

RESEARCH ...

"... to merit and preserve the confidence of the best element in the medical and pharmaceutical professions . . . to build well, to last."

It was in these words that, over 90 years ago, the founders of the House of Parke-Davis expressed their policy for the future.

To meet these self-imposed and exacting demands, research has been a constant feature of the Company's activities. Over the years many contributions to Medicine have resulted: Vegetable drugs such as Cascara Sagrada; glandular products, including Adrenalin, Pituitrin, Pitocin, Pitressin, Antuitrin "S" and Eschatin; vitamin preparations; and many synthetic chemicals such as Dilantin. Recent achievements include the antihistamines, Benadryl and Ambodryl, and the first synthetic antibiotic, Chloromycetin.

To-day, backed by a research programme more extensive than ever before, Parke-Davis offer the medical profession products worthy of their symbol, "Medicamenta Vera" — truth in medicine.

PARKE, DAVIS & COMPANY, LIMITED

(Inc. U.S.A., Limited Liability)

SYDNEY



Vol. 23

AUGUST-SEPTEMBER, 1960

CONTENTS

						F	'age
Medical and Dental Branch of the R.A.N.							2
Navy Doctor helps Merchant Seaman							3
Medical Store of the R.A.N.							4
Flinders Naval Hospital							6
Balmoral Naval Hospital							8
The Naval Sick Berth Attendant							-11
The Development of Naval Medical Services							14
Medical Officers Train for Atomic Defence							17
Recompression Chamber for R.A.N.							18
New Sea-Air Rescue Ship for R.A.N.							19
H.M.A.S. Melbourne returns							21
Review of R.A.N.							25
Military Explosives for Peaceful Purposes							26
Increased Naval Co-operation between R.N.,	R.A	.N.	and	R.N	Z.N.		27
H.M.S. Londonderry Commission	, ,						31

Published by The Navy League of Australia.

N.S.W.: 66 Clarence St., Sydney. VIC.: 443 Little Collins St., Melbourne. ADVERTISING: Sydney—29 6531; Melbourne—MU 3123.
SUBSCRIPTION RATE: 12 issues post free in the British Commonwealth. 20/-

Copies of "Herald" photographs published may be obtained direct from Photo Sales. "Sydney Morning Herald," Hunter Street, Sydney.

SUBSCRIPTION FORM

To "The Navy" Box 4819, G.P.O. Sydney, N.S.W.

I enclose 20/- (postal note, money order or cheque) for 12 issues of "The Navy," post free, commencing from

(Please add exchange where applicable)

Name Street

City

Date..

August-September, 1960

OF AUSTRALIA

PATRON:
His Excellency The Governor-General,
The Rt. Hon. Viscount Dunrossil, P.C.,
G.C.M.G., M.C., E.St.J., Q.C.
FEDERAL COUNCIL:

FEDERAL COUNCIL:
President: Bear Admiral H. A.
Shower: C.B.B. (Retd.).
Deputy President: Cdr. R. A. Nettleford, D.S.C., V.B.D., R.A.N.B.
Secretary: Lieutenant Mackay-Cruisa,
D.A.N.B.

New South Wales Division:
Patron: His Excellency The Governor
of New South Wales.
President S. B. Adolral H. A
Sefretary: Lieutenant Mackay-Crulae,
R.A.N.R
Hon. Tresuurer: R. I. Rae, Esq.

Victorian Division:
Patron: His Excellency the Governor
of Victoria
President: Lieut.-Comdr. A. N. Bouston, R.A.N.R.
Secretary: Miss. E. C. Shorrocka, Room
S. 8th Floor, 528 Collina Street,

South Australian Division:
Patron: Hia Excellency The Governor
of South Australia
President: Surgeon-Comdr. R. P.
Matters (Redd.).
Hon. Sec.: R Sutton, Eaq., 30 Pirie
Street, Adelaide.

Tasmanian Division:
Patron: Vice Admiral Sir Guy Wyatt,
K.B.E. C.B., R.N. (Retd.).
President: Comdr. A. H. Green, O.B.E.,
D.S.C., R.A.N. (Retd.).
Hon. Sec.: Comdr. G. E. W. Bayly,
O.B.E., V.R.D., R.A.N.V.R. (Ratd.).
726 Sandy Bay Road, Lower Sandy
Bay, Hobart.
Western Australian Division:

Patron: His Excellency The Governor of Western Australia. President: Roland Smith, Esq. Hon. Sec. - Hon. Treas.: K. Olson, Esq., 62 Blencowe Street, West Leederville, W.A.

Queensland Division.
Patron: His Excellency The Governor
of Queensland.
President: Comdr. N. S. Pixley,
M.B.E. V.R.D. R.ANR. (Ratd.),
Ryan House, Eagle Street, Briabana.
Hon. Sec. G. B. O'Neill, Esq., Box
376E. G.P.O. Briabana.

Jree. GP.O., Branche.
Autrelian Capital Ferritory Division:
President: Lt.-Cdr. J. B. Howse,
RANVR, M.P., Parliament House,
Canberr., A.C.T.
Hon. Sc.: Lieut. D. M. Blake,
RANVR, 60 Limestone Avenue,
Ainslic A.C.T. Phone: J 3237.

Ainsite A.C.T. FROME: J 3237.
Northern Territory Division:
Patron: Hla Homour the Administrator, J. C. Archer, Esq., O.B.B.
President: Captain S. H. E. Spurgeon,
D.S.O., O.B.E., RAN, (EV.).
Hon. Sec. C. A. J. McRae, Esq., c/Welfarn Branch, Darwin, N. T.

AUSTRALIAN SEA CADET COUNCIL:
Representatives of the Naval mark
Director of the Captain W B M Marks, C.B.E., