will be supplied to medical personnel on request, together with bibliography.

AYERST LABORATORIES PTY. LTD.
Gregory Place, Parramatta, N.S.W.



Recruit Radar Plotters Bette Stanley (left), 19, of Rockhampton, and Jennifer Royes, 17, of New Farm, Brisbane, on course at H.M.A.S. WATSON.

THE "RURAL" pays tribute to AUSTRALIA'S NAVY

... for achievements past,
and prospects to come.
We, at the "Rural," trust
the Trafalgar Day
Celebrations will be an
outstanding success.

RURAL BANK

HEAD OFFICE: MARTIN PLACE, SYDNEY

RB29/4.2

SEPTEMBER-OCTOBER, 1963

Always ask for . . .

SHELLEY'S FAMOUS DRINKS

Obtainable from leading
shops and saloons

CORDIAL FACTORY

SHELLEY & SONS

PTY. LTD.

MURRAY STREET
MARRICKVILLE

N.S.W.

'Phone: LA 5461

WRANS — Important Role

The increasingly important role of the W.R.A.N.S. in the shore support of the Royal Australian Navy was reflected in the start of a series of training courses in Sydney recently.

The W.R.A.N.S. training has been extended from Victoria to N.S.W. to cope with the bigger intake of girls into the Women's Royal Australian Naval Service.

It has been necessary to expand training to Sydney to prepare for a new commitment for the Wrans later this year.

In a few months' time, Wrans are to take over duties at a Naval Air Station for the first time. Sixty-eight Wrans will become radio operators, motor transport drivers, radar plotters, cooks, stewards and writers at the Naval Air Station at Nowra, N.S.W. They will release sailors for duty at sea.

Under the expanded training scheme, up to 35 Wrans will be undertaking specialist courses in Sydney.

Diesel Fuel Injection Equipment

- Repairs
- Maintenance
- Consulting and
Manufacturing
Engineers

NEPTUNE

Engineering Company

Lavender Bay,
North Sydney

XB 2004 Phones XB 2695

"SEACAT" — THE CHOICE OF FIVE NAVIES
SHORT BROTHERS & HARLAND LTD. — LONDON AND BELFAST



"SEACAT" — ROYAL AUSTRALIAN NAVY'S GUIDED MISSILE

* Seacat is the Australian Navy's new close-range anti-aircraft weapon.
 * Seacat has completed acceptance trials.
 * Seacat enters service only five years from contract.
 * Seacat is also on order for the Royal Navy, Sweden, Germany, New Zealand and Holland.
 Developed by Short's under British Ministry of Aviation contract, the Seacat, capable of exceptional accuracy and manoeuvrability, is acknowledged to be the most effective close-range defence weapon of to-day.

BRAYBON BROS. Pty. Ltd.

Electrical Engineers



Specialists in repairing D.C. Electric Motors and rewinding of Armatures and Field Coils, also Machine Shop Work, Grinding and Turning Shafts and Commutators.

Distributors for "Mawdesley" D.C. Motor Parts, covering Armatures, Field Coils, etc.

27/33 Washington St., Sydney
 Phone: MA 6853



£60,000,000
— a record!

Take a look at this record! In 12 months to 30th June, 1963, the Commonwealth Banks lent over sixty million pounds to their customers to build or buy homes—homes for over 23,000 families. Just one reason why it pays to:

BANK
COMMONWEALTH
 Australia's Most Helpful Bank

(CB.35.43)

GUIDED MISSILE for R.A.N.

The Seacat guided missile which is to be supplied to the Royal Australian Navy as part of the modernisation programme announced by the Ministry of Defence will provide Australia's sea arm with one of the most effective close-range anti-aircraft systems yet envisaged. The missile will be fitted in the very near future in the four new R.A.N. frigates, PARRA-MATTA, YARRA, STUART and DERWENT, and will fill the role formerly designated to the 40 mm. anti-aircraft gun.

Seacat, which has been described by the First Lord of the Admiralty as "a most ingenious weapon," has been ordered by more countries than has any other British guided missile. Apart from the Australian order, it has been adopted as the Royal Navy's standard close-range anti-aircraft armament, has been ordered by New Zealand (and is in fact already installed in H.M.N.Z. Ships OTAGO and

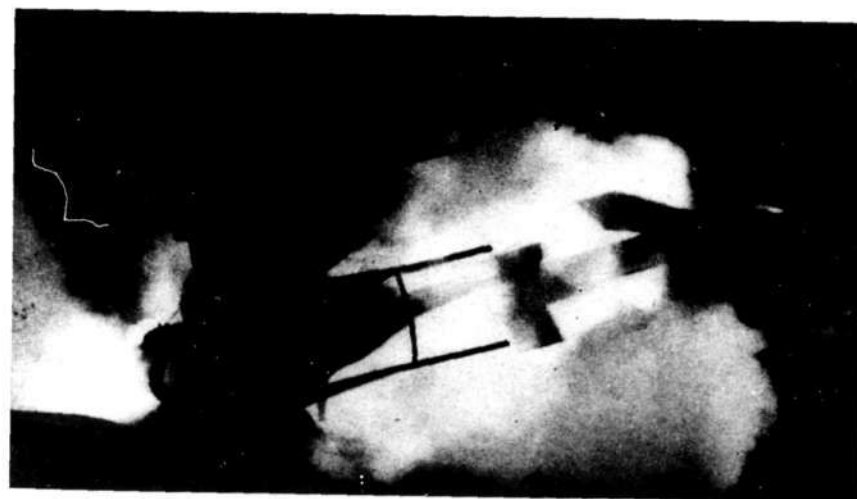
TARANAKI), Sweden, Holland and West Germany, and is known to be creating considerable interest in other countries.

A small and highly manoeuvrable weapon, Seacat is designed to be instantly ready to repel attack by hostile aircraft which may evade a naval unit's outer defensive fighters and long-range guided weapons. Power is provided by a solid fuel motor, and the large warhead carries both contact and proximity fuses. The missile can be used in a purely visual guidance system, or can be integrated with a blind fire director.

The system to be installed in the R.A.N. frigates will consist of a visual director and a launcher, mounted on deck, and a fire director room containing a launcher control console and a guidance transmitter. The director is manned by a control officer and an airman. The former receives the target bear-

ing on his information panel from the ship's warning radar. He manoeuvres the director on to the bearing indicated, and the aimer picks up the target in his binoculars. Movements of the binoculars are transmitted electrically to the launcher control console, where certain corrections are applied before routing to the launcher itself. The missile is then fired into the aimer's field of vision, and he guides it to the target by joy-stick control, stick movements being processed by the guidance transmitter and passed on to the missile in flight by an aerial mounted on the launcher.

The launcher carries four missiles grouped around the transmitting aerial. It automatically aligns itself to the correct bearing and elevation received from the control console, so that when a missile is fired it appears in the field of view of the binoculars at a distance convenient to the aimer. A launcher can be completely re-loaded in less than three minutes.



Sea-Cat Blasts Off

NOW

KELVIN HUGHES Compact Transistorised MARINE RADAR TYPE 17

Kelvin Hughes' latest Marine Radar, the Type 17, is a low cost, high performance, transistorised equipment of light weight, compact design, and low power consumption. It is particularly suitable for fitting in coasters, fishing vessels, tugs, yachts, and other small craft having limited space and power facilities. It is designed to meet the British Ministry of Transport specification and as a second radar on larger vessels it offers the advantages of low first cost and full reliability.

The Type 17 presents a high definition P.P.I. display on a NINE INCH cathode ray tube. This size of tube eliminates the need for magnification of the picture, although an optical magnifier can be supplied to increase the size of the display to TWELVE INCHES if required. Eight scale ranges are provided extending from A QUARTER MILE to TWENTY-FOUR MILES. Reliability is ensured by the use throughout of high quality components operating well within their safety limits, in association with silicon transistors which are exceptionally robust and virtually unaffected by temperature variations. The aerial employed is of the efficient slotted waveguide type.

S. Smith & Sons (England) Ltd.

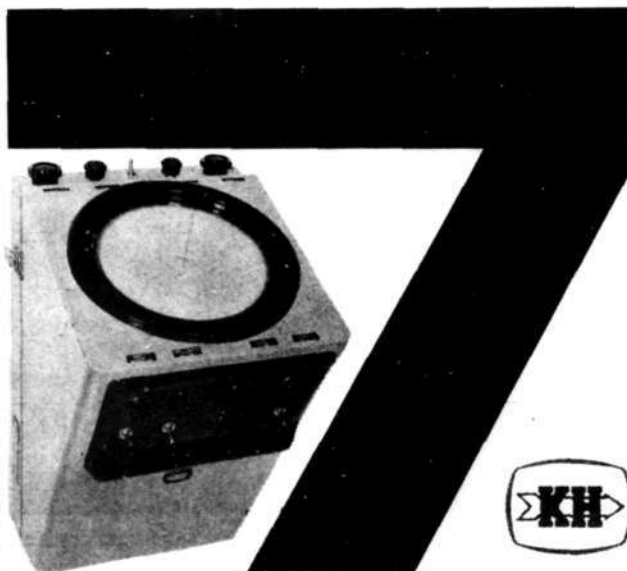
KELVIN HUGHES DIVISION

Sole Australian Representatives.

AMALGAMATED WIRELESS (AUSTRALASIA) LIMITED

HEAD OFFICE: 47 YORK STREET, SYDNEY

Branches in all Australian States.



JUNIOR TRAINING IN THE NAVY

— (1) —

Two forms of Junior Entry into the Royal Australian Navy are becoming increasingly popular — the Junior Recruit Entry and the Apprentice Entry.

The entry of "boys" into the Royal Navy is a long-established procedure, and the Royal Australian Navy, in its earliest days, commissioned TINGIRA as a boys' training ship in Sydney. The scheme was started in 1912 for boys from 14½ to 16½, and continued till 1927, when TINGIRA was sold.

The present Junior Recruit training scheme differs from the old scheme in almost every way. In TINGIRA the young seaman was taught the basic skills of the seaman, and was given very little formal schooling. The accent now is not on practical skills, but on academic training, to give these young men a sound

basis on which to build their professional knowledge. Whereas the 'boy' of 1912 was required to master knots, splicing, rigging and gun drill, his counterpart of to-day must be able to man or maintain complicated Asdic, Radar and communications equipment, and his knowledge of seamanship is relatively less important.

When present plans mature, the Royal Australian Navy will increase its intake each year from 525, as at present, to 600.

Junior Recruits now enter the Navy between 15½ and 16½ years. After their year's training at H.M.A.S. LEEUWIN in Western Australia, or H.M.A.S. CERBERUS in Victoria, they go to sea in ships of the Fleet for a year, for general experience. When this year is completed, the

ex-Junior Recruit is sent to a shore training school for specialist training lasting three to nine months. After about 33 months in the Navy, he is advanced to Able Seaman, Engineer or Electrical Mechanic, or the equivalent rate in the Supply and Secretariat Branch, or Fleet Air Arm.

APPRENTICE TRAINING

Apprentice training is comparatively new in the Royal Australian Navy. The School, near Sydney, was opened in 1956, to meet the Navy's requirement for tradesmen of the highest skill. Many civilian-trained men do not meet the Navy's special standards. The excellent training given by H.M.A.S. NIRMBA is reflected in the strong



Education is vital for the sailor of today. Junior recruits and apprentices continue their schooling as well as technical training.

competition for vacancies. This year there have been over 1500 applicants for 160 vacancies.

The main trades taught at H.M.A.S. NIRIMBA are fitting and turning, electrical fitting, and the skills required by Naval shipwrights. The apprenticeship lasts five years, of which the first four are devoted entirely to training, and the fifth to gaining

practical experience under supervision.

As all qualified tradesmen in the Navy hold the rate of Petty Officer or Chief Petty Officer, the Apprentices' School must not only give a sound technical training, but must also seek to develop the character of its men.

The product of H.M.A.S. NIRIMBA is thus a highly-

skilled tradesman who can not only take his place in industry, but who is specially trained to meet the Navy's needs.

Both Junior entries to the Royal Australian Navy provide avenues by which young men may leave school but continue their education, and at the same time start a career with endless possibilities for advancement.



Apprentices from H.M.A.S. NIRIMBA march with precision through Sydney.

NUTTALL LATHES

Some of the 76 NUTTALL All Geared Head, CENTRE LATHES at the R.A.N. Apprentice Training Establishment, "H.M.A.S. Nirimba" Quakers Hill, N.S.W.



MODERN TOOLS PTY. LTD.

414 BOTANY ROAD, ALEXANDRIA, N.S.W. MX 4327-8. Telegrams and Cables: "MODTOOLS", Sydney.

INTERESTED IN SHIPS?

Recent visits to Sydney by ships such as the U.S. aircraft carrier CORAL SEA and the Chilean training vessel, ESMERALDA, serve to show that a large section of the Australian public has more than a passing interest in the sea.

For those who wish to pursue this interest a little more vigorously as a hobby, there are quite a number of organisations in Sydney which cater specifically for them; one such body is the N.S.W. branch of the World Ship Society.

People from all walks of life derive great benefit from membership of the World Ship Society, and any readers interested in the Society's activities should write to the Hon. Secretary, N.S.W. Branch, World Ship Society, 64 Parr Parade, Dee Why, N.S.W.

GARDEN ISLAND DOCKYARD

require Tradesmen in the following classifications:—

| | |
|------------------------------|----------|
| Electrical Fitters | £20 16 6 |
| Electrical Mechanics | £20 16 6 |
| Coppersmiths | £20 19 6 |
| Fitters and Turners | £20 16 6 |
| Scientific Instrument Makers | £21 17 6 |
| Tradesmen (Radio) | £20 16 6 |

plus 5/- per week clothing allowance. Increments of 11/- per week after 1st and 2nd year. Good leave conditions, Cafeteria and Canteen. Continuity of employment to right men.

Applicants must have served an apprenticeship or hold a Certificate under the Tradesmen's Rights Regulations.

Apply personally, or in writing, to the General Manager, Garden Island Dockyard, or telephone FL 0444, Ext. 281.

AFT THROUGH THE HAWSE PIPE

In the days of the Old Navy, when the transition from the lower deck to officer rank was not easy for a rating, this slightly derogatory phrase was used to describe the way ex-ratings had reached commissioned rank. Because of the changed conditions in to-day's Navy, the phrase is no longer used.

There are several ways by which a rating may become an officer. Junior Recruits and Naval Apprentices who show special promise are selected as "topmen", and form a separate class at H.M.A.S. LEEUWIN in Western Australia. After 12 months in this class, they sit for the Western Australian Leaving Certificate. The successful graduates from the "topmen" class thus become eligible to enter the Royal Australian Naval College at Jervis Bay and join the Senior Entry Cadets.

The man who joins the Navy at an older age has an opportunity to qualify for commissioned rank through the Upper Yardman Scheme. The rating, to be eligible for selection, must

have reached before or after entry approximately a Leaving standard of education, and must be under 21 at the time of his selection for training under the Scheme.

Both "topmen" and upper yardmen join the Naval College for their basic training, and are further promoted under the same rules as cadet entry officers.

The commonest way for ratings to reach commissioned rank is through selection for the Special Duties list of officers. Candidates for this list are usually Petty Officers, and must have attained the requisite educational standard. After promotion, they remain in the branch in which they served as ratings. They thus become, through training and long experience, the experts in their chosen field.

Under to-day's conditions, it is more important than ever to encourage keen and intelligent ratings to aspire to officer rank. Not only is this to the rating's benefit, but it also helps fill the Navy's ever-growing need for skilled and experienced officers.

KWIT DETERGENT

MANUFACTURERS OF
ALL INDUSTRIAL AND DOMESTIC CLEANERS
AND DISINFECTANTS, etc.

SCOTTS DETERGENTS (A'asia) PTY. LTD.

SIR JOSEPH BANKS STREET, BOTANY

Tel. 666-9741

Tel. 666-9741



**FLY ONE JETLINE
AROUND THE WORLD**

QANTAS
42 YEARS OF DEPENDABLE SERVICE

QANTAS EMPIRE AIRWAYS LIMITED, in association with Air India, B.O.A.C., S.A.A. and TEAL.

Q73.64.93

GAMLEN CHEMICALS & SOLVENTS

The Gamlen Chemical Co., of South San Francisco, U.S.A., has been formulating and manufacturing chemicals to serve the Marine and industrial field for over half a century and have established offices throughout the world to give a 'World Wide' representation.

They are backed by the most modern laboratory and equipment to ensure the users are supplied with the correct material for the application and to cope with new and advanced methods of engineering.

Gamlen Chemicals market degreasing emulsifying solvents, steam cleaning compounds, electrical solvents, decarbonising solvents, descaling solvents and compounds, evaporator additives, boiler fireside combustion preventatives, fuel oil additives, sludge removal, refractory coatings, ships' tank cleaning at sea without labour, feed water treatments, recirculating cooling water system treatments in addition to which is provided a complete cleaning and maintenance service to handle every requirement.

Our engineers will be glad to assist you in the development of any special chemical or solvent that you need to meet a particular problem.

Australian Distributors:

H. G. THORNTHWAITE PTY. LTD.
CALTEX HOUSE, 167 KENT STREET, SYDNEY

Ship's Badges unveiled at Snapper Island



Captain M. N. Moyes, R.A.N. (Retd.), points out the badge of one of the ships of the R.A.N., in which he served, to an admiring group of Sea Cadets from T.S. SYDNEY.

The work of assembling the badges has been a labour of love, and Commander Forsythe has gone to great pains in many cases to hand-copy badges, and to visit out-of-the-way places in his efforts to represent as many ships as possible in his collection.

Vice-Admiral Sir John Collins spoke very feelingly on his long association with the Sea Cadet Corps, and graciously consented to assume office as Patron.

Captain Dovers (H.M.A.S. SYDNEY) spoke in support of Admiral Collins' remarks, and high-lighted the association of SYDNEY with the name of the Corps.

The unveiling ceremony was performed by the Corps' perennial friend and mentor, Captain M. N. Moyes, R.A.N. (Retd.), pictured above.

Captain Moyes spoke on the history of the R.A.N. and the

tradition handed down from the British Navy.

He regretted that perhaps some of the stories that could be told were not recorded.

One could not fail to be impressed by the magnificent efforts that have been put forward by the Cadets in manning Snapper Island and, indeed, any other activity associated with their training.

SEPTEMBER-OCTOBER, 1963

THE NAVY

ESSAY COMPETITION FOR SEA CADETS

In his entry for the essay competition, I. Liccioni, aged 14, of T.S. WARREGO, assembles a lot of good points, arranged in ship shape and with good economy of words. Included among his thoughts were the following:—

"What Sea Power Means to Australia"

"Sea power means life to Australia in many ways. If we did not have sea power we would be defenceless and practically isolated from other countries.

"Australia, with its vast area, needs sea power to bring iron ore from Adelaide to Newcastle and Wollongong for smelting. Although this is one reason, the most important is our import and export trade. Aeroplanes could only bring small quantities of foods, oil and machinery into the country.

"Ships can bring in much more than 'planes and it's cheaper.

"We export many things, mostly wool and wheat. Japan and many European countries buy these. But we must ship it out to them . . . we owe a great deal to ships and shipping.

"Sea power is life to Australia."

The essays were generally not up to prize standard, although they included thoughtful efforts, and, among these, the essay of I. Liccioni was considered worthy of a consolation prize which is being sent to him.

AT YOUR SERVICE For Your Holiday Requirements

INFORMATION AND BOOKINGS

Call or Telephone

HOWARD SMITH TRAVEL
CENTRES

SYDNEY:

269 George Street. Tel.: 27 5611

MELBOURNE:

522 Collins Street. Tel.: 62 3711

PORT ADELAIDE:

3 Todd Street. Tel.: 4 1461

FREMANTLE:

1 Mouatt Street. Tel.: 5 1071

NEWCASTLE:

16 Watt Street. Tel.: 2 4711

CAIRNS:

18 Abbott Street. Tel.: 2115 6

BALLARAT:

Cnr. Lydiard and Mair Streets.
Tel.: 2 5462.

JOIN THE



NAVY LEAGUE

The object of the Navy League in Australia, like its older counterpart, the Navy League in Britain, is to insist by all means at its disposal upon the vital importance of Sea Power to the British Commonwealth of Nations. The League sponsors the Australian Sea Cadet Corps by giving technical

The League consists of Fellows (Annual or Life) and Associates.

All British subjects who signify approval to the objects of the League are eligible.

MAY WE ASK YOU TO JOIN and swell our members so that the Navy League in Australia may be widely known and exercise an important influence in the life of the Australian Nation?

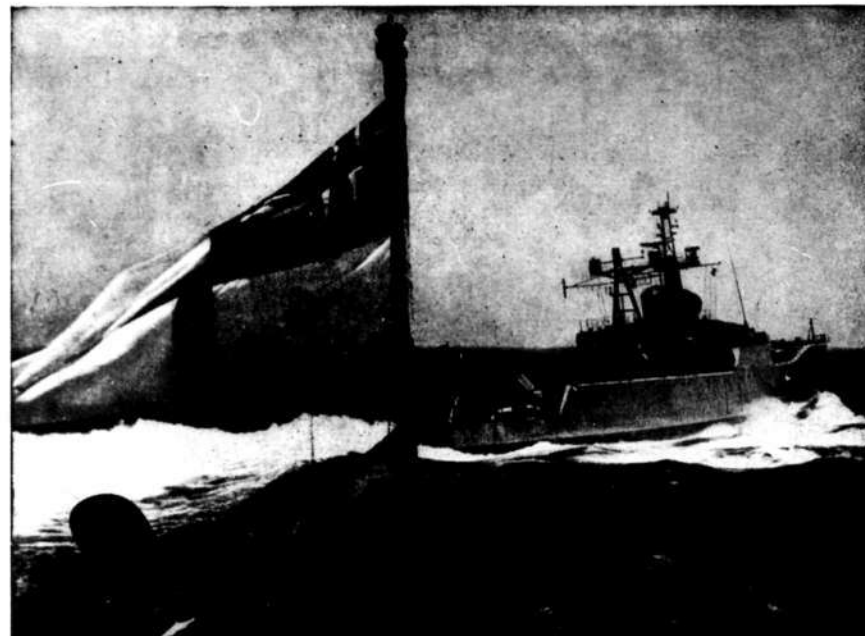
For particulars, contact The Secretary, 66 Clarence Street, Sydney, N.S.W.,
or The Secretary, Room 8, 8th Floor, 528 Collins Street, Melbourne, C.I, Victoria

or one of the Hon. Secretaries at:

- Box 376E, G.P.O., Brisbane, Queensland
- 11 Quorn Street, Sandy Bay, Hobart, Tasmania
- C/- H.M.A.S. "Melville," Darwin, N.T.

- 30 Pirie Street, Adelaide, S.A.
- 182 Coode Street, Como, W.A.
- 60 Limestone Ave., Ainslie, Canberra, A.C.T.

THE NAVY



H.M.A.S. Farramatta

Suppliers of a wide range of Austral Alloys to Australian Shipyards . . .

Copper and copper alloys, by virtue of their combination of excellent mechanical properties and the ability to resist corrosion by sea water and natural waters, are very extensively used in marine engineering.

There is an Austral alloy available for every need. Here are some of the many uses:—

COPPER—Sheathing for small craft and piles, electrical components, boat nails.

GILDING METALS—Decorative trim, hull fittings.

BRASS—Mouldings, frames, nuts, bolts, screws, chains, pipe fittings, sail eyelets.

NAVAL BRASS—Sheathing, condenser tube plates, shafting, valves, non-magnetic binnacle fittings, telegraphs, hull fittings, general marine hardware.

ALUMINIUM BRASS—Tube plates for condensers and heat exchangers.

BEARING ALLOYS—Bearings, gears, connecting rods, bushes.

PATENTED NOXOSTON ALLOY—Produced under licence to J. Stone & Co. (Aust) Pty. Ltd. for the fabrication of propellers by Cockatoo Docks and Engineering Company Pty. Ltd. only.

Austral Bronze Company specialises in the production of high-strength corrosion-resistant alloys to British, American and Admiralty specifications for marine applications.

MANGANESE BRONZE—Propeller shafts, valves, pumps, bolts, nuts, gears, bearings, pump impellers, fittings.

PHOSPHOR BRONZE—Springs, switches, bellows, diaphragms, shims, bushes.

ALUMINIUM BRONZE—Propeller shafts, valves, pumps, gears bushes, pump bodies, impellers, forgings, tube plates, underwater fittings.

CUSILMAN (silicon bronze)—Calorifiers, welded tanks and pressure vessels, pipe fittings.

EVERDUR—Shafting, keel bolts, screws, nuts, nails.

NICKEL SILVER—Marine instruments and fittings, decorative trim.

PATENTED SUPERSTON ALLOYS—Produced under licence to J. Stone & Co. (Aust) Pty. Ltd. for fire and big pumps, turbine runners, impellers, end plates, valves, stems.

Ask your Austral Bronze Sales Office for further information and literature.

AUSTRAL BRONZE

COMPANY PTY. LIMITED

Sales Office and Warehouse: 15-21 O'Riordan Street, Alexandria. Phone: 69 0322



Off the beach at Waikiki

You'll never forget the pleasure of sailing P & O - Orient

Run away to sea on a P & O - Orient vacation voyage. In our big ships there's every imaginable facility to have a good time . . . deck sports, swimming, race meetings, housie, dancing, movies, parties. Good food. Good company. Good health. Ask about our 'Boomerang' voyages to North America,

Hawaiian Excursions, Pacific Triangle voyages, visits to Fiji, Shopping Trips to the Far East, Round Tours to Ceylon/India, Winter Cruises to Pacific Islands.

**P&O - ORIENT
LINES**

527
Na

THE

NOVEMBER, 1963

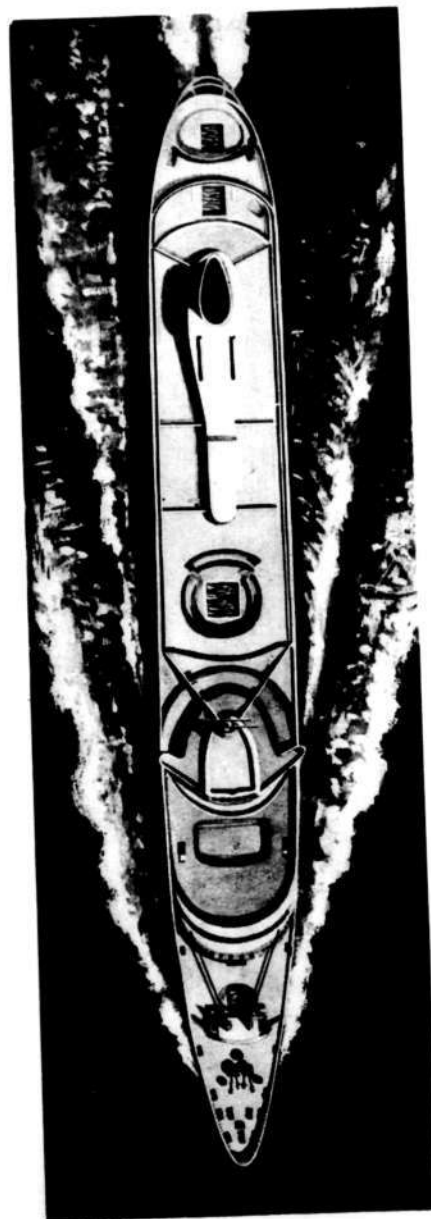
1/6

Navy



H.M.A.S. PERTH LAUNCHED

H.M.A.S. PERTH makes a splash as she stands up for the first time.



SEAGOING LINER



or SEAWORTHY LINKS...

ZINC galvanises it into longer life

Nothing lasts forever; things wear out with use; but iron and steel products "live" longer, giving more years of service if they are protected from corrosion by galvanising with zinc or the application of zinc anodes. "Think Zinc" — and for marine products specify a galvanised coating or zinc anodes to ensure longer life, lower maintenance costs and hence unquestioned economy.

BUILDING AND CONSTRUCTION
Structural steel, girders, trusses, angles.

MANUFACTURING
Steel sheet, wire, pipes, castings.

PUBLIC WORKS AND SERVICES
Traffic signs, guard rails, transmission towers.

MARINE
Anchors, chains, cleats, rails.

DOMESTIC
Roofing, water tanks, clothes hoists, window frames, wrought iron work.

"A-Z" brand electrolytic zinc (guaranteed 99.95%)
"A-Z Special" four nines zinc (guaranteed 99.99%)
Quality products of world-wide reputation produced by:—



ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED

390 Lonsdale Street, Melbourne, Victoria.
Cables & Telegrams "ELECTZINC", Melbourne.

214

THE NAVY

Vol. 26

NOVEMBER, 1963

The Official Organ of the Navy League of Australia

No. 5

19 DEC 1963

CONTENTS

| | Page |
|--|------|
| SUPPORT FOR MALAYSIA | 2 |
| GOVERNOR-GENERAL VISITS H.M.A.S. SYDNEY | 3 |
| WHALER TRAGEDY | 7 |
| MINESWEEPERS TO CLEAR ISLANDS MINEFIELD | 9 |
| CENTRAL ORGANISATION FOR DEFENCE IN U.K. | 11 |
| INTERSTATE SHIPPING — AUST. NATIONAL LINE | 13 |
| NAVY SECRETARY RETIRES | 15 |
| H.M.A.S. MORESBY — NEW TYPE MACHINERY | 17 |
| TRAFALGAR COMMEMORATED | 19 |
| REGULAR DEFENCE FORCES WELFARE ASSOCIATION | 22 |

Plus Sundry Stories and Photographs of H.M.A. Ships

Published by the Navy League of Australia
66 Clarence Street, Sydney, MA 8784. Postal Address, Box 3850, G.P.O.

Advertising Enquiries: The Navy, 5th Floor, 222 Clarence Street, Sydney.

Printed by Jno. Evans & Son Printing Coy. Pty. Ltd., 486 Kent Street, Sydney. Phone: MA 2674.

THE NAVY LEAGUE OF AUSTRALIA

PATRON:

The Governor-General, His Excellency The Right Honourable Viscount De Lisle, V.C., P.C., G.C.M.G., G.C.V.O., Kt. of St. J.

FEDERAL COUNCIL:

President: Rear Admiral H. A. Showers, C.B.E.
Deputy President: Lieut. Cdr. J. B. Howse, V.R.D., R.A.N.V.R.
Secretary: Lieutenant I. Mackay-Cruise, R.A.N.R.

New South Wales Division:

Patron: His Excellency, The Governor of New South Wales.
President: Rear Admiral H. A. Showers, C.B.E.
Secretary: Lieut. Cdr. A. A. Andrews, M.B.E., R.A.N., 28 Royal Street, Chatswood, Sydney.

Victorian Division:

Patron: His Excellency, The Governor of Victoria.
President: Captain A. N. Boulton.
Secretary: Miss E. C. Shorrocks, 528 Collins Street, Melbourne.

Queensland Division:

Patron: His Excellency, The Governor of Queensland.
President: Cdr. N. S. Paisley, M.B.E., V.R.D., R.A.N.R. (Retd.).
Hon. Sec.: G. B. O'Neill, Esq., Box 376E, G.P.O., Brisbane.

Australian Capital Territory Division:

President: Lt. Cdr. J. B. Howse, V.R.D., R.A.N.V.R.
Hon. Sec.: Lieut. Cdr. D. M. Blake, R.A.N.V.R., 60 Limestone Avenue, Ainslie, A.C.T.

Northern Territory Division:

Patron: His Honour the Administrator.
President: O. J. Cameron, Esq.
Hon. Sec.: Mrs. V. M. Slide, c/o H.M.A.S. "Melville", Darwin, N.T.

AUSTRALIAN SEA CADET COUNCIL:

Navy League:
Rear Admiral H. A. Showers, C.B.E.
Lieut. Cdr. J. B. Howse, V.R.D., R.A.N.V.R.

South Australian Division:

Patron: His Excellency, The Governor of South Australia.
President: F. N. Dunn.
Hon. Sec.: R. R. Sutton, Esq., 30 Pirie Street, Adelaide.

Tasmanian Division:

Patron: Vice Admiral Sir Guy Wynt, K.B.E., C.B., R.N.
President: Cdr. A. H. Green, O.B.E., D.S.C., R.A.N. (Retd.).
Hon. Sec.: Lt.-Cdr. J. C. Mahon, R.A.N.R., 11 Queens Street, Sandy Bay, Hobart, Tas.

Western Australian Division:

Patron: His Excellency, The Governor of Western Australia.
President: Roland Smith, Esq.
Hon. Sec.: R. A. Hannah, Esq., 182 Coode Street, Como, W.A.

A Representative from each Navy League Division, also—
S.C. Cdr. L. E. Forryde.
Lieut. Cdr. F. G. Evans, R.A.N.V.R.
Hon. Sec.: Lieutenant I. Mackay-Cruise, R.A.N.R.

NOVEMBER, 1963

1

Diesel Fuel Injection Equipment

- Repairs
- Maintenance
- Consulting and
Manufacturing
Engineers

NEPTUNE

Engineering Company

Lavender Bay,
North Sydney

XB 2004 Phones XB 2695

Support For Malaysia

AUSTRALIA'S POSITION MADE CLEAR

In the House of Representatives on September 25, the Prime Minister, Sir Robert Menzies, made a policy statement on defence.

Sir Robert Menzies said: "Members would not wish me to create or to permit any ambiguity about Australia's position in relation to Malaysia."

"I therefore, after close deliberations by Cabinet and on its behalf, inform the House.

"That we are resolved, and have so informed the Government of Malaysia and the Governments of the United Kingdom and New Zealand and

others concerned . . .

"That if in the circumstances that now exist in relation to Malaysia or any of its constituent States armed invasion or subversive activity supported or directed or inspired from outside Malaysia . . .

"We shall to the best of our powers and by such means as shall be agreed upon with the Government of Malaysia . . .

"Add our military assistance to the efforts of Malaysia and the United Kingdom in the defence of Malaysia's territorial integrity and political independence."

Governor-General Honours R.A.N.

The Royal Australian Navy was honoured recently when His Excellency Viscount De L'Isle, V.C., P.C., G.C.M.G., G.C.V.O., K.St.J., Governor General of Australia and Commander-in-Chief, made his first trip with the service.

The Governor-General sailed from Sydney aboard the troop-carrier H.M.A.S. SYDNEY, on Friday, 27th September, and called at Norfolk Island on the 30th, and Lord Howe Island on 2nd October. He returned to Sydney on Friday, 4th October.

The Governor-General had expressed a keen desire to experience at first-hand life in an Australian Naval ship, and his first visit to Norfolk and Lord Howe Islands provided this opportunity.

H.M.A.S. SYDNEY was carrying out her normal programme of training, which she combines with her role as a fast troop transport.

During the passage of H.M.A.S. SYDNEY to Norfolk Island, His Excellency tried his hand at steering the 17,700-ton carrier.

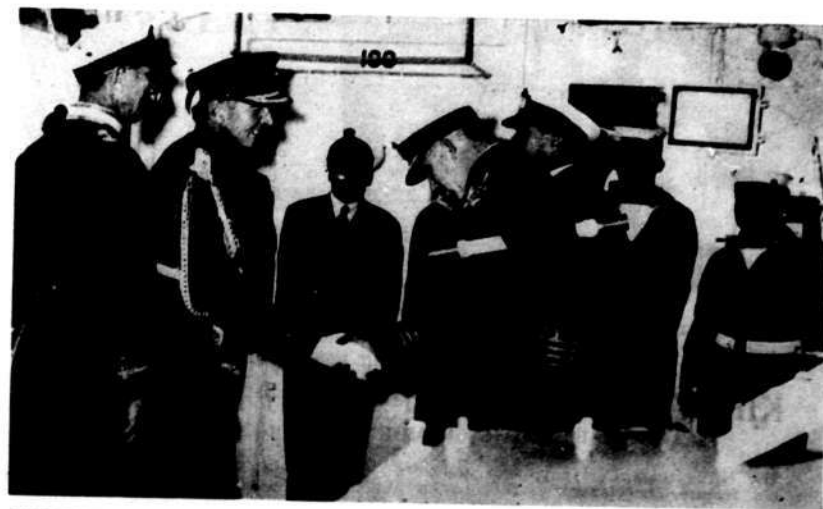
He also visited the engine-room, where, dressed in protective overalls, he spent half an hour in a temperature which varied from 100 degrees to 135

degrees.

Despite the furnace-like atmosphere and the almost deafening noise of the machinery, Lord De L'Isle stopped for shouted conversations with most of the sailors on duty.

In the boiler-room he was given the opportunity to control the burners, and in another compartment stopped to taste the ship's freshly-distilled water.

SYDNEY turns three and a half tons of sea water into fresh water every hour.



WELCOME ABOARD — The Governor-General, Lord De L'Isle is welcomed aboard the H.M.A.S. SYDNEY by the ship's Commanding Officer, Capt. W. J. Dovers, D.S.C., R.A.N. On the left of the picture is the Flag Officer Commanding the Australian Fleet, Rear-Admiral A. W. R. McNicoll, C.B.E., G.M.

THE NAVY IS ALWAYS AT WAR . .

Yes—the navy is always at war with corrosion and marine growths which attack the hulls of fighting ships. For more than eighty years the weapons to fight this war have been supplied to Her Majesty's Navies throughout the world by International Paints—world leaders in marine paints.

Australia's Merchant Marine, the navy's partner in war, is also protected by International Paints.

All over the world, from over 1,000 distributing points, the products of International Paints are available. The same high quality goes into every can—whether marine paint or the famous Rapid Interlux range of household finishes.

Follow the navy's lead—protect your own boat, and your home, too, with International Paints. A complete range of enamels, undercoats and primers, together with Majora Rapid Interlux Plastic Matt, Australia's foremost plastic paint, ensures that there is an International Paint for every job.

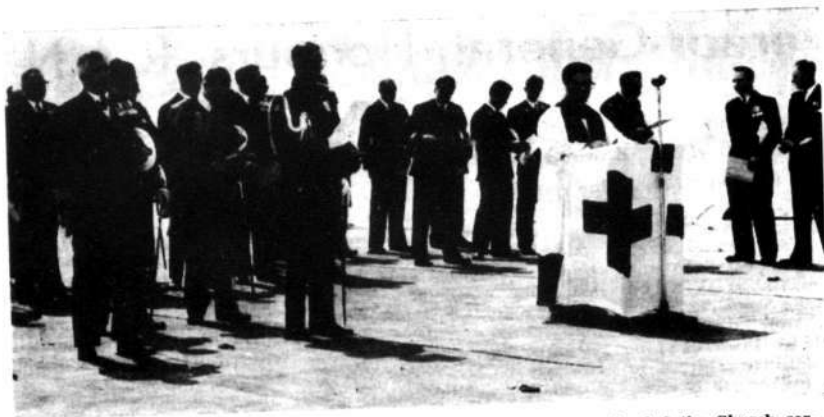


INTERNATIONAL MAJORA PAINTS PTY. LTD.

Australian Unit of INTERNATIONAL PAINTS LTD.



The World's Largest Paint Organisation



Lord De L'Isle after inspecting the ship's company at Divisions, attended the Church service on the Flight Deck.



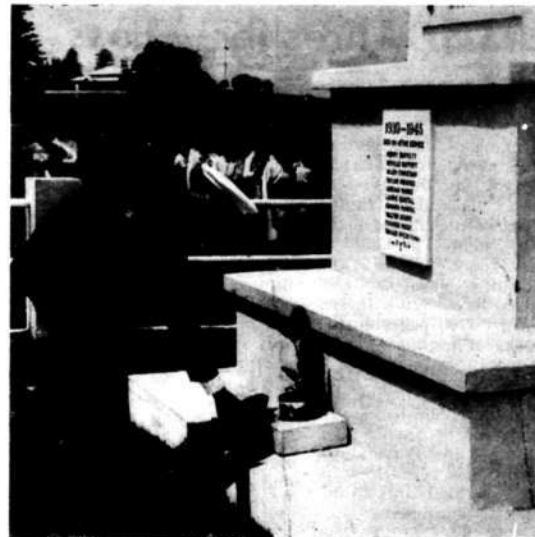
HELICOPTER TRANSPORT

Leading Airman Len Ackerly and L.A. Gordon Walter, make sure the Sycamore helicopter in which Lieutenant Commander Ken Douglas, right, flew the Governor-General ashore at Norfolk Island and Lord Howe Island, is ready.

Compliments to "The Navy" and all R.A.N. Establishments.
KIRBY BOOK COMPANY PTY. LTD.
362 MILITARY ROAD, CREMORNE. PHONE: 90-5248.

The Kirby Book Company, well known throughout all R.A.N. Establishments. We feature Encyclopaedias, Dictionaries, Motor Manuals, and all Educational and Technical Books.

Available on small deposit, immediate delivery, and balance by easy monthly instalments.



His Excellency lays a wreath on the War Memorial at Norfolk Island.



His Excellency leaving H.M.A.S. SYDNEY, shortly after the ship berthed at Garden Island.

**COCKATOO DOCKS
& ENGINEERING
CO. PTY. LTD.**

•
**Shipbuilders
Marine
and
General Engineers**

Contractors to . . .
H.M. AUSTRALIAN NAVY
Inquiries Invited

**COCKATOO DOCK
SYDNEY**
Phone: 82 0661
(10 lines).

U.S.S. Thresher—Loss

COURT OF INQUIRY FINDING

The sinking of the American nuclear-powered submarine, THRESHER in the Western Atlantic was "most likely" caused by a piping failure in one of the salt water systems, "probably in the engine room." This is the conclusion of a Naval Court of Inquiry that heard 120 witnesses and recorded 1700 pages during eight weeks of testimony.

The loss of the THRESHER was the greatest submarine disaster in history. She had sailed on the morning of April 9 after nine months in Portsmouth, New Hampshire, Naval Shipyard, for overhaul and installation of new equipment.

When she plunged to the bottom in 8,400 feet of water she

had 112 Navy personnel and 17 civilians on board.

Two weeks after the formal Board of Investigation concluded hearings, the United States Navy announced that while on her deep-dive tests, "most likely a piping system failure had occurred in one of THRESHER'S salt water systems, probably in the engine room. The enormous pressure of sea water surrounding the submarine subjected her interior to a violent spray of water and progressive flooding. In all probability, water affected electrical circuits and caused loss of power. The THRESHER slowed and began to sink. Within moments she had exceeded her collapse depth and was totally flooded."

WHALER TRAGEDY

A Naval Board of Inquiry is inquiring into the disappearance of a whaler, manned by Midshipmen D. J. Sanders, G. J. Pierce, B. H. Mayger, P. G. Mulvany, and Sub-Lieut. N. J. Langstaff, R.A.N.R., while engaged on a training cruise from H.M.A.S. SYDNEY.

The following statement regarding the occurrence was made in the Senate by the Minister for the Navy, Senator J. G. Gorton:

"I wish to take this opportunity to place before the Senate a factual account, so far as it is at present known of this affair and to indicate what is now happening and what it is proposed will happen in the future.

"A party of five midshipmen left H.M.A.S. SYDNEY last Thursday morning with the object of circumnavigating Hook

and Hayman Islands.

"The object of this training exercise was to give them further experience in small boat handlings, which is an essential accomplishment of seamen officers.

"This exercise had been going on for some time with different crews, and three previous exercises of the same kind had been carried out on the three previous days before the exercise on which the tragedy occurred.

"On the three previous occasions, and on the occasion we are discussing, the weather is reported by the Navy on the spot to have been similar, with winds ranging from 15 to 25 knots, and moderate seas.

"On two previous occasions boats were unable to return to H.M.A.S. SYDNEY by nightfall

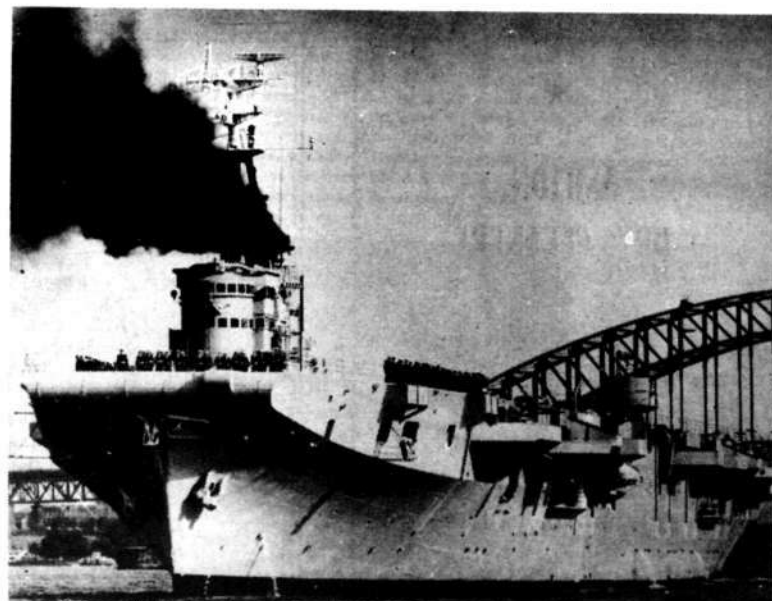
because of the tide, but this had been anticipated, and the crews had been told to spend the night camped ashore, if necessary.

"On each of these occasions a motor cutter went out from H.M.A.S. SYDNEY as a safety precaution to investigate the whereabouts of the crews.

"On the fourth occasion the ill-fated whaler left H.M.A.S. SYDNEY at 5 a.m.

"She was last seen at 8.20 a.m. by the crew of a whaler which was returning from the previous day's exercise, who spoke with her, gave indications of sea conditions ahead, and who reported her sailing well in moderate conditions.

"When the whaler failed to return on Thursday evening, a motor cutter left H.M.A.S. SYDNEY as on previous occasions, but could find no sign of the boat.



**H.M.A.S.
SYDNEY**
leaves
Harbour for
North
Queensland
Cruise.

**AUSTER
AEROPLANES**
All Models Available
ex stock

Service, Overhauls and Spare Parts
available at Attractive Prices.

AUSTERSERVE PTY. LIMITED

P.O. BOX 11, BANKSTOWN, N.S.W.

Telephone: 70-1242

**THE UNITED SHIP SERVICES
PTY. LTD.**

88-102 Normanby Road, South Melbourne,
Victoria, Australia.

**MELBOURNE — GEELONG —
PORTLAND**
and all Victorian Ports

The largest organisation in Victoria for the fabrication and installation of fittings for every description of cargo. Bulk grain fittings a speciality. Dunnage Supplied. Holds cleaned. Decks caulked. All trades available and include:

Shipwrights, Carpenters, Joiners,
Dockers, Painters, Riggers

Telephone: MX 5231
Telegrams and Cables: "UNISTEVE,"
Melbourne

Always ask for . . .

SHELLEY'S FAMOUS DRINKS

Obtainable from leading
shops and saloons

CORDIAL FACTORY

SHELLEY & SONS

PTY. LTD.

MURRAY STREET

MARRICKVILLE

N.S.W.

'Phone: LA 5461



ASHTON DRY CLEANERS



*Well Known in R.A.N. Circles for
Service and Quality*

68 OXFORD STREET, SYDNEY
TELEPHONE: FA 4473

"In the early hours of Friday morning it called at Hayman Island to inquire if the boat had been sighted from there.

"The crew of the cutter was told that late on the previous afternoon a boat from the island had set out to investigate a report from a visitor to the island of an object which could have been an upturned boat with three people surrounding it.

"The island boat, however, had mechanical trouble soon after setting out, and did not, in fact, carry out the investigation.

"As soon as the cutter's crew inquired about the missing whaler the island boat set out again, while the cutter returned to H.M.A.S. SYDNEY to report the situation.

"The cutter reached H.M.A.S. SYDNEY at 5 a.m., and a comprehensive search was under way an hour later.

"H.M.A.S. ANZAC was sent to search to the east of Hook Island

while H.M.A.S. SYDNEY and the island boat searched to the north-west of Hayman Island.

"The Royal Australian Air Force was asked to co-operate in the search, and the first Neptune maritime aircraft was on task by 10 a.m.

"The whaler was not found until yesterday afternoon in circumstances which the Senate will know. These are all that are known of the facts up to the present.

"I should like to conclude, Mr. President, by stating that these young men are the finest types of young Australians, and the nation can ill spare them.

"Their loss to their families must be infinitely greater.

"All we can do is to express to those families the greatest sympathy and admiration for the men whom they have lost."

BEGG & GREIG PTY. LTD.

**Marine, General and Electrical
Engineers**

20 ERSKINE STREET, SYDNEY
29-1208 29-7087

After Hours:

| | |
|--------------------|-----------------|
| D. W. REED | JW 4095 |
| C. D. WILKS | 44-5959 |
| E. HAGLEY | 524-8350 |

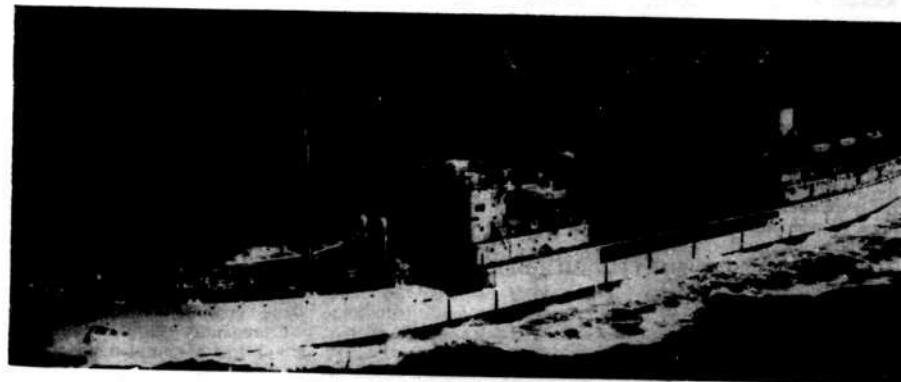
24 Hr. Service in following Trades:
BOILER MAKERS, FITTERS, ELECTRICIANS,
MACHINISTS, PLUMBERS and COPPERSMITHS,
SHIPWRIGHTS and JOINERS,
PAINTERS and DOCKERS

MINESWEEPERS SAIL TO CLEAR MINEFIELD

The six ships of the 16th Minesweeping Squadron sailed from Sydney on September 26, to chart a channel into Tonolei Harbour on the South Coast of Bougainville.

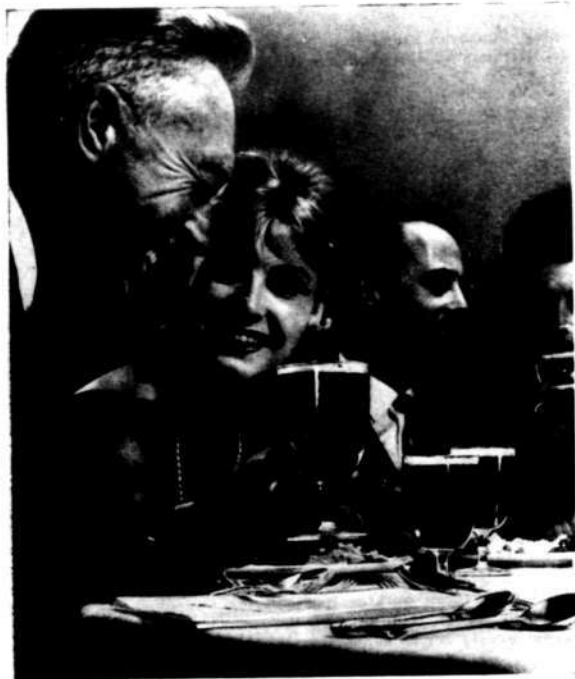


The operation will provide practical experience for the Australian minesweeping squadron, which was formed at the end of last year. The minesweepers will sweep an area about five and a half miles long by half a mile wide. The 150 mines to be cleared are of the magnetic variety laid on the ocean floor by U.S. aircraft in 1943. The minesweepers will have to make a number of sweeps over the area, because the mines were carrying "ship count" devices designed to trigger them after the passage of a set number of ships. However, after twenty years, it is likely that most of the mines have ceased to be dangerous. With the six ships of the squadron working together, the sweeping task will take only a few days. The R.A.N. replenishment tanker, H.M.A.S. SUPPLY, shown below, will accompany the minesweepers to act as support vessel.



THE NAVY

NOVEMBER, 1963



CS313.28

Beer only for barbecues?

Good beer belongs anywhere there's an appetite. The same cool sharpness that adds so much to an outdoor grill is equally enjoyable with any dish. Nothing's too good for beer. Its zest and coolness are welcome whether your chef is Paris-trained or just the next door neighbour.

Whatever you're eating, whatever the occasion, ask for beer. You'll add to your pleasure!

CARLTON & UNITED BREWERIES LTD.

Change in Senior Sea Appointment

The Minister for Defence, Mr. Townley, announced future appointments for Rear-Admiral A. W. R. McNicoll, C.B.E., G.M., and Rear-Admiral O. H. Becher, C.B.E., D.S.C. and Bar.

Rear-Admiral McNicoll, Flag Officer Commanding the Australian Fleet, will become Fourth Naval Member of the Naval Board next January.

Mr. Townley said that in June next year, Rear-Admiral McNicoll would take up the appointment of Flag Officer in Charge, East Australia Area.

Rear-Admiral Becher, Head of the Australian Joint Services Staff in London, would succeed Rear-Admiral McNicoll as F.O.C.A.F.

New Post for Western Australian

A Royal Australian Navy survey ship, H.M.A.S. BARCOO, is carrying out a two-month survey in the Samson Point-Depuch Island area, south of Port Hedland.

BARCOO will chart shipping channels suitable for safe navigation by deep-draught vessels. Such charts are vital in the establishment of new ports to open up mineral deposits.

The Navy has given priority to this project because of its importance to national development.

It is a typical example of the contribution which the Royal Australian Navy's Hydrographic Service made to the peacetime development of Australia.

H.M.A.S. BARCOO is under the command of Lieutenant-Commander E. R. Whitmore, and has a complement of 133 officers and men.

CENTRAL ORGANISATION FOR DEFENCE IN UNITED KINGDOM

by MICHAEL CHICHESTER

The following extracts have been taken from an article in "The Navy":—

The enormous scientific and technological advances in weapons and equipment of the last decade, the reduction in the size of our armed forces, and the ever-changing nature of war have all coalesced to make inevitable the massive changes in Britain's higher defence organisation, which were foreshadowed by Mr. Thorneycroft in this year's defence debate and which have now been explained in the White Paper, "Central Organisation for Defence".

Under the new arrangements a Secretary of State for Defence will preside over a unified Ministry of Defence comprising the existing Defence Ministry, the Admiralty, War Office, and Air Ministry. With responsibility for the whole defence budget of some £2000 million annually, for some 400,000 Service men and women, and for an equal number of civilians in defence employment, the new Secretary of State will wield vast influence and dispose of great patronage in the new corridors of power in Whitehall Gardens. Under his chairmanship, a Defence Council will be established, consisting of three Ministers of State for Defence, the Chief of the Defence Staff and the Chiefs of Staff of the three Services, the Chief Scientific Adviser to the Secretary of State and the Permanent Under-Secretary of State for Defence. Although the Defence Council will deal mainly with major defence policy, it will exercise the highest level of command and

administrative control over the Services, and under its authority will be issued all the regulations, orders and instructions hitherto issued by the Admiralty, and by the Army and Air Councils. For the Royal Navy, 'By command of their Lordships' will become 'By order of the Defence Council'.

Despite his overall authority, in practice the Secretary of State will delegate responsibility for the 'management' of each Service to the newly constituted Navy, Army and Air Force Boards, each of which, under a Minister of State, will be charged with personnel management, welfare and disciplinary administration and the procurement of weapons and equipment for its own Service.

In two respects, the new organisation will be a great improvement on the existing tangle of overlapping and inter-related organisations which represent the current Whitehall defence jungle. For the first time in the history of this country we shall have a fully integrated, operational war headquarters within the Defence Ministry whence the control of our forces on a world-wide basis can be exercised and a 'brush-fire' war or any other type of operation put into action in a matter of minutes.

This control will be exercised by three vital elements of the military staff of the new Ministry: the Defence Operations Executive which will man the Defence Operations Centre on a permanent basis; the Defence Signals Staff, which will man the Defence Communication Centre to link the Ministry with head-

quarters and units all over the world; and a Defence Intelligence Staff (pooled from the old Intelligence Departments of the Admiralty, War Office and Air Ministry), which will provide an integrated intelligence background for the activities of our fighting units. In addition, there will be a Defence Operational Requirements staff charged with the formulation of requirements for weapons and equipment on a Defence, instead of on a single Service basis.

Necessary Improvement

The other major improvement will be achieved, it is hoped, in the control — both financial and otherwise — of defence research, development, and production, which at present takes nearly £800 million a year out of the defence budget. The gross miscalculations and endless delays in the post-war weapons' programme, and the sorry tale of cancellations and vacillations, prove how necessary this improvement has become. We have already referred to the presence of the Chief Scientific Adviser (Sir Solly Zuckerman) on the Defence Council, and the White Paper stresses the need for scientific effort throughout the Ministry to be more closely co-ordinated. A Defence Research Committee will be set up to advise on scientific and technical matters which may affect defence research policy and independent scientists from outside the Ministry will be invited to sit on it.

For the majority of officers and men of the Royal Navy the new power complex in Whitehall Gardens will have little direct

effect. Their promotions and advancement, their appointments and drafting, their welfare and conditions of service will continue to be looked after by much the same organisations and officials as before, even if they may be found in future in

AT YOUR SERVICE For Your Holiday Requirements

INFORMATION AND BOOKINGS
Call or Telephone
HOWARD SMITH TRAVEL
CENTRES

SYDNEY: Tel: 27 5611
269 George Street.
MELBOURNE: Tel: 62 3711
522 Collins Street.
PORT ADELAIDE: Tel: 4 1461
3 Todd Street.
FREMANTLE: Tel: 5 1071
1 Mowat Street.
NEWCASTLE: Tel: 2 4711
16 Watt Street.
CAIRNS: Tel: 2115/6
18 Abbott Street.
BALLARAT: Tel: 2 5462
Cnr. Lydiard and Main Streets.

NICOL BROS. PTY. LTD.

ALL CLASSES OF STEAM, DIESEL
AND GENERAL ENGINEERING
BOILERMAKERS, OXY-ACETYLENE
AND ELECTRIC WELDERS
PLUMBING AND ELECTRICAL WORK

10-20 WESTON ST., BALMAIN EAST

'Phones: 82-0367 (3 lines)

After Hours: 76-9385, 86-3225, 36-5708

different offices and with different titles to those made familiar by years of past acquaintance. But whenever possible, and more and more, these problems of administration will be examined on an integrated 'Defence' rather than a single Service basis. Thus the Chief of Naval Personnel (The Second Sea Lord) will work closely alongside the Adjutant-General and the Air Member for Personnel, whilst a new appointment of Deputy Chief of the Defence Staff (Personnel and Logistics) will be formed to deal with the Defence aspects of personnel and logistics problems. In passing, it may be hoped that this officer will examine (in time) some of the anomalies which have grown up over the years in the administration of the so-called uniform pay code by each Service, particularly in the field of allowances where naval officers often seem to fare worse than their opposite numbers.

Lord High Admiral

In mourning, as we must, the passing of the Board of Admiralty we can be gratified to note that steps have been taken to perpetuate the historic title of

Lord High Admiral which would otherwise have fallen into disuse after some 600 years. Her Majesty the Queen has graciously consented to assume this title, and she will fly the flag of the Lord High Admiral at sea and in naval establishments on official occasions with the Royal Standard. The last woman to hold this title was Queen Anne, who held it for a month and a day in 1708, after the death of her husband, Prince George of Denmark.

Space does not permit further examination of these far-reaching proposals which are due to be debated in the House of Commons as this issue of "The Navy" goes to press. They are to be brought into force on April 1, 1964, and it is clear that a period of years will be necessary for them to become fully effective. But already one big question mark hangs over the whole project. Will it lead to real and sizeable reductions in the civil and military staffs (particularly the former) of the defence departments, so that a larger total of ships, aircraft and weapons, and trained men to man them, can be provided from the available funds, or will there by 1980 be two civilians to every man in uniform instead of the present one?

Vice-Admiral Sir Peter Cazalet

Letter from Chairman of the British Navy League to the "Times":—

"Opinions may vary as to the efficacy of the new proposals for the Central Organisation for Defence, but on one point it would seem that there is little room for argument. Unless the Secretary of State for Defence is allowed a reasonable time in office, it is difficult to see how any system can remain efficient.

"There have been nine Ministers of Defence in the past 11 years and a repetition of this kind of thing will be more than any system of defence can stand."

THE NAVY

INTERSTATE SHIPPING

The following extracts are from the 1962-63 Report of the Australian National Line:—

Chairman's Report

In the earlier months of this financial year, no less than 14 ships of the fleet were laid up through lack of business, primarily due to a falling away in the quantity of iron-ore required by the steel industry.

At the same time, the state of the world freight market made it impossible for Management, and despite every effort, to find relief in overseas trading.

As indicated in my Report of last year, the future, 12 months ago, seem to show little promise of a satisfactory result. Fortunately, as time went on the demand for tonnage rose, and it is pleasing now to be able to note that as at 30th June, 1963, every ship of the Australian National Line, saving one under classification survey, is back in service.

The net profit earned for the period ended 30th June, 1963, at £1,340,736, falls short of the figure recorded for the preceding 12 months by £21,873, an indication of the manner in which the General Manager and all his staff rose to the challenge of difficult trading conditions; and for which my fellow Commissioners, and I would now record our best thanks.

From the amount available for appropriation, a dividend of 6% amounting to £985,507 will again be paid, whilst £300,000 has been transferred to General Reserve, and £50,000 to Reserve for Hull Insurance; £120,383 is carried forward as unappropriated profit.

During the year, over £3 million was expended on fixed assets, mainly new ship construction, terminal and office facilities, and commitments have been entered into for a further £5 million for the same purposes.

In order to finance this programme and other projects now being investigated, the Act governing the Australian Coastal Shipping Commission has been amended so as to increase borrowing power from £1 million to £5 million.

Considering the immediate future, certainly the picture today, with full employment of the fleet, is a great deal better than it was at this time last year, a bright spot being the successful penetration into the Melbourne/Brisbane trade with two "B" Class vessels converted to "container-carriage".

A point to be remembered, however, is that since the establishment of the Commission in October, 1956, the cost of operating vessels on the Australian Register has risen by not less than 40%, whilst the recently granted margins on wages will involve the Australian National Line in a further increase of £275,000 in the coming year.

| Class | Average D.W. Tonnage | Number in the Fleet | Average Age (Years) | Propulsion |
|------------------------|----------------------|---------------------|---------------------|--------------------|
| "Princess of Tasmania" | 1,073 | 1 | 3.8 | Motor |
| "Bass Trader" | 1,515 | 1 | 2.3 | Motor |
| "Mount" | 13,705 | 2 | 2.8 | Motor |
| "Lake" | 10,327 | 8 | 5.5 | 5 Motor 3 Steam |
| "T" | 10,233 | 2 | 8.1 | Steam |
| "River" | 8,525 | 1 | 15.8 | Steam |
| "T" | 7,133 | 3 | 6.7 | Motor |
| "B" | 6,456 | 5 | 10.9 | 3 Motor 2 Steam |
| "Y" | 4,678 | 2 | 8.3 | Steam |
| D/A | 3,105 | 3 | 11.9 | Motor |
| "D" | 2,991 | 3 | 15.5 | Steam |
| "Esk" | 1,666 | 2 | 5.1 | Motor |
| "N" | 1,660 | 2 | 8.8 | Motor |
| "E" | 635 | 5 | 14.2 | Motor |

TOTAL DEADWEIGHT TONNAGE 252,751
AVERAGE AGE OF THE FLEET 9.0 years

Up to the present, apart from an adjustment following the 1958 basic wage decision, freight rates have been held, and in a number of instances brought down substantially. A stage is being approached when it will not be possible to absorb additional costs, and the revision of freight rates in certain trades may be necessary.

Apart from the matters referred to in this Report, the results for the year have not been materially affected by items of an abnormal nature.

Chairman.

Major Events of 1962-63

Ship Sales

The sale of four of the remaining five "River" Class vessels.

The Fleet

Following the disposal of the four redundant "River" Class vessels this year, the fleet, in terms of class, age, tonnage, and type of propulsion machinery, consists of:—

All ships have been well maintained throughout the year, and a further nine underwent classification survey, whilst the period has been free from a major accident.

As to the immediate future, on the commissioning of the "Empress of Australia", those "E" Class vessels running in the Sydney/Tasmania trade will be displaced and, at this stage, it is difficult to see any future employment for them on the Australian coast.

Ship Construction Programme

The keel of the "Empress of Australia", the largest passenger vessel built in the Commonwealth and, incidentally the largest of her type in the world to-day, was laid by the Honourable Hubert Opperman, O.B.E., M.H.R., at Cockatoo Dockyard on 11th September, 1962.

Construction will be to Lloyd's highest standard, and the closest consideration has been given to providing comfort and entertainment for passengers, as well as to efficient cargo handling methods.

The "Empress" will be launched on 18th January by the Hon. Catherine Sidney, daughter of the Governor-General, Lord De L'Isle, and will enter service in the latter half of 1964.

The M.V. "Jeparit", a bulk carrier of 7,500 ton deadweight, designed to carry maximum loadings at shallow draft, with manoeuvrability enhanced by the installation of a bow propeller, and equipped with heavy-duty cranes at every hatch, will be commissioned from the yard of the builders, Evans Deakin & Co. Pty. Ltd., of Brisbane, towards the end of 1963.

The "Jeparit" has been specially built so that she may pick up or land bulk or other cargoes at certain of the smaller Australian coastal ports, or possibly at newly developed points where large ships cannot enter — a

field in which there would seem to be a growing demand.

The 21,400 ton deadweight bulk carrier to be named "Musgrave Range", and now on the stocks at the Whyalla Yards of the Broken Hill Proprietary Co. Ltd., is expected to be ready late next year. Electronic systems will control much of the machinery on board. Self-tensioning winches, with which the labour of mooring or unmooring a vessel or handling a heavy tow line is vastly reduced, together with "push-button" operated hatch covers, are amongst the work-saving innovations to be installed. Thus to a considerable degree the building of the "Musgrave Range" follows the growing trend towards mechanisation, and it represents a marked advance in the use of labour-saving devices.

In April it was announced that the two "B" Class steamers at present engaged on the Brisbane/Melbourne run would be replaced by a vehicular-deck ship, or ships, and investigations into the most suitable type of vessel are being actively pursued.

In keeping with the policy of the Commission to buy "Australian Made" wherever and whenever possible, both the "Musgrave Range" and the "Jeparit" are to be powered by locally-built diesel engines. In this general connection it may be of interest that no less than 3232 local firms and companies supplied goods and services, of one kind or another, to the Australian National Line during the 12 months.

Property

1.—The purchase of a convenient 2½ acre site on the Brisbane River, where a vehicular deck ships' terminal will be built.

2.—The opening of negotiations towards the acquisition of 8 acres of land at Mort Bay, Sydney, where a terminal for the passenger and cargo vessel,

(Continued on page 23)

New Secretary for Navy



Mr. Samuel Landau, O.B.E., M.A., pictured, has succeeded Mr. Thomas J. Hawkins, C.B.E., B.A., L.L.B., as the permanent head of the Department of Navy.

Mr. Landau, who is 48, has been the First Assistant Secretary to the Department of Defence.

A graduate of Melbourne University, he was the first graduate entry into the Defence Department.

He entered the Commonwealth Public Service in 1936, and has spent his entire career in the Defence Department.

He was appointed First Assistant Secretary of the Department in 1957.

He was Secretary of the Prime Minister's delegations overseas in 1941, 1944 and 1946; was Secretary to the ANZUS Military Representatives Meeting at Pearl Harbour in 1952; was a member of the Australian delegation to the Manila Conference in 1954, and attended the Commonwealth Conference in London in 1955.

Mr. Landau went to the Imperial Defence College in Britain in 1958, and received his O.B.E. in the 1960 New Year's Honours.

THE NAVY

A LIFETIME WITH THE NAVY

Mr. T. J. Hawkins Retires

A man who could be regarded as the "Samuel Pepys" of the Australian Navy will retire on Thursday, November 14, after half a century in the Department of the Navy.

He is Mr. Thomas J. Hawkins, C.B.E., B.A., L.L.B., who, as a behind-the-scenes administrator, has made a significant contribution to the development of the Royal Australian Navy.

Mr. Hawkins joined the Department of the Navy in July, 1915, just two weeks after the formation of the Department. The R.A.N. was only four years old, and had taken delivery of its first Fleet two years earlier.

In the succeeding 50 years, Mr. Hawkins rose from a Naval Staff Clerk to Secretary and Permanent Head of the Department. In that span of five decades, coal-powered cruisers gave way to guided-missile destroyers, the R.A.N. encompassed three wars in its growth to maturity, and a comparatively simple Navy entered a complex age of electronics in weapons and administration.

The retirement of Thomas Joseph Hawkins is the end of an era for the Australian Navy. There is no one to match his record in the Navy to-day. He has served all 17 Ministers for the Navy since the Department was first established, 48 years ago. He had also worked with all 14 Chiefs of the Naval Staff in the Royal Australian Navy, beginning with Vice-Admiral Sir William Creswell, the "father" of the R.A.N.

As Secretary and Permanent Head of the Department of the Navy since 1950, Mr. Hawkins has been responsible for the general working and

business of the Department, for financial administration and control of expenditure of the Navy, for civilian personnel, and for the co-ordination of the business of the Naval Board, of which he has been a member. He has been a member of the Joint War Production Committee since its inception in 1948.

By Accident

At the age of 17, Thomas Hawkins entered the Navy more or less by accident. After leaving St. Patrick's College, East Melbourne, he sat for an examination for Military Staff Clerks. He passed the top of the Melbourne candidates, and was actually appointed to a post with the Army when he received an approach from the Navy, which was seeking Naval Staff Clerks.

He decided to try the Senior Service, and so began his lifetime career. The new Navy Office was in Lonsdale Street, Melbourne, when Thomas Hawkins first reported for duty on the 22nd of July, 1915. He recalls that there was some excitement at this time, because a wireless mast had recently been erected, and the first radio messages were being received at the Naval headquarters.

As a shorthand typist in his early days, he worked with people who were to make their mark on the Australian scene. At one stage in the First World War he was shorthand typist for Lieutenant-Commander John Latham, later Sir John Latham, Chief Justice of the High Court of Australia, who was associated with Naval Intelligence.

Wartime

The Second World War found Mr. Hawkins in charge of a

branch at Navy Office which, among other things, was responsible for coding and cyphering. He slept at Navy Office for the first three months of the war, and was often on duty day and night throughout the war years.

He was usually the first to learn of the success and tragedies of war, and was frequently called from his bed to deal with top secret signals. He still remembers the drama of the 4 a.m. message from H.M.A.S. SYDNEY in 1940 reporting her victory over the Italian cruiser BARTOLOMEO COLLEONI; also the sadness of the signals advising the loss of the PRINCE OF WALES and REPULSE, and the days of anxiety following the disappearance of H.M.A.S. SYDNEY in 1941.

Mr. Hawkins became an Assistant Secretary of the Department of the Navy in 1944, and was appointed Secretary six years later.

Hard Work

He is inclined to dismiss his 50 years of public service as uneventful, but satisfying, notably mainly because of its constant requirement for hard work. He considers the most important development during the years has been the growth of the R.A.N., and its universal acceptance as an essential part of the national life.

His advice for young people seeking successful careers in the Public Service is to work hard and to take full advantage of

(Continued page 16)

T. J. HAWKINS—Cont.

opportunities for further study. He obtained his degrees by studying in his own time, and had a wife and young family when he became a Bachelor of Laws and Bachelor of Arts.

Mr. Hawkins was born in the Melbourne suburb of Carlton on the 15th November, 1898. A former fast bowler for the Fitzroy and Carlton first-grade cricket teams in the days of Ted McDonald and Bill Woodfull, his home was in Melbourne until Navy Office moved to Canberra in 1959. He has seven children and 18 grandchildren living in Melbourne.

When he joined the Department in 1915 the staff was centred in Melbourne, and was so small that he knew everyone personally. His successor as Secretary of the Department of the Navy, Mr. Samuel Landau (First Assistant Secretary, Department of Defence) is taking over a Department of some 8400 civil personnel throughout Australia.

NEW AIRCRAFT CARRIER FOR R.N.

After considerable speculation and controversy about the future of aircraft carriers, Mr. Thorneycroft, Minister for Defence, announced in the Commons that Britain is to build a 50,000-ton aircraft carrier, costing £60m., and designed specifically for vertical take-off jets.

It is expected that she will become operational by about 1971, and will replace H.M.S. VICTORIOUS (30,530 tons) and H.M.S. ARK ROYAL (43,340 tons), which will come to the end of their useful lives in the 1970s. Thus, the new carrier, together with the EAGLE (44,000 tons) and the HERMES (23,000 tons) will provide the Royal Navy with a fleet of three carriers until 1980.

The Minister told the House that nuclear propulsion had been

rejected when the design of the carrier was considered. He said: "There may well be a future for nuclear propulsion for surface ships, but to embark on what would be largely an experimental venture in the case of a capital ship like an aircraft carrier would be to take a very considerable gamble."

He added that agreement had been finally reached between the Royal Navy and the R.A.F. on the question of a common aircraft to be used by both Services. The carrier would embark a new version of the Hawker P.1154, which would be a replacement aircraft for both the R.N. Sea Vixen and the R.A.F.'s Hunter. This aspect of the project he called "a breakthrough in military operations."

H.M.A.S. MORESBY New Type Machinery

The R.A.N. T.S. Survey Vessel, H.M.A.S. MORESBY, which was launched on 7th September, 1963, at the State Dockyard, Newcastle, brings a new type of machinery into the Navy.

The 5,000 S.H.P. diesel electric propulsion machinery was supplied by "English Electric", and comprises three 1330 KW, 600 Volt, 800 R.P.M. "English Electric" diesel generator sets supplying electrical power to the two 2,500 S.H.P., 900 Volt, 250 R.P.M. propulsion motors. In addition, "English Electric" supplied the propulsion machinery control desk, main switchboard, the two exciter sets, and the bridge telegraph system.

Operation and Control.

The two propulsion motors and three generators are electrically connected in a series loop, and the bridge telegraphs provide six steps forward and astern for each propulsion motor. A vernier control is also provided for fine adjustment of power and speed between the steps chosen by the telegraphs.

A useful feature of the control system lies in the fact that completely normal operation can be maintained with either one, two or three generators running, and generators can be brought in and taken out of circuit without interruption of the propulsion power. With one generator running, the full-ahead power is naturally limited to one-third of the rating of the propulsion motors, and this mode of operation may prove extremely useful for some types of survey work in which low ship speeds will be maintained for considerable lengths of time. The system also permits maintenance on a diesel engine without interruption of

propulsion power, and the advantages of this feature are readily apparent.

The main generators are excited from a three-field generator exciter. The combined effect of the three exciter field is to produce a generator voltage which falls as the main loop current increases, thereby producing a KW/current curve, in which the maximum power occurs at the designed working point. The generators thus have inherent non-overloading characteristics, and it is impossible to exceed the service rating of the diesel engines, regardless of the number of generators in circuit or the position of the telegraphs.

Two exciter sets are provided to ensure that propulsion need not be interrupted on account of possible troubles with a motor or generator exciter. Power for the exciter drive motors is obtained from auxiliary generators tandem coupled to the main generators. The propulsion scheme is thus completely self-contained. Some of the additional refinements incorporated in the propulsion scheme include a protective device to prevent propeller run-away should abnormal conditions lift a propeller free of the water, and a field pulsing device to rotate an idle propeller shaft at regular intervals to prevent overheating of the idle propulsion motor armature when the vessel is operating on one screw.

Similar Ships in Service

Similar propulsion equipments are in operation on Pilot Vessel "Wyuna", owned by the Port Philip Pilots' Association;

New Director of Navy Recruiting

Commander J. Hume has been appointed Director of Recruiting.

He succeeds Commander John Osborn, who has been selected to command the R.A.N.'s new survey ship, H.M.A.S. MORESBY.

To meet its increasing manpower commitments, the R.A.N. was aiming to recruit about 1300 adults each year. This was in addition to special entries, such as 600 junior recruits and 160 apprentices.

Commander Hume takes up his new appointment after three years as Executive Officer at the Naval School producing skilled artificers for the Navy — the Apprentice Training Establishment, H.M.A.S. NIRIMBA, at Quaker's Hill, near Sydney.

During the past two and a half years, Commander Osborn has supervised the recruitment of some 4000 men into the Royal Australian Navy.

One of the main trends during this period has been the increasing popularity of the Junior Recruit Training Scheme for youngsters seeking careers in the Navy.

This entry system for youths aged between 15½-16½ will soon be responsible for 30 per cent. of the Navy's annual recruitment.

C.S. "Retriever" and C.S. "Mercury", owned by Cable and Wireless Ltd., and on M.V. "Aramoana", the road-rail ferry owned by N.Z. Government Railways and operating between the North and South Islands of New Zealand.

Upson

RUGBY RUBBER TORCHES

Continuously supplied to
The Royal Australian Navy

CELCO
QUALITY
PRODUCTS

ANOTHER UPSON VICTORY
The ALL RUBBER RUGBY
LANTERN

● Guaranteed ● Unbreakable ● Shockproof
● Rustproof ● Waterproof ● Will float

**THE KINGS
HOTEL**

(Mrs. K. BONVENTI, Licensee)

Cnr. KING and PITT STREETS,
SYDNEY

- Haven of Naval Personnel
- Ladies' and Gents' Lounge
- Entertainment Provided

Telephone: BL 1095

H.M.S. VICTORY — DAY CABIN



Day Cabin of Victory, Nelson's flagship at the Battle of Trafalgar, as it is today.

Mr. A. D. Stroud, export manager of Santon Limited, England, recently visited the Australian distributors, H. G. Thornthwaite Pty. Ltd., Sydney. Santon Limited are manufacturers of the well-known rotary switches, case aluminium enclosures and immersion heater.

The purpose of Mr. Stroud's visit was to introduce new developments and applications of Santon Rotary Switches to Australian industry.

He spent some time in Victoria, South Australia and Western Australia, and will visit India before returning to England.

The tables and chairs are the originals used by Nelson.

The British Admiralty is restoring VICTORY, and to mark the first phase of the project it gave a luncheon aboard recently for the Advisory Technical Committee.

The flagship, built in Chatham Dockyard in 1759, is visited by about 300,000 sightseers each year.

The ship was damaged by extensive decay and a bomb which exploded near it during the war.

The restorations of a decade have prevented the ship from collapsing in the dock.

Repairs are continuous.

Three times the ship has had to be sealed and fumigated to check death watch beetles.

The Admiralty announced recently that it had decided to re-rig the ship with Italian hemp.

It will use 34 miles of hemp, three tons of spun yarn, 300 yards of old canvas, and 224 gallons of tar on the job.

THE NAVY

Trafalgar Remembered

SYDNEY CENOTAPH
CEREMONY

Address by
Rear-Admiral H. A. Showers,
C.B.E., R.A.N. (Retd.),
President of the Navy League



To-day Navy League of Australia commemorates the 158th anniversary of the victory of the Battle of Trafalgar. Fought on 21st October, 1805, in the Atlantic off the southern coast of Spain, it was the last great Naval battle to be fought under sail alone.

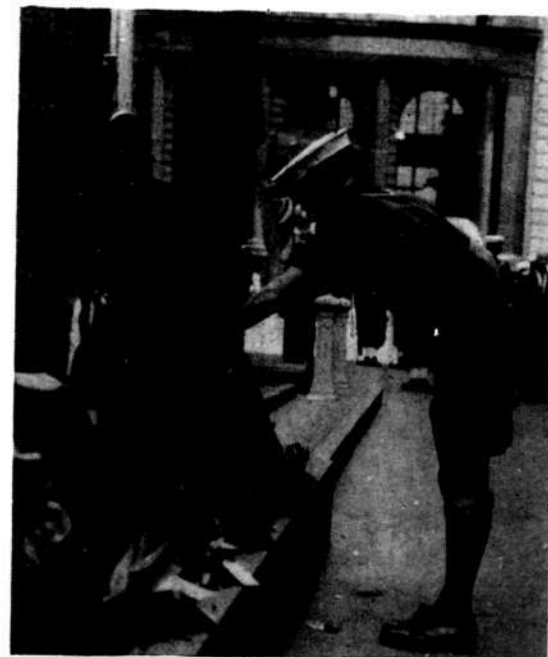
So crushing was this defeat of the combined fleets of France and Spain by a numerically inferior British fleet, under the command and inspired leadership of Admiral Lord Nelson, that for more than 100 years England remained the undisputed "Mistress of the Seas".

(Continued on page 21)

Right:

Above) Rear-Admiral Showers
inspects Sea Cadet Guard of
Honour.

Below) A Sea Scout places a
wreath on the Cenotaph.



Sea Cadets (N.S.W.) Athletics

The N.S.W. Division of the Australian Sea Cadet Corps held their 1963 annual athletic sports on the 20th October, 1963.

T.S. SIRIUS is to be congratulated in having such a fine bunch of athletes. The unit again carried off the Aggregate Point Score Cup.

Aggregate Point Score Trophy (Stamina Cup)

T.S. Sirius, 106 points, 1; T.S. Shropshire, 82 pts., 2; T.S. Canberra, 73 pts., 3; T.S. Warrego, 61 pts., 4; T.S. Albatross, 40 pts., 5; T.S. Tobruk, 24 pts., 6; T.S. Sydney, 10 pts., 7; T.S. Condamine, 7 pts., 8.

Details

U/14 Shot Putt: Smith, J. (Sirius), 1; Wilmot, G. (Albatross), 2. Open 440: Schoevers, R. (Canberra), 1; Blackman, N. (Sirius), 2. U/16 440: Kendall,

P. (Canberra), 1; Wojcik, R. (Shropshire), 2. Tug-o'-War: SIRIUS, 1; ALBATROSS, 2.

100 yards Open: Green, N. (Albatross), 1; Liccioni, P. (Warrego), 2. 100 yds. U/16: French, P. (Sirius), 1; Wilmot, G. (Albatross), 2.

High Jump: Green, W. (Albatross), 1; Liccioni, P. (Warrego), 2. Open Medley: SIRIUS (4), 1; SYDNEY (4), 2.

Broad Jump, Open: Green, W. (Albatross), 1; Kendall, P. (Canberra), 2. Broad Jump U/16: Green, W. (Albatross), 1; Moorehead (Sirius), 2. Broad Jump U/14: Smith, J. (Sirius), 1; Needham (Albatross), 2.

220 yards Open: Schoevers, R. (Canberra), 1; Green, W. (Albatross), 2. 220 yds U/16: Heatj, P. (Shropshire), 1; Poole, C. (Sirius), 2. 220 yards U/14: Tovey, L. (Warrego), 1; McLachlan, K. (Sirius), 2.

U/16 High Jump: Kendall, P. (Canberra), 1; Lang (Canberra), 2. Open Mile: Tovey, P. (Warrego), 1; McLachlan, K. (Sirius),

2. 4 x 100 Relay: SIRIUS (4), 1; CANBERRA (4), 2.

Hop, Step and Jump: Nicholson (Sirius), 1; Dummett (Warrego), 2. Hop, Step and Jump U/16: Newman, R. (Shropshire), 1; Smith, R. (Shropshire), 2. Hop, Step and Jump U/14: Smith, J. (Sirius), 1; Gregory, R. (Shropshire), 2.

880 Open: Richards, G. (Sirius), 1; Dummett, N. (Warrego), 2. 880 U/16: Lyall, J. (Shropshire), 1; Barnes, J. (Canberra), 2. Mile Juniors: Tovey, L. (Warrego), 1; Johnson, P. (Sirius), 2.

Open Shot Putt: McLachlan, K. (Sirius), 1; Cockbairn, W. (Shropshire), 2. U/16 Shot Putt: McRorie (Albatross), 1; Forbes, L. (Warrego), 2. U/14 High Jump: Smith, J. (Sirius), 1; Needham (Albatross), 2. Open Shot Putt: Sheehan, C. (Sirius), 1; Bushell, E. (Shropshire), 2.

Girls' Race, 100 yards: Miss H. Brierley (Sirius), 1; Miss K. Weimer (Sirius), 2; Miss S. Morris (Sirius), 3.

TRAFALGAR REMEMBERED

(Continued from page 19)

Under that protection, Australia was able to grow rapidly from an outpost colony into a robust nation, because its shores remained free from enemy invasion, and the country has been spared from the ravages of war.

Sea power is — and always must be — vital to the development and protection of this island continent, with its 12,000 miles of coastline. To-day, Australia ranks sixth among the nations of the world for the volume of its overseas trade, and that trade is ever expanding. Therefore, both in peace and in war, it is essential for the country's survival that we neither forget, nor neglect, to make adequate provision for sea power.

Sea power, very simply, is defined as: "The ability of a nation to ensure for itself at all times freedom of the seas, but, in times of emergency, to deny that freedom to the enemy."

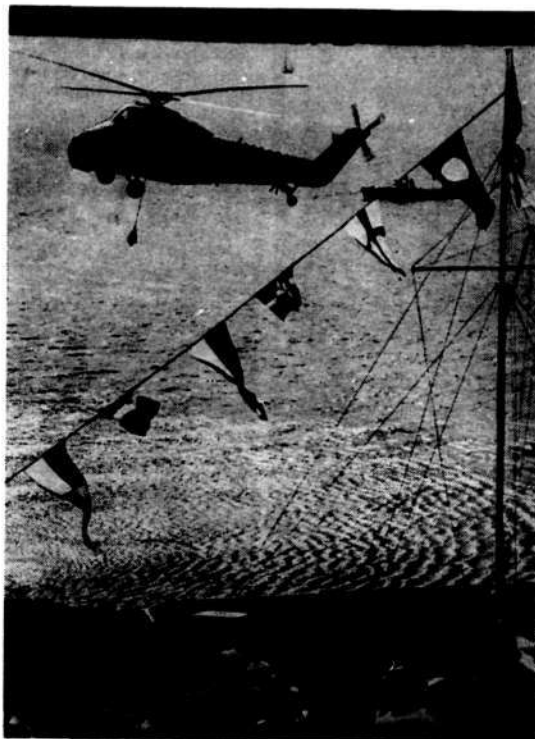
Thus, to provide our country with sea power, the requirements needed are: combatant Naval ships, including submarines and aircraft; dockyards, with their supporting industries; bases; a merchant marine; and trained man-power.

Navy League is most gratified to have present to-day detachments from the Sea Scouts and Sea Rangers, together with those of the Australian Sea Cadet proclaming through their organisations that Australian youth is conscious of the influence of sea power, and that sea power itself is dependent upon trained man-power.

Finally, let us remember always that immortal signal of Lord Nelson on the eve of the battle that we commemorate — "England expects that this day every man will do his duty."

NOVEMBER, 1963

HUNTER KILLER HELICOPTERS



Some of the crowd of 7,000 which attended H.M.A.S. WATSON during Navy Week, watch a Wessex helicopter in action. A crowd of almost 20,000 attended the display at Garden Island where, in addition to seeing the helicopters in action, they saw H. M. Submarine TRUMP dive in Captain Cook Dock.

WE ARE GLAD TO HAVE PROVIDED ENTERTAINMENT FOR NAVAL PERSONNEL PER MEDIUM OF OUR 16 M.M. PROJECTOR EQUIPMENT.

HARMOUR & HEATH
PTY. LTD.



NORTH SYDNEY — 43-6061

SUBSCRIPTION FORM

To "The Navy,"

Box 3850, G.P.O., Sydney, N.S.W.

I enclose 23/- for Annual Subscription to "The Navy," post free, commencing January, 1964.

Name

Street

Town State

Date

Please note that all annual subscriptions now commence in January. New subscribers after January should send only 1/11 for each month remaining up to and including December. Otherwise back copies from January will be posted.

THE NAVY

Regular Defence Forces Welfare Association

A most successful "Get-together" Buffet Supper and Annual General Meeting of R.D.F.W.A. (N.S.W. Branch) was held at Headquarters of the Royal N.S.W. Regiment, Lower Fort Street, Millers Point, on the evening of 25th September, 1963.

New Committee elected for N.S.W. Branch:—

Chairman, Lt.-Cmdr. H. A. E. Cooper, R.A.N. (Retd.); Secretary, Wing Cdr. F. T. Tarleton, R.A.A.F.; Assist. Sec., Comdr. L. A. J. Wallace, R.A.N. (Rtd.); Treas., Sqd. Ldr. G. H. Barnes, R.A.A.F.; Members: Capt. R. T. Power, R.A.N. (Rtd.), Mr. K. E. Hind, R.A.N. (Retd.), Lt. Col. M. G. Carpenter.

The following are extracts from the Chairman's Report:—

During the year your Executive prepared a submission on the many anomalies in the De-

fence Forces Retirement Benefits Act. We had arranged to present this submission to the Federal Treasurer when he visited Sydney. This was agreed upon as being one way in which we could assist the Federal Executive in their fight for increased pensions and other matters. A copy of our proposed submission was forwarded to the Federal Chairman, who immediately asked us to withhold our proposed presentation, and to forward them additional copies. From the copies forwarded the Federal Executive prepared a 15-page submission, which was duly presented to the Rt. Hon. Harold Holt, M.P. Briefly, the submission dealt with the following matters:—

- the payment of the Government's supplement to those pensioners retired between 1948 to 1959 to bring pension values up to the 1959 level.

- the involvement of an equitable and distinguishable pension payment to pre-war contributors now retired, to compensate for the effects of the 1947 reduction of retiring ages.

- medical treatment for service-caused disabilities.

- the overhaul of provisions relating to invalidity percentage incapacity on a "fit-unfit" for service basis, employment and re-employment

- establishment of an independent Appeal Board.

- adequate pensioner representation on the D.F.R.B. Board.

- setting up a Statutory Select Committee on which the R.D.F.W.A. is adequately represented, to review completely the present D.F.R.B. Acts with a view to producing a simpler and more comprehensible scheme.

The outcome of this submission is now well known to you all. In presenting his Budget speech the Federal Treasurer specifically referred to the D.F.R.B. pensions by saying, inter alia:—

"The Government now proposes to bring further relief by bringing the Consolidated Revenue share of these pensions up to a level comparable with what would have been payable by the Commonwealth had the pensions been determined under the scale set out in the Superannuation Act of 1959, and applies to the level of salaries that reflected the marginal increases of 1959.

"The Government will also bring down legislation to correct the pattern of entitlements

to contribute, so that the ratios of pension to salary that were adopted for contributions in the 1959 legislation will be restored and preserved in the future."

During the Parliamentary debate on the Budget, Mr. P. Stokes, M.P. (Chairman of the Special Parliamentary Committee on the D.F.R.B. Act) said:—

"... Therefore, the present indicated intention to raise pensions by the addition of the Commonwealth contribution at this level represents a fairly substantial increase.

"My chief concern in this matter has been for those persons who come under the operation of the Defence Forces Retirement Benefits Act and who retired prior to December, 1959. There is no doubt that they are all very pleased at the Government's recognition of their plight. I trust that in due course further consideration will be given to other aspects of the operation of this legislation. In the meantime, may I express the hope that the compilation of the schedules and introduction of the necessary legislation. In the meantime, may I express the hope that the compilation of the schedules and introduction of the necessary legislation will not be held up on the grounds of achieving uniformity with other enabling legislation emanating from other budgetary proposals."

The concession now admitted by the Government is an achievement that has been brought about solely by the representations of your Association. There are, as you already know, many other anomalies, and we will continue to press for their rectification.

Since the last General Meeting one of our nominees, Sir John Northcott, was elected as Federal President.

Enquiries: Tel. 61-9519.

WRITING IN REVERSE



W.R.A.N. Radar Plotters (top row) Linda Heilig, Maureen Caril, Christine Roddan, and below, Fran Porter and Judy Gitsham, practise writing backwards on the plotting screen at H.M.A.S. WATSON.

INTERSTATE SHIPPING—Continued from page 14

- "Empress of Australia", will be established.
- 2.—The chartering of M.V. "Dalby" and the M.V. "Windarra" to John Burke Ltd., for the Melbourne, Sydney, North Queensland trade.
- 3.—The introduction of the specially-equipped "South Esk" into the steel trade between Port Kembla and Melbourne.
- 4.—Shipments of blue asbestos from Point Samson, Western Australia, to the Eastern States.
- 5.—The carriage of zinc concentrates from Port Pirie to Risdon, Tasmania.

New Trades

SHIP CONSTRUCTION PROGRAMME

- 1.—Chartering of s.s. "Talinga" to the Commonwealth Aluminium Corporation Pty. Ltd. on a long-term basis, to carry bauxite from Weipa, Queens-

NOVEMBER, 1963

ALWAYS ASK FOR —

"OCEAN" Table Salt

A Product of Sea and Sunshine

1 lb. PACKETS
PLAIN OR IODIZED AT GROCERS
EVERYWHERE.

Distributors:

OCEAN SALT PROPRIETARY LTD.

Telephone: BW 9252

Ghurka "Family Day" in H.M.A.S. Quiberon



Entertaining the Gurkhas are John Gibbs (above), and at right, Ron McLaren and Fishy Fishwick.



CENTENARY OF N.S.W. NAVAL BRIGADE

H.M.A.S. QUIBERON held a "Families' Day" 3500 miles from home recently.

This year (1963) is a milestone in the history of Australia's defence services. The establishment of one of Australia's first defence forces — the New South Wales Naval Brigade — took place 100 years ago this year.

The Minister for Defence and Acting Minister for the Navy, Mr. Townley, said the Brigade held its first meeting in Sydney on the 19th May, 1863. Only 20 officers and men attended this first parade, but by 1885 the strength of the force had increased to 640.

The objects of the Brigade were to man any future ships acquired by the Colony, to pro-

vide reinforcements for the Royal Navy, and to take part in any expeditions requiring additional naval personnel.

The main task of the Brigade became the manning of shore defence batteries. Between 1869-1900, the Brigade undertook the entire responsibility of manning the guns on Pinchgut, which was one of Sydney's principal forts.

Members of the Brigade also saw overseas service. Volunteers went to China in 1900 to fight in the Boxer Rebellion.

The Brigade, like the State navies formed in Victoria, South Australia and Queensland, became part of the Commonwealth Naval Forces after Federation.

Instead of their own families, the Australian sailors had Gurkha soldiers, accompanied by their wives and children, as their guests at sea.

The Gurkha troops and their families went aboard the Australian warship at Singapore.

QUIBERON, commanded by Lieutenant-Commander Peter Rees, is currently serving with the British Commonwealth Strategic Reserve in South East Asia, and has established an affiliation with the 31 Gurkha Army Service Corps in Singapore.

The Gurkhas recently paid a rare tribute to the Australian frigate when they presented a ceremonial kukri combat knife to the ship's company.

During their day at sea, the Gurkhas and their families were taken on a tour of the ship, and observed the underway operations of an R.A.N. warship.

THE NAVY

Shipping and General Tank Maintenance Service

Shipping and Industrial Rigging, Ship Repairs, Painting, Maintenance of Tanks, Boilermaking, Blacksmithing, Manufacturers of Wire and Rope Slings, Marine Fitters and Turners, Shipwrights, Plumbing Survey and Certification of Gear (Testing Capacity to 50 Tons).

Telephone: 29-6125

PROMPT ATTENTION TO ALL ENQUIRIES.

60a DAY STREET, SYDNEY

After Hours: 96-7533, 51-6214

JOIN THE



NAVY LEAGUE

The object of the Navy League in Australia, like its older counterpart, the Navy League in Britain, is to insist by all means at its disposal upon the vital importance of Sea Power to the British Commonwealth of Nations. The League sponsors the Australian Sea Cadet Corps by giving technical

sea training to and instilling naval training in boys who intend to serve in Naval or Merchant services and 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.

The League consists of Fellows (Annual or Life) and Associates.

All British subjects who signify approval to the objects of the League are eligible.

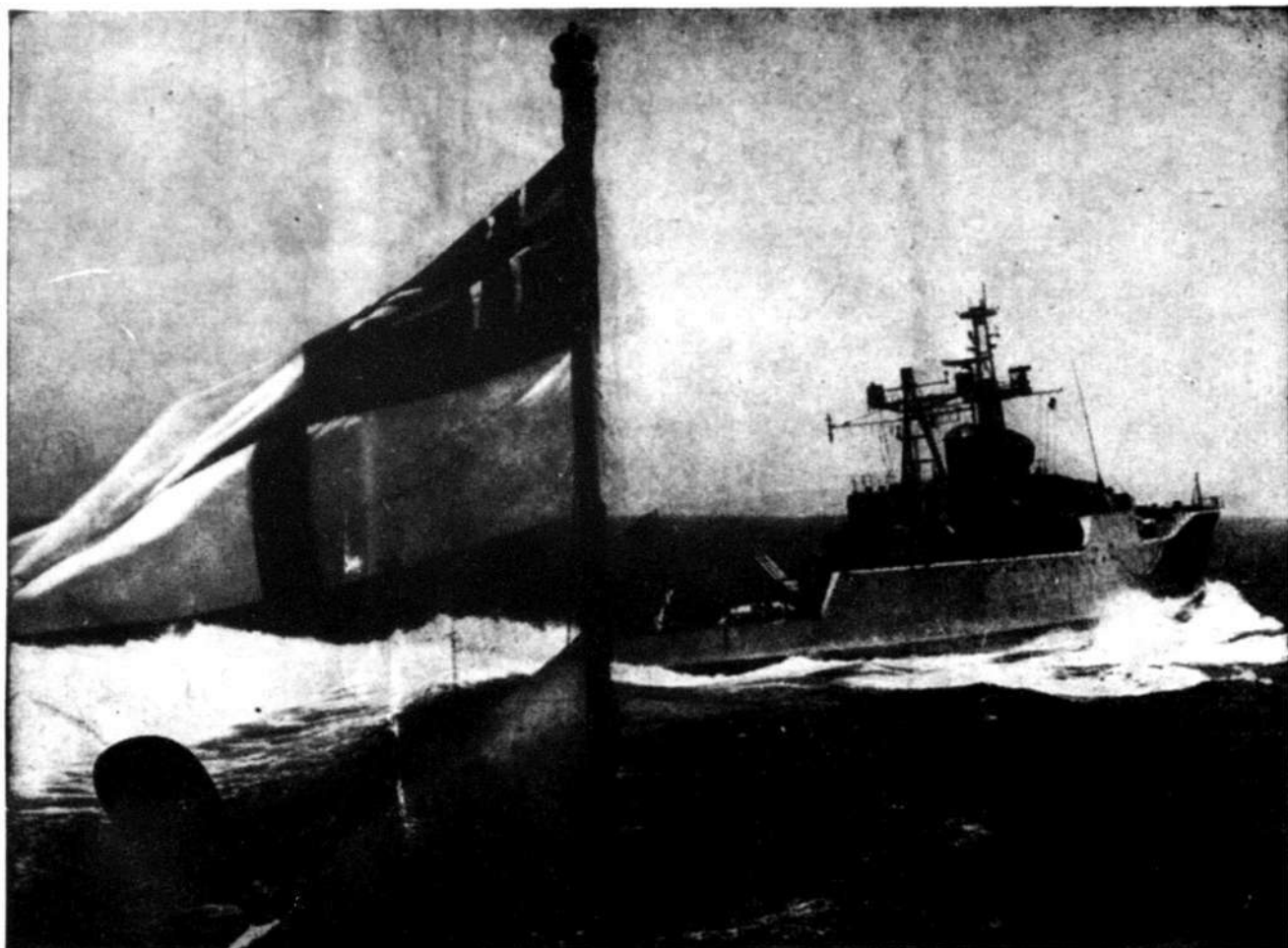
MAY WE ASK YOU TO JOIN and swell our members so that the Navy League in Australia may be widely known and exercise an important influence in the life of the Australian Nation?

For particulars, contact The Secretary, 66 Clarence Street, Sydney, N.S.W., or The Secretary, Room 8, 8th Floor, 528 Collins Street, Melbourne, C.I, Victoria

or one of the Hon. Secretaries at:

- Box 376E, G.P.O., Brisbane, Queensland
- 11 Quorn Street, Sandy Bay, Hobart, Tasmania
- C/- H.M.A.S. "Melville," Darwin, N.T.

- 30 Pirie Street, Adelaide, S.A.
- 182 Coode Street, Como, W.A.
- 60 Limestone Ave., Ainslie, Canberra, A.C.T.



H.M.A.S. Parramatta

Suppliers of a wide range of Austral Alloys to Australian Shipyards . . .

Copper and copper alloys, by virtue of their combination of excellent mechanical properties and the ability to resist corrosion by sea water and natural waters, are very extensively used in marine engineering.

There is an Austral alloy available for every need. Here are some of the many uses:—

COPPER—Sheathing for small craft and piles, electrical components, boat nails.

GILDING METALS—Decorative trim, hull fittings.

BRASS—Mouldings, frames, nuts, bolts, screws, chains, pipe fittings, sail eyelets.

NAVAL BRASS—Sheathing, condenser tube plates, shafting, valves, non-magnetic binnacle fittings, telegraphs, hull fittings, general marine hardware.

ALUMINIUM BRASS—Tube plates for condensers and heat exchangers.

BEARING ALLOYS—Bearings, gears, connecting rods, bushes.

PATENTED NOVOSTON ALLOY—Produced under licence to J. Stone & Co. (A'sia) Pty. Ltd. for the fabrication of propellers by Cockatoo Docks and Engineering Company Pty. Ltd. only.

Austral Bronze Company specialises in the production of high-strength corrosion-resistant alloys to British, American and Admiralty specifications for marine applications.

MANGANESE BRONZE—Propeller shafts, valves, pumps, bolts, nuts, gears, bearings, pump impellers, fittings.

PHOSPHOR BRONZE—Springs, switches, bellows, diaphragms, shims, bushes.

ALUMINIUM BRONZE—Propeller shafts, valves, pumps, gears bushes, pump bodies, impellers, forgings, tube plates, underwater fittings.

CUSILMAN (silicon bronze)—Calorifiers, welded tanks and pressure vessels, pipe fittings.

EVERDUR—Shafting, keel bolts, screws, nuts, nails.

NICKEL SILVER—Marine instruments and fittings, decorative trim.

PATENTED SUPERSTON ALLOYS—Produced under licence to J. Stone & Co. (A'sia) Pty. Ltd. for fire and bilge pumps, turbine runners, impellers, end plates, valves, stems.

Ask your Austral Bronze Sales Office for further information and literature.

AUSTRAL BRONZE

COMPANY PTY. LIMITED

Sales Office and Warehouse: 15-23 O'Riordan Street, Alexandria. Phone: 69 0322

1969
THE
DECEMBER, 1963

1/6

Navy



Topmen's division with cutlasses marching past at Divisions in H.M.A.S. LEEUWIN.

SEAGOING LINER



or SEAWORTHY LINKS...

ZINC galvanises it into longer life

Nothing lasts forever; things wear out with use; but iron and steel products "live" longer, giving more years of service if they are protected from corrosion by galvanising with zinc or the application of zinc anodes.

"Think Zinc" — and for marine products specify a galvanised coating or zinc anodes to ensure longer life, lower maintenance costs and hence unquestioned economy.

BUILDING AND CONSTRUCTION
Structural steel, girders, trusses, angles.

MANUFACTURING
Steel sheet, wire, pipes, castings.

PUBLIC WORKS AND SERVICES
Traffic signs, guard rails, transmission towers.

MARINE
Anchors, chains, cleats, rails.

DOMESTIC
Roofing, water tanks, clothes hoists, window frames, wrought iron work.

"A-Z" brand electrolytic zinc (guaranteed 99.95%)
"A-Z Special" four nines zinc (guaranteed 99.99%)
Quality products of world-wide reputation produced by:—



ELECTROLYTIC ZINC COMPANY OF AUSTRALASIA LIMITED

390 Lonsdale Street, Melbourne, Victoria.
Cables & Telegrams "ELECTZINC", Melbourne.

THE NAVY

Vol. 26

DECEMBER, 1963

No. 6

The Official Organ of the Navy League of Australia

CONTENTS

| | Page |
|---|------|
| THE PEACETIME ROLE OF THE NAVY — WITH SPECIAL REFERENCE TO THE COLD WAR | 3 |
| H.M.S. LION — VISIT TO WESTERN AUSTRALIA | 9 |
| CAPTAIN FOR H.M.A.S. MORESBY | 9 |
| BYNOE HARBOUR | 10 |
| NEW CAPTAINS FOR CARRIERS | 11 |
| H.M.A.S. GASCOYNE | 12 |
| SUBMARINERS IN INLAND AUSTRALIA | 13 |
| BOOK REVIEW — H.M.S. CAPTAIN | 15 |
| SEA CADETS AT SEA | 16 |

Plus Sundry Stories and Photographs of H.M.A. Ships

Published by the Navy League of Australia
66 Clarence Street, Sydney, MA 8784. Postal Address, Box 3850, G.P.O.

Advertising Enquiries: The Navy, 5th Floor, 222 Clarence Street, Sydney.

Printed by Jno. Evans & Son Printing Coy. Pty. Ltd., 486 Kent Street, Sydney. Phone: MA 2674.

THE NAVY LEAGUE OF AUSTRALIA

PATRON:

The Governor-General, His Excellency The Right Honourable Viscount De Lisle, V.C., P.C., G.C.M.G., G.C.V.O., Kt. of St. J.

FEDERAL COUNCIL:

President: Rear Admiral H. A. Showers, C.B.E.
Deputy President: Lieut. Cdr. J. B. Howe, V.R.D., R.A.N.V.R.
Secretary: Lieutenant L. Mackay-Cruise, R.A.N.R.

New South Wales Division:

Patron: His Excellency, The Governor of New South Wales.
President: Rear Admiral H. A. Showers, C.B.E.
Secretary: Lieut. Cdr. A. A. Andrews, M.B.E., R.A.N., 28 Royal Street, Chatswood, Sydney.

Victorian Division:

Patron: His Excellency, The Governor of Victoria.
President: Captain A. N. Boulton.
Secretary: Miss E. C. Shorrocks, 528 Collins Street, Melbourne.

Queensland Division:

Patron: His Excellency, The Governor of Queensland.
President: Cdr. N. S. Pixley, M.B.E., V.R.D., R.A.N.R. (Retd.).
Hon. Sec.: G. B. O'Neill, Esq., Box 376E, G.P.O., Brisbane.

Australian Capital Territory Division:

President: Lt. Cdr. J. B. Howe, V.R.D., R.A.N.V.R.
Hon. Sec.: Lieut. Cdr. D. M. Blake, R.A.N.V.R., 60 Limestone Avenue, Ainslie, A.C.T.

Northern Territory Division:

Patron: His Honour the Administrator.
President: O. J. Cameron, Esq.
Hon. Sec.: Mrs. V. M. Slide, c/o H.M.A.S. "Melville", Darwin, N.T.

AUSTRALIAN SEA CADET COUNCIL:

Navy League:
Rear Admiral H. A. Showers, C.B.E.
Lieut. Cdr. J. B. Howe, V.R.D., R.A.N.V.R.

South Australian Division:

Patron: His Excellency, The Governor of South Australia.
President: F. N. Dunn.
Hon. Sec.: R. R. Sutton, Esq., 30 Pirie Street, Adelaide.

Tasmanian Division:

Patron: Vice Admiral Sir Guy Wyatt, K.B.E., C.B., R.N.
President: Cdr. A. H. Green, O.B.E., D.S.C., R.A.N. (Retd.).
Hon. Sec.: Lt.-Cdr. J. C. Mahon, R.A.N.R., 11 Queen Street, Sandy Bay, Hobart, Tas.

Western Australian Division:

Patron: His Excellency, The Governor of Western Australia.
President: Roland Smith, Esq.
Hon. Sec.: R. A. Hamish, Esq., 182 Coople Street, Como, W.A.

A Representative from each Navy League Division, also:

S.C. Cdr. E. J. Forrester, R.A.N.V.R.
Lieut. Cdr. F. G. Evans, R.A.N.V.R.
Hon. Sec.: Lieutenant J. Mahon, R.A.N.R.

DECEMBER, 1963

MARITIME MAINTENANCE PTY. LTD.

For:

- Rust Elimination
- Tank Cleaning
- Flame Scaling
- Cleaning and Painting
and

All forms of Ships' Husbandry
and Service

Consult:

MARITIME

Maintenance

Pty. Ltd.

SHELL HOUSE, SYDNEY

25-1159 (Day), 82-3640 (Night)

AT YOUR SERVICE

For Your Holiday Requirements

INFORMATION AND BOOKINGS

Call or Telephone

HOWARD SMITH TRAVEL
CENTRES

• SYDNEY:

269 George Street. Tel.: 27 5611

• MELBOURNE:

522 Collins Street. Tel.: 62 3711

• PORT ADELAIDE:

3 Todd Street. Tel.: 4 1461

• FREMANTLE:

1 Mouatt Street. Tel.: 5 1071

• NEWCASTLE:

16 Watt Street. Tel.: 2 4711

• CAIRNS:

18 Abbott Street. Tel.: 2115/6

• BALLARAT:

Cor. Lydiard and Mair Streets.
Tel.: 2 5462.



Beer only for barbecues?

Good beer belongs anywhere there's an appetite. The same cool sharpness that adds so much to an outdoor grill is equally enjoyable with any dish. Nothing's too good for beer. Its zest and coolness are welcome whether your chef is Paris-trained or just the next door neighbour.

Whatever you're eating, whatever the occasion, ask for beer. You'll add to your pleasure!

CARLTON & UNITED BREWERIES LTD.

The Peacetime Role of the Navy with Special Reference to the Cold War

A TALK TO THE SOUTH AFRICAN NAVY LEAGUE

By VICE-ADMIRAL A. A. F. TALBOT, C.B., D.S.O.,
Commander-in-Chief, South Atlantic and South America Station.

I was originally invited to give this talk under the title "Navy's Role in the Cold War", but it is difficult to speak of Cold War in isolation, so I have changed to "The Peacetime Role of the Navy. With Special Reference to the Cold War."

I am speaking as a private individual — the views expressed are in no way official or those of their Lordships; in fact, many may well be considered heresy by some in Whitehall, but it is my privilege, as that rare and strange specimen of its kind to-day, a Vice-Admiral who has never served at the Admiralty. Most of my time has been spent in keeping the ships at sea and keeping the harbours clear.

When I speak of the Navy, it is, of course, functions, capabilities and techniques of the Royal Navy which I have chiefly in mind, but the principles involved apply equally to the navy of any country which depends for its livelihood and outside contact of sea communications. And when I speak of the Navy's role to-day, what I really mean is the peacetime role of sea power which, to my country, is just one of the facts of life, and its ability to help win the cold war and readiness to meet threat of limited hot war, while, of course, I realise that my audience is mainly South African.

The Cold War

So far as the term "Cold War" goes, some people consider the expression is misleading and unwise. Nonetheless it is fairly generally accepted, if rather vaguely understood. The war as such is real enough, even though many of those taking part are unaware that they are engaged in it themselves.

The cold war as I see it has its strategy and tactics, its campaigns and skirmishes, troops and weapons and, although the analogy with hot war should not be stretched too far, I am sure that it would be profitable is some of the principles, systems and certainly energy and determination at present expended in preparation for a hot war were adapted for use in cold. For

this reason I would like to see the technique of cold war studied and taught alongside that of hot war in service schools and staff colleges, for the cold war is primarily a moral, not a physical one, and if Napoleon was right that "in war the moral is to the physical as three to one," then a lot more emphasis should be given to the way we, in the West, set about trying to win it. On the other hand, the economic side must not be forgotten. This is straightforward, traditional, economic warfare (underselling in uncommitted countries).

In any conflict there are offensive and defensive phases and in cold war to-day it is quite clear that our opponents, by whom I mean chiefly the Communist bloc and their satellites, at present adopt a far more offensive attitude than we do. This is understandable, as they are "pro" something, while we are merely "agin" and anti. They are convinced that Communism is the answer for mankind or, at any rate, the platform for them to achieve their goal of world domination, and are ruthlessly determined to force the system upon others. We are, on the other hand, largely negative, allowing a man to be free to think, say and do what he likes.

The West takes positive action only when the initiative has so often been already taken by the other side. There is, of course, the human urge for freedom which keeps asserting itself and which is anathema to Communism. In fact, one of the great weaknesses of the Communist creed is that it ignores human nature, but I am afraid we can derive little comfort from this until we discover for ourselves some more positive attitude.

The primary question which we must surely ask ourselves is "What are we fighting for?" and to bring it home to the context of this talk, "In what way can sea power help us in this struggle?"

Navy Taken Too Much For Granted

In my view, sea power can become a major instrument in fighting and winning the cold war,

provided the necessary degree of priority and effort can be directed to this end.

In any consideration of the peacetime work of the Navy there is a tendency that many of its efforts and achievements can so often be taken for granted. In rather general terms the Navy's day-to-day work can be considered under these headings:—

Defence against attack.

Protection of trade routes.

Police action: patrolling to prevent shipment of arms, gun-running, contraband or illegal immigration, as in the Persian Gulf.

Readiness to deal with bush fire operations such as British Guiana, Kuwait and Brunei, where quick reaction is required.

Fishery protection, as in Iceland.

Readiness to help in dealing with disaster at sea.

Readiness to help in dealing with natural disasters.

Exercising and training with friendly and allied Navies for our mutual benefit and to create friendly co-operation and understanding; and

Conveying V.I.P.s to out-of-way places.

Spread of Western Influence

There is, in addition to the duties quoted, a much wider benefit of sea power to which we have been accustomed for so long that we may be in danger of surrendering the position of advantage we have built up through failing to give it sufficient priority. By this I mean the traditional spread of good relations, trade, culture, ideals and common interests; in fact, in a word, of civilisation through the world.

For the last few hundred years this has been the stock-in-trade of the European and more recently the American countries, and it is not by accident that the English language has been carried over two-thirds of the globe. From the Navy's point of view, this means showing the flag, maintaining and extending world-wide contacts by goodwill cruises — not just for the benefit of the young bachelors — and shop-window displays.

If you believe, as I do, that the Navy is not just an assembly of ships but that it is an institution that has endured for centuries, a repository of knowledge, a mould of form with tradition, product of 500 years of history and experience, full of examples of such simple things as

Honesty, decency, integrity, devotion to

duty, spirit of service, courage and initiative, good fellowship and kindness of heart.

All things which really count in life, then surely the Navy has something to contribute and sell in this cold-war battle for the hearts and minds of men. That being so, the question is, "Should we, or can we, give a higher degree of priority and more of our efforts to purely cold-war tasks?" We cannot afford to be complacent, because there are, I believe, grave doubts whether in fact we, in the West, are winning in this fight. What I want to know is, "Who is leading us in this fight?" and "Is the West as a whole organised to ensure success?" Maybe we have forgotten some of the lessons of the past and are overlooking the fact that our heritage was built on sea power and sea communications.

U.S.S.R. as a Maritime Power

Events of the last few years have shown beyond doubt that the Soviet Union fully appreciates the role of sea power in history and its importance in their destiny. The Soviet Navy is being developed at a fantastic rate to ensure their supremacy at sea in the event of a major conflict. This is clearly indicated by the degree of priority given to research and development of Naval weapon systems, nuclear-powered submarines and missile-firing destroyers.

To support their policies in any limited war, the Soviet military aid to certain strategically-placed and anti-colonialist countries — aid which is far in excess of the defence needs of the countries concerned — has now given the U.S.S.R. the strings and the ability to wage war by proxy. For example, the supply of missile-firing craft able to engage up to horizon ranges has given the Egyptian and Cuban Navies a completely new stature.

Many people I know regard the Egyptian war as probably a joke, but I think one would be unwise to underestimate them when their hand is being held by Russia. In the Far East it is well known that the Indonesians have received a squadron of submarines, manned by volunteers thrown in for good measure, a cruiser, several destroyers and escorts, besides a number of T.U.16 bombers fitted with air-to-surface weapons. All this presents a formidable threat in the areas concerned which Western Naval forces might be hard put to counter in addition to their other commitments.

The Soviet already possesses the world's largest fishing fleet, which operates over wide areas of the North and South Atlantic and North Pacific. At the same time their modern and effective whaling fleet is much in evidence in the Antarctic. Although most of these vessels

are lawfully engaged in catching fish, it does, of course, provide cover for some ships to collect intelligence and carry out other military tasks. In addition, they give advice and help in developing the fishing industries and harbours in such places as Cuba, Morocco, Guinea, Ghana and Yemen.

Russia's increasing activities at sea serves both to extend her influence throughout the world, when possible supplanting Western influence, and at the same time to make their presence generally felt and accepted on the High Seas. The Soviet bloc overseas trade with Cuba, Indonesia and West Africa has increased in the last year.

The Soviet merchant fleet is being rapidly expanded so as to reduce their present dependence on chartered shipping. Their declared aim is to achieve a tonnage of 10 millions by 1970, and to double this figure by 1980. This will then give them a tonnage broadly the same as the British merchant fleet of to-day.

In fact, in general capability we must now acknowledge Russia to be for the first time in her history a major maritime power.

Our Requirements

It is against this rather alarming background that we must review our own efforts. With ships and weapon systems becoming so incredibly expensive, it is difficult for us to maintain the world-wide cover and impossible for us to maintain the command of the seas which we once had. How then are we to apportion our efforts?

One must recognise that the constituent factors of any kind of war — global, limited and cold — are completely intertwined and mutually supporting. Any weakness or lack of preparedness on our part for one, will have its effect upon the others.

Let us first take global war.

In allotting forces for global war we must, of course, face the fact that our only hope of providing a credible deterrent to-day lies in combining with other countries, each nation contributing forces appropriate to the type of war which might develop in its area. It is of great value, for example, that the South African Navy is acquiring anti-submarine frigates since they would operate in an area where there would be an immense amount of shipping to be protected and where the potential submarine threat could be so great.

Limited War

For limited war, each nation has its own particular problems. We in the Royal Navy still have a number of widely-scattered dependent

With Compliments to the R.A.N.
and
Australian Navy League
from

W. GLAZEBROOK

SHIPS' PROVIDORES

Suppliers to the Navy

1 BANK STREET, PYRMONT

Phone: 68-5271

THE UNITED SHIP SERVICES PTY. LTD.

88-102 Normanby Road, South Melbourne,
Victoria, Australia.

**MELBOURNE — GEELONG —
PORTLAND**
and all Victorian Ports

The largest organisation in Victoria for the fabrication and installation of fittings for every description of cargo. Bulk grain fittings a speciality. Dunnage Supplied. Holds cleaned. Decks caulked. All trades available and include:

Shipwrights, Carpenters, Joiners,
Dockers, Painters, Riggers

Telephone: MX 5231
Telegrams and Cables: "UNISTEVE,"
Melbourne

countries for whose defence we must provide. In addition, we have areas of interest and of treaty obligations, such as in the Persian Gulf and Malaya, which may require intervention with military forces at short notice. The operative words here are "at short notice," because experiences since the war have shown that unless one can, or is allowed to act quickly to counter, or, if possible, to forestall unfriendly or acquisitive actions by ill-disposed people, manoeuvring by vocal political groups in the United Nations is likely to make any subsequent effective military action to restore the situation both embarrassing and difficult and, of course, allows our political masters at home more time to get cold feet!

The contrast in outcome of the Suez operations and of the recent reinforcement of Kuwait present vivid illustrations of the need for quick and appropriate intervention; of course, one of the reasons for Kuwait's success was undoubtedly due to the Admiralty's wise choice of a Naval Commander for the operation!

So far as purely cold war goes, the best we do at present is to use the ships provided for global and limited war "showing the flag" and covering as much of the world as we can in maintaining contact with our friends and exerting our influence in the uncommitted countries. But there should be more co-ordination with other

Western countries both in this work and in similar tasks undertaken in the economic, cultural and educational fields.

The question is, "Should we try to deploy more Naval effort to purely cold-war tasks?" The ships so employed must be capable of operating for long periods in remote and undeveloped areas but also be capable of being quickly concentrated to form a close-knit and effective fighting force when and where required. The present degree of priority given to this task limits the number of ships that can be made available so as not to affect in any way the balance of forces ready at short notice elsewhere, and within a limited budget any increase in numbers can only be achieved by either raising the priority of the cold war task or by sacrificing the present carefully-weighted balance of quality against quantity in future naval construction.

Each country has to make its own appreciation of the type of force it needs to meet the requirements I have outlined for global, limited and cold war.

In the Royal Navy we try to maintain a balanced Fleet, centred around the aircraft carrier as the main offensive unit and capable of providing at the same time defence against air, surface or submarine attack. We also aim to provide counter-offensive surface ships and anti-submarine submarines. Few operations these days are single Service in character, and the present trend, which I am sure will increase, is to consider the requirement for all military forces as being a common one, whether deployed at sea, land or in the air.

The Royal Navy has now two Commando ships, each capable of carrying a commando of 600 men complete with its own logistic support, motor transport, and the flexible, tactical mobility provided by the helicopter lift and the movements of the ships themselves.

These ships, working with a new type of assault ship and the new design of logistic ships, are capable of deploying rapidly a military force of about brigade strength, including group units of armour and artillery, thus achieving the military flexibility which sea power alone has has always given us.

Type of Ships

Naturally there is considerable professional argy-bargy about the type, size and number of ships we need. My own view — no doubt heresy to many — is that in the field of air support we must concentrate on aircraft mainly for anti-submarine purposes and for air support for the Army in operations ashore where the R.A.F. cannot operate because there are no airfields,

fuel and maintenance personnel. Aircraft must also be restricted in size and therefore must not be too complex in order that they can be embarked in a mode 1 sized rather than a monster aircraft carrier.

I agree the aircraft carrier is still the most imposing and effective offensive unit which we possess — the big guns of the Fleet — but we must have enough of them to achieve effective dispersal and spread and to avoid a situation in which the monster aircraft carrier in a navy our size becomes not so much a means to an end but an end in itself, swallowing up all the offensive and defensive capability of the remainder of the navy just to protect itself — a magnificent status symbol but of little practical value.

Submarine Takeover

I feel that within the next 10 to 15 years maybe, when we finally enter into the real all-rocket age, when the manned bomber in global

war will be as dead as a dodo, as will its counterpart, the fighter, we shall, as far as possible, have to go under water to survive. Not only is this the medium in which we would have to fight our principal enemy in a major war but it is also the only medium which provides concealment from satellite observation and at the same time gives reasonable immunity from nuclear attack.

I feel that when we try to work out how to meet all the needs of the three Services within the ever tightening economic control — the simple sailor, the soldier and the intrepid aviator, while he still exists as other than Transport Command — are bound to grow more closely together, each providing the component for which it is best suited and each developing on complementary as opposed to parallel lines, while retaining their separate identities.

Peacetime Role

It must be a primary role of the Navy to ensure the free passage of our merchant shipping

Brantford Constructions Pty. Ltd.

Builders of Quality Homes

Joinery Works

Plans and Specifications Prepared

Free Quotations and Advice

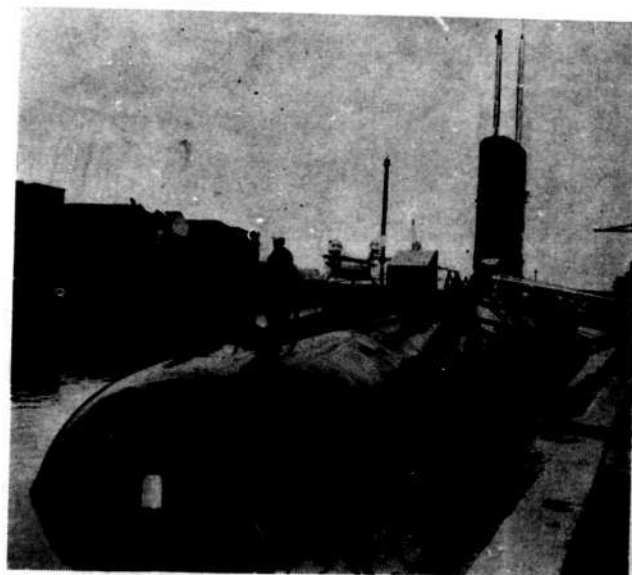
16 JAMES STREET, HORNSBY

Phone: 47-3554

After Hours: 44-6216

HMS. DREADNOUGHT

Britain's First Nuclear Submarine



throughout the world. No Western nation can afford to forget that the life and commerce of its industrial and trading societies depend on sea power to ensure the unmolested movement of shipping on the High Seas. Certainly the Soviet Union is well aware of this.

In addition, as long as there is a need for the British Government to engage in military operations overseas the Navy must continue to contribute to the combined seaborne-airborne forces on which these operations depend, passage by sea being independent of frontiers.

In the cold war we in the West started with a tremendous advantage, which has been built up over the years through sea power and sea communications, but we now have a major adversary in this field supported by a widening circle of satellites, set on exerting a rival influence and threat in areas in which we used ourselves to be

supreme. We are in danger of surrendering our position of advantage to these countries unless we devote the necessary money and effort to produce a sufficient number of modern fighting units, able, not only to provide a credible deterrent to large-scale war and ready at short notice for our defence and that of our friends and dependants in limited war, but also to be used to maintain and develop the world-wide contacts which we now have and which we should extend in the cold war.

To fight and win this battle and, make no mistake, it is a battle, the West must get together to pool their resources, to make a co-ordinated effort — proclaim a clearly-stated aim with an outline plan, with definite leadership, an efficient command structure — in fact, get properly organised to win this vital peacetime struggle.

Helicopters and Submarine



HMS. "LION" VISITS WEST AUSTRALIA



The Tiger-class cruiser, H.M.S. LION, standard displacement 12,080 tons, and with a crew of 54 officers and 665 ratings, visited Fremantle, W.A., for a week on her way home to the U.K., after a year's commission in the Far East.

TO COMMAND NEW SURVEY SHIP

The Captain of the new £2,000,000 vessel, H.M.A.S. MORESBY, will be Commander John H. S. Osborn, of Canberra. Commander Osborn has been a Naval hydrographer for the past 20 years and is a former Captain of the survey vessels BARCOO and WARREGO. He has also served at Garden Island, in Sydney, as the Royal Australian Navy's hydrographer.

In 1958, as Captain of WARREGO, he was responsible for the technical direction of a concentrated, four-ship survey in the Arafura Sea, which opened up new, safe shipping routes between Australia and Asia.

Commander Osborn entered the Royal Australian Naval College from Bundaberg, Queensland, in 1940. During the early war years he served in the AUSTRALIA, NIZAM and QUEEN ELIZABETH. After specialising in hydrography, he saw service in R.A.N. and Royal Navy survey ships.

He is at present at Navy Office in Canberra as the Inspector of Naval Recruiting.

Commander Osborn has taken up his appointment and is "standing-by" MORESBY during her final stages of construction at the Newcastle State Dockyard. The 2,300-ton vessel will commission early next year. She is the R.A.N.'s first ship designed specifically for survey work, and will rank among the best vessels of her kind in the world.

The modern, well-equipped survey ship, complete with helicopter, will enable the Navy to speed up its comprehensive programme of charting the Australian coastline.



Commander J. H. S. Osborn

" BYNOE HARBOUR —

NORTHERN TERRITORY

By T. F. ROBERTS

Bynoe Harbour, an extensive indentation, lies along the coast, close westward of Darwin. The low-lying bush country running inland from its shores is isolated, lonely and wild — unmarked by progress, untouched by time. The colours range from greens and greys of its mangrove-lined upper reaches and tidal creeks, to the vivid hues which set its skies aflame at dawn and dusk with the coming and going of the sun. Sea birds from the north and wild fowl from the south come to nest by its deep waters and flat, sandy beaches, instinctively drawn there by the

quiet stillness of its utter solitude. Bynoe Harbour is named after the doctor of H.M.S. BEAGLE, which was the original survey ship in the area in 1839. How the writer came to supplement their survey is outlined in the following narration:—

In 1941, I was commanding Officer of H.M.A.S. VIGILANT, based at Darwin. In August of that year a reconnaissance of Bynoe Harbour was organised by the Defence Authorities with a view to assessing its possible value to an enemy, or to our own forces. The King's Harbour Master at Darwin, Commander H. T. Bennett, D.S.O., R.N., and Colonel Thompson, were embarked on my ship, together with a scouting party from one of the Pioneer Regiments. We sailed for Bynoe, and on arrival proceeded to the head of the harbour, where the scouts were landed at a beach on the northern shore. Their object was to spy out the terrain of Cox Peninsula towards Darwin and report on its potential for the movement of troops. This party was expected to return onboard before dark, but as they failed to do so, bonfires were lighted on the beach and the searchlight beam directed vertically from VIGILANT, at anchor in mid-stream. The ship's fog-horn was also blown periodically throughout the night. The missing men had not shown up by dawn next day, so a search party was sent out, spreading themselves over a front of 1500 yards. Within a few hours the original scouts were located, they having got themselves completely "bushed". They were uninjured

when found, but a little "rattled" by their night in the bush, as sand-flies had been bad. In due course "all hands" returned in VIGILANT to Darwin.

It was then decided at Defence Headquarters that owing to the old and imperfect nature of the survey and the obvious inaccuracy of the coastline as charted, that Cox Peninsula should be aerially photographed by the Royal Australian Air Force, and that VIGILANT should carry out a hydrographic survey of the head reaches of Bynoe, above Rankin Point. Accordingly we returned to the scene of the former reconnaissance, and a fortnight was spent in triangulating and sounding the area indicated on the accompanying map. In this work, Mr. Arthur Miller, the then Surveyor-General of the Northern Territory, co-operated by lending us surveying instruments which, during the war, were generally in short supply. Care had to be taken when sounding due to the large range of tide and strong tidal streams. Two crocodiles were shot upstream, on Knife Island. Dawson Rock, Brown Point and Pittard Spit were named after officers who assisted me.

When our survey was completed we once more headed for Darwin, calling at Indian Island en route, where a successful turtle hunt gave the ship's company some diversity, and augmented our cuisine with rich soup and succulent steaks. Our plan of the harbour was later incorporated in official nautical charts.

NEW CAPTAINS FOR CARRIERS

Australia's two biggest warships, the Aircraft Carrier, H.M.A.S. MELBOURNE, and the fast troop transport, H.M.A.S. SYDNEY, are to get new Captains.

New commanding officers for the two carriers were among a number of senior Naval appointments announced in Canberra recently.

The new Captain of the flagship, H.M.A.S. MELBOURNE, will be Captain R. J. Robertson, D.S.C., who is at present serving at Navy Office in Canberra as Director of Naval Reserves.

The newly-appointed Captain of H.M.A.S. SYDNEY is Captain H. D. Stevenson, the Director of Plans at Navy Office.

Captain Robertson attended

the Imperial Defence College in Britain last year, and is a former Captain (D) of the 10th destroyer squadron in H.M.A.S. VEN-DETTA, and a former Director of Plans. He graduated from the Royal Australian Naval College in 1933, and during the Second World War was awarded the D.S.C., and was three times mentioned in Despatches.

He will take command of H.M.A.S. MELBOURNE in January, succeeding Captain R. I. Pleck, O.B.E., D.S.C., who has been appointed to Navy Office.

Captain Stevenson took command of H.M.A.S. SYDNEY during November, relieving Captain W. J. Dovers, D.S.C., who is to attend the Imperial Defence College in Britain.

Captain Stevenson became Director of Plans in 1961, after two years as Captain of the New Zealand cruiser, H.M.N.Z.S. ROYALIST. He is the only R.A.N. officer to have commanded a New Zealand cruiser. He graduated from the Royal Australian Naval College in 1935, and was Mentioned in Despatches during the Second World War.

Other appointments were:—
• Captain B. S. Murray, of H.M.A.S. PARRAMATTA, to be Director of Plans at Navy Office; and

• Captain R. J. Scrivenor, of H.M.A.S. VAMPIRE, to succeed Captain Murray as Commanding Officer of PARRAMATTA, and as Senior Officer of the Frigate Squadron.

P & O - Orient Lines New Commodore Captain Leonard H. Howard, R.D.

Captain Leonard H. Howard, aged 59, has been appointed Commodore of the P. & O. Orient fleet. He succeeds Commodore Leslie A. Hill, D.S.C., R.D., who retired on Wednesday, 11th November, after 39 years' service with the company.

Captain Howard joined the P. & O. S.N. Co. in 1924 at the age of 20, and was appointed Fourth Officer in the 6853-ton NANKIN. Two years later, he was promoted to Third Officer in the 7912-ton CHINA.

During the following years he served in several of the company's vessels until, in 1935, he was promoted Second Officer in the 15,121-ton liner CATHAY. In 1936, he obtained his master's ticket, and three years later he was called up for active service in the R.N.R., which he had joined in 1921. Captain Howard served throughout the war, and

in 1945 returned to the company's service, and was appointed Chief Officer.

Since the war, Captain Howard has, amongst others, served in three of the famous "Straths"—STRATHMORE, STRATH-EDEN and STRATHAIRD. It was in the latter that he was promoted Staff Captain in 1951. In 1953, he received his first command—the 7754-ton cargo ship, SOCOTRA. He is presently serving in the 29,664-ton ARCADIA.

Captain Leslie Hill was a cadet at Pangbourne Nautical College before serving his apprenticeship with the New Zealand Shipping Company. He joined the P. & O. S.N. Company in May, 1924, as Fourth Officer in SARDINIA.

In August, 1939, he was called up for active service in the R.N.R., and was awarded the

D.S.C. in June, 1940, for dangerous and successful experimental work in dealing with enemy mines. After the war, Captain Hill returned to the company's service as First Officer in RANCHI in September, 1948, and was appointed Staff Captain of STRATHNAVER in October, 1950.

He was promoted to Captain, R.N.R., in December, 1952, and subsequently served on a Committee of Enquiry into the future of the R.N.R.

In March, 1953, Captain Hill was appointed Captain of PIN-JARRA, since when he has commanded various ships, including EMPIRE FOWEY, IBERIA and STRATHEDEN. In September, 1960, he took command of CHUSAN, in which ship he served until joining his last command—the 45,000-ton CANNIBERRA.

Always ask for . . .

SHELLEY'S
FAMOUS DRINKS

Obtainable from leading
shops and saloons

SHELLEY & SONS
PTY. LTD.

CORDIAL FACTORY
MURRAY STREET
MARRICKVILLE
N.S.W.

'Phone: LA 5461

HMAS. GASCOYNE CRUISE

Since GASCOYNE left Sydney in September, she has done two cruises for the C.S.I.R.O. between Sydney and Melbourne, and a cruise in the Great Australian Bight visiting Fremantle, and steaming a total of 9260 miles.

During the cruise in the Great Australian Bight, GASCOYNE visited the many islands of the Nuyts Archipelago at the eastern end of the Bight, and the Recherche Archipelago at the western end. The purpose of this visit was to check habitation, flora and fauna, investigate reported shoals, and make sketch surveys of poorly surveyed areas.

Parties from the ship landed on 15 islands, only visiting many others, which are mainly bare granite outcrops.

The ship crossed the Bight inside the 100 fathom line,

making frequent observations of wind, sea and swell; comparing these with conditions experienced by other ships on the normal shipping route at the time, investigating the theory that the heavy ocean swells are broken up in the shallower water.

Unfortunately, the weather was almost calm during this passage, as it was for almost our entire time in the area, and was, therefore, not ideal for our purpose. However, from this limited experience, it does seem that the swell is shorter and slighter using this route, which is only about 150 miles longer. More trips in varied weather conditions shall be necessary to reach a firm conclusion. Only one island was found to be inhabited, although others are visited by fishermen. Sketch surveys show that several islands are up to three miles from their present charted position, but this is, at the moment, a rarely visited area.

C.S.I.R.O.

Two cruises, each of about 10 days, were made during the period September to November to survey the area off the N.S.W. and Tasmanian coasts where tuna are known to occur. Scientists of the C.S.I.R.O. Division of Fisheries and Oceanography believe there is a relation between the occurrence of tuna and the relative positions of warm and cold masses of water throughout the area under survey. The two cruises just completed were planned to find the boundaries of these water bodies before the beginning of the tuna season (September cruise), and during the fishing season (November cruise). In the early cruise, cold water, unfavourable for the catching of tuna, was present over the whole survey area from Tasmania to as far north as Port Stephens, but by November warm water from the north has penetrated as far south as Montague Island, and some catches of tuna have been made in this area.

In addition to helping fishermen to make their search in the most likely areas, the observations made during the last couple of months, combined with observations and measurements made on the fishing vessels themselves, will enable scientists to advise industry on the optimum catch of tuna.

C.S.I.R.O. work on GASCOYNE was under the control of Principal Research Officer David Vaux, assisted by a staff of five, including two analysts. One of the C.S.I.R.O. party, Leon Olsen, became darts champion in a knockout competition during the last cruise.

During the two cruises in which C.S.I.R.O. were on board, 91 oceanographic stations were occupied, over 2000 temperature measurements made, and over 3000 water samples collected for analysis of salt and phosphate and oxygen content.

SUBMARINERS —

In Inland Australia

Months of careful planning went into an expedition of 4500 miles commenced recently by a party of eight Royal Navy officers and ratings of the Fourth Submarine Squadron based at Sydney.

The submariners left Sydney on Friday, October 19, for the expedition.

Led by Lieutenant H. M. White, the party consisted of Lieutenant R. D. Hunter, Lieutenant J. T. K. Sloane, Sub-Lieutenant R. S. Worthington,

Engine Room Artificer 1st Class S. Jennings, Chief Radio Electrician R. Elliot, Able Seaman B. Shipman and Able Seaman J. Robb.

Their aim was partly to get a change of air away from the sea, and partly to carry out a biological survey of wild life on islands in the salt lake, Amadeus, some 200 miles south-west of Alice Springs.

Directed by the Australian Museum in Sydney, it was thought possible that animals,

isolated by the hot, glaring salt barrier, might have evolved differently from the rest of Australian fauna.

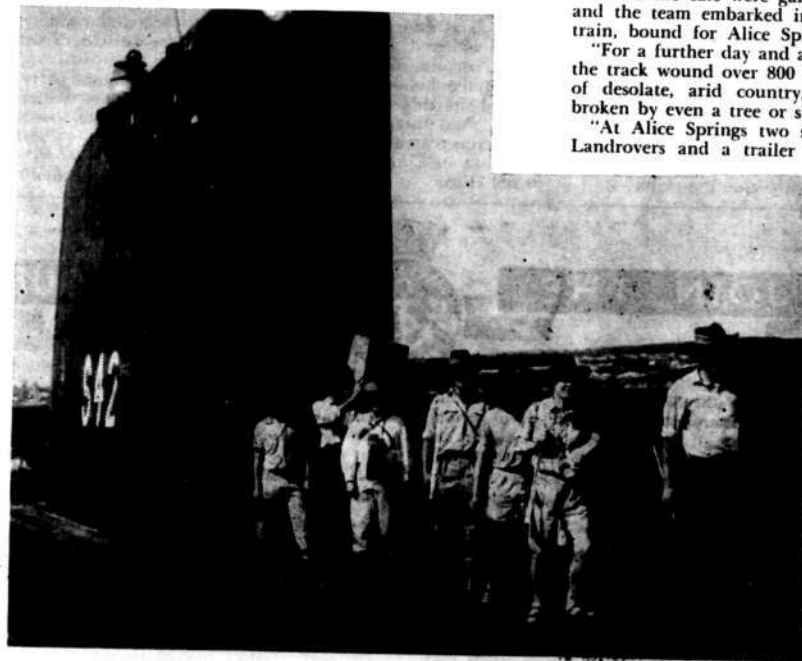
The story of the trip is as follows:—

"For two and a half days the expedition drove westwards in three private cars, roof racks piled high with a clutter of equipment until, from the heights of the Flinders Range it looked down on Port Augusta, a new town developing at the head of the Spencer Gulf.

"Here the cars were garaged, and the team embarked in the train, bound for Alice Springs.

"For a further day and a half the track wound over 800 miles of desolate, arid country, unbroken by even a tree or shrub.

"At Alice Springs two smart Landrovers and a trailer were



Lieutenant M. White (expedition leader) leads Engine Room Artificer S. A. Jennings, Able Seaman B. Shipman, Lieutenant R. D. Hunter, Chief Radio Electrician R. N. Elliott, Sub-Lieutenant F. S. Worthington and Able Seaman J. Robb ashore. Lieutenant T. J. Sloane is not in the photograph.



With Compliments

OSTA CHEMICALS
PTY. LTD.



Rusheutters Bay

31-1154

waiting, hired from the Northern Territory Administration.

"A hurried forenoon was devoted to buying last-minute stores and reporting intended movements to the relevant authorities. Then the party was off, jogging along a broad dirt road towards the south.

"Consultation at Alice Springs had resolved the route into a large anti-clockwise circle passing through Henbury, with its meteorite craters, westwards to the King's Canyon, a strangely eroded cutting in the Levi Mountains, southwards to Amedeus, for the survey, followed by a guide visit to Ayres Rock and the Olgas on the way back to Alice Springs, a total distance of about 800 miles.

"Meteorite Craters"

"Apart from a punctured tyre, the journey to Henbury was uneventful.

"The country was flat and stony, broken only by the occasional range of hills rising abruptly from the plain.

"It was difficult to locate the craters in this inaccurately mapped and unignosted area where the name on the map itself covered five miles; nevertheless, the Rovers struck off towards the estimated position, and discovered a series of large, rocky hollows.

"They were about 20 to 30 feet deep and anything up to 50 yards in diameter.

"The entire area was carpeted with brightly-coloured mineral chips, and it seemed likely that these were the meteorite craters.

"It was impossible to be certain.

"The following day saw the party pressing on to the west.

"Slowly the countryside changed, the flat monotony being replaced by a tumbled chaos of red sand dunes.

"A withered vegetation of mulga, desert oak and shrub choked the hollows and thinly covered the ridges.

"In the distance the Levi Mountains reared suddenly from the plain in a long escarpment of red cliffs.

"To the surprise of us all, the weather, too, was changing. The sky was overcast and unsettled. "Ominous black clouds lined the horizon, and a chill wind whipped the sand into stinging red spirals.

"No one was under any illusions about rain.

"Less preferable than the customary scorching sun, it quickly turns the land into a red glue-pot of sodden sand, interwoven by countless fast-running creeks.

"No vehicle can move under these conditions.

"By midday it still had not rained, and the expedition reached Yana Bore, three huts and a gaunt wind pump. Here was the last touch with civilisation.

"Both Rovers were filled to the brim with fuel and water, and a billy of tea was shared with the hospitable occupants of the home: read before the party drove on, now on a narrow dirt track winding round the foot of the Levi escarpment.

(To be Continued)

Book Review - HMS. CAPTAIN

By ARTHUR HAWKEY

G. Bell & Sons, London, 31/- Our copy from Technical Book and Magazine Co. Pty. Ltd., 295 Swanston Street, Melbourne.

For the man of the sea, Arthur Hawkey presents an engrossing story of the transition of naval shipbuilding in Britain, from sail and steam to the beginning of the giant battleships of our own day. For the layman, he presents the story of a struggle between two men, and the tragedy that ended it.

It is, perhaps, a little difficult for us to envisage the bitter public controversy that raged around these two figures. Many of the ideas, now accepted as the basic principles of shipbuilding to-day, were, in the Victorian era, highly controversial. In the mid-nineteenth century, naval ships were steam-driven, but carried a full rig of sail. It was during the latter half of the nineteenth century that the first drastic changes in ship design for 500 years took place.

Captain Cowper Phipps Coles, brilliant and inventive, went down with the ship created by his impatient imagination and obstinate persistence in the face of strong and, as it turned out, more knowledgeable opposition. His opponent was Edward James Reed, Chief Constructor to the Navy. Reed's scientific caution was just as assertive as Coles' emphatic revolutionary ideas of battleship design, and both men were forceful and facile in expressing opinion.

Such was the conservation and slow development of ship building in Britain, that there was little difference between the CALEDONIA, launched in 1810, and the ROYAL SOVEREIGN, built in 1837. The ships were defenceless, aft, there being no gun points cut in the stern.

The end of the wooden sailing battleships was at hand, but although iron was displacing oak, steam was considered only complementary to sail. Her designers put all masts and a full rig of sails on a hull that ought never to have had them, and sealed the fate of the 500 men who went down with the H.M.S. CAPTAIN.

Coles' revolutionary idea was to turn the gun round, not the whole ship, and this idea of untable gun turrets caught the public imagination, and this, in a day when gratuitous advice abounded. Discussion raged in the Press and in Parliament.

Reed was labelled a jealous reactionary. Newspaper editorials backed Coles. They became public antagonists in a popular free-for-all debate. Coles' aim was to gain maximum fire-

power in all directions, but this involved the ship being designed with a low side. This, Reed would only accept for small ships for coastal defence, ships without sails. But Coles envisaged large cruisers with his turntable turrets, carrying a full rig of sails and capable of long voyages.

Coles persisted, and at long last the Admiralty, bowing to public and Parliamentary opinion, agreed to Coles' design. It was the triumph of the lone man against bureaucracy. Coles' seemingly drastic and exciting design took shape at last. It was December, 1869.

The account of the foundering of the Captain is graphic, and the best part of the book. In the mounting fury of the storm, the end of "the finest ship afloat" was sudden and terrible, and when she turned over only 18 men, who were on deck at the time, survived.

The report of the court-martial is almost an anti-climax after the adventures of these fortunate few. They reached the coast of Spain in a small boat — two sailors, Dryburgh and Treggera, owing their lives to the fantastic feat of making for the high side of the CAPTAIN as she was turning over, and literally walking along the ship's bottom before jumping off into the sea.

The remainder of the book will be of more interest to the student of naval and maritime affairs than to the general readers, and the author is at his best describing the drama of the storm and the courage and selflessness of the survivors. It would seem merciful that Captain Coles went down with the ship.

The dust jacket informs us that on 30th April, 1870, when H.M.S. CAPTAIN was commissioned, the ensign was accidentally hoisted upside down. Never has an omen been more tragically or swiftly fulfilled.

MACQUARIE ISLAND RELIEF EXPEDITION, 1963

Cadet Petty Officer J. Kennedy, of the Western Australian Division A.S.C.C., and Cadet Petty Officer E. O. R. Schrevers, of the A.C.T. Division A.S.C.C., have been selected to accompany the 1963 Relief Expedition to Macquarie Island. To these Cadets the Federal Council extends its congratulations and best wishes for a successful voyage.



The object of the Navy League in Australia, like its older counterpart, the Navy League in Britain, is to insist by all means at its disposal upon the vital importance of Sea Power to the British Commonwealth of Nations. The League sponsors the Australian Sea Cadet Corps by giving technical

sea training to and instilling naval training in boys who intend to serve in Naval or Merchant services and 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.

The League consists of Fellows (Annual or Life) and Associates.

All British subjects who signify approval to the objects of the League are eligible.

MAY WE ASK YOU TO JOIN and swell our members so that the Navy League in Australia may be widely known and exercise an important influence in the life of the Australian Nation?

For particulars, contact The Secretary, 66 Clarence Street, Sydney, N.S.W., or The Secretary, Room 8, 8th Floor, 528 Collins Street, Melbourne, C.I. Victoria

or one of the Hon. Secretaries at:

- Box 374E, G.P.O., Brisbane, Queensland
- 11 Quern Street, Sandy Bay, Hobart, Tasmania
- C/- H.M.A.S. "Melville," Darwin, N.T.

- 39 Pirie Street, Adelaide, S.A.
- 182 Coode Street, Come, W.A.
- 60 Limestone Ave., Almale, Canberra, A.C.T.

THE NAVY

DECEMBER, 1963

SEA CADETS AT SEA

By S.C. SUB-LIEUT. R. McTAGGART

I think I would be justified in saying that during the last Cadet Camp, 15 Sea Cadets from T.S. MAGNUS had one of the most thrilling experiences of their lives, and one, I am sure, that each of them will never forget. At New Farm wharf one morning the C.O. informed the corps that H.M.A.S. ANZAC would be in Brisbane and exercising in Moreton Bay, and that 15 of us could, at the invitation of the Captain, spend two days in her.

The lucky group reported at 0700 on Monday morning to Sub-Lieut. K. Waller at Brett's No. 3 wharf. From there we proceeded aboard the ANZAC. The first thing that struck us on boarding her was the cleanliness of the ship. We soon discovered, after many blisters and sore backs, how this was achieved. The first real thing in the daily routine of the ship which concerned us was when she prepared to leave the port.

A warship leaving harbour has no resemblance to a passenger liner quitting her berth. There were no streamers, no blaring of horns, and no cheering crowds on the wharf, just a few parents and friends. Also, there was no transferring of a pilot, as the Navy always takes their ships in and out of port without assistance. Each of us had a job to do — tend the fenders — haul on that wire, or merely standing to attention on the deck of the ship.

While proceeding down the river, we shifted into No. 8s (changed into working dress) to prepare for a conducted tour of the ship. We found we had quite a deal of spare time, in which we either roamed about the ship or relaxed in our mess deck (the place where we ate and slept). After lunch — incidentally, the meals were very good — we were put to work. Work in the Navy is work; you slave over a piece of brass or some rusty railing and polish and scrape until you ache all over, and then some P.O. says, "That's not much," or "How about you get started," whereupon you scrub and polish some more.

I am sure the other cadets will agree with me in saying that we found the greatest pleasure in being allowed to be slipped over the side of the moving ANZAC as crew, in her sea boats. Being lowered over the side into a choppy sea is really so nothing. The "Jimmy" of the ship (the First Lieutenant) was supervising, while the Captain looked on from the bridge. I can truthfully say that we did not disgrace ourselves in pulling those boats in a choppy sea. That night we were entertained with some films, which finished about 2230. Then we slung our hammocks, and after "pipe down" was piped we retired, and very soon dropped off to sleep.

Next morning, "Lash up and stow" woke us by 0700. By now

we felt old hands, and had been accepted by the crew as mates. After the important "Hands to breakfast" we reported to "G" Bofor to have that mystery explained. We were told the way to learn about the gun was to get in and drive it. So we did. The gun is trained, elevated and fired by one number.

Then we returned to the sea boat, and all of us were again dropped, and the sea boat was hoisted in. Then we were taken to the "Operations Room" while the ship was under way. This was below the bridge in the forward superstructure. We saw the navigational radar set in action, the gyro repeaters recording the changes in the ship's course, and the echo sounder, measuring the depth of water in the treacherous waters of Moreton Bay.

The "Radio Room" interested us, with its amazing collection of sets, each with a different role. There, we learned that, in such a ship, very few signals were sent by Morse or voice; most come in by teleprinter. We even saw, by luck, the handling of a coded signal.

After dinner, we had an informal lecture from the Damage Control Officer, and were impressed by A.B.C.D.

Then came the rush of preparation to go ashore, and we were ready when the work boat from H.M.A.S. MORETON with a crew of our mates from T.S. MAGNUS, came alongside at 1600. We spent the trip up river impressing our shipmates who had not been lucky enough to spend two days in H.M.A.S. ANZAC.

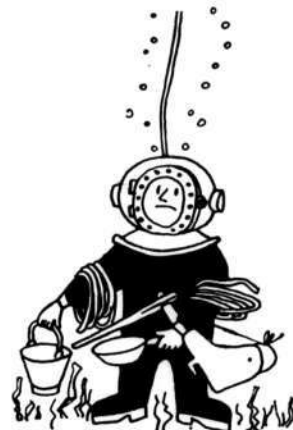
THE NAVY

You'd be sunk without
CIBA Epoxy Resins

ARALDITE^(R)

the original Epoxy Resin for

Laminating
Casting
Coating
Tooling
Flooring
Bonding



CIBA Company Pty. Ltd., Orion Rd., Lane Cove — Phone 42-0221
Also at Melbourne — Adelaide — Brisbane

WATSON CRANE PTY. LIMITED

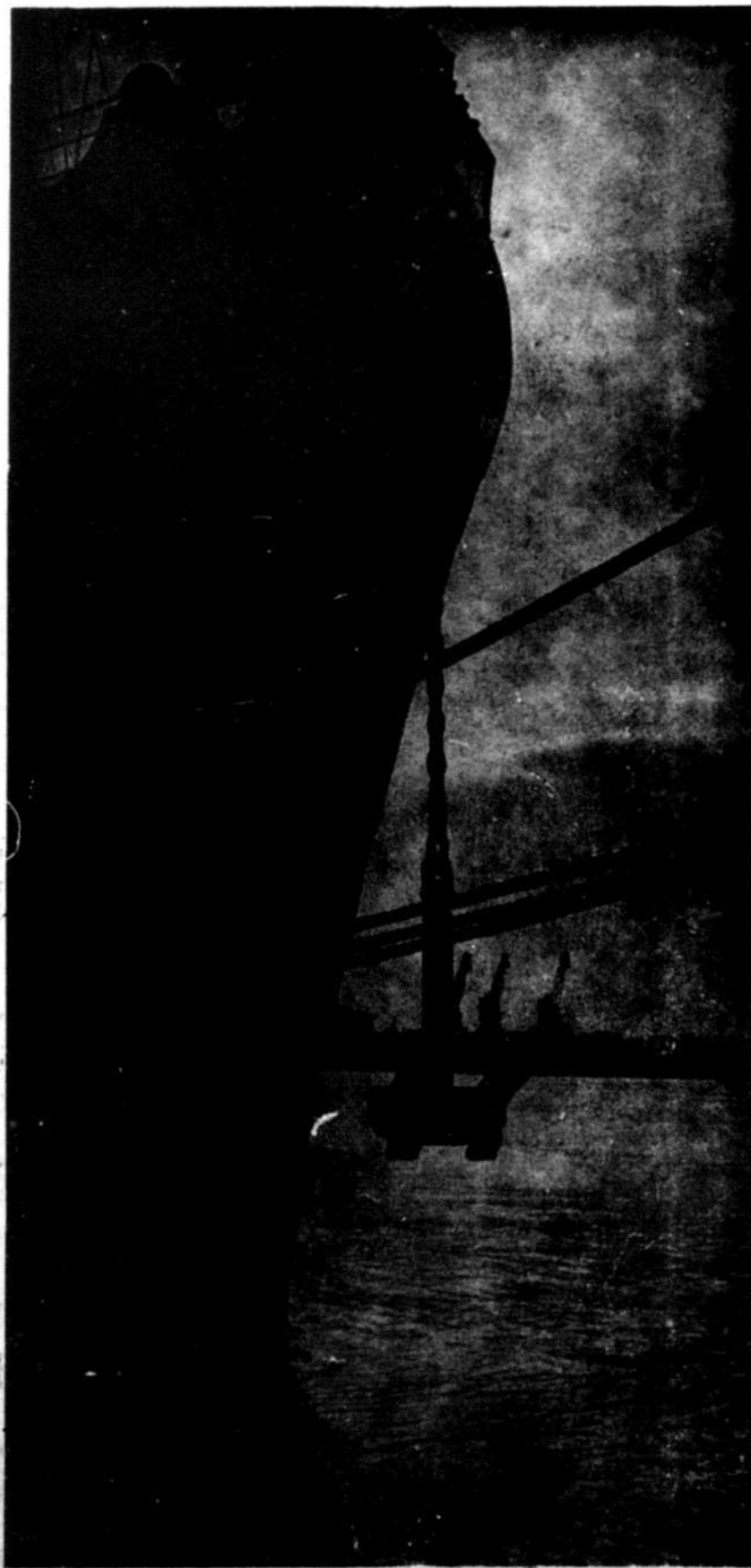
- **MANUFACTURERS AND DISTRIBUTORS OF**
All Standard and Special Brassware Fittings, including the "WATCRANE" Spring Cock, for the Plumber and Hot Water Engineer.
- **SUPPLIERS of**
Full range of Gunmetal, Cast Iron and Steel Valves for Water, Air, Oil and Steam; Baths, Basins, Lowdown Suites, Heaters and "IDEAL" Hot Water Boilers.
- **ELECTROPLATING SPECIALISTS in**
Chrome, Silver, Nickel, Cadmium and Tin.
- **FOUNDERS of**
Non-ferrous Castings and Hot Pressings, etc., in Brass, Gunmetal, Phosphor Bronze, Aluminium Alloys.
- **DIE MAKERS**

WORKS AND FOUNDRY:

Fairfield Street, Villawood, N.S.W. Phone: 07-7171

WAREHOUSE:

1037-1047 Bourke Street, Waterloo, N.S.W. Phone: 69-5761



life at sea

is a good life, better than ever before, and in the Merchant Navy, more modern ships are appearing on the Australian Register each year.

In addition to operating its own fleet of cargo vessels, the B.H.P. Co. Ltd. has Australia's largest shipbuilding yard at Whyalla, thereby providing employment for a wide variety of trades and professions . . . producing the steel, building the ships, then sailing them, surely a wide-sea and vital national project.



THE BROKEN HILL PROPRIETARY CO. LTD.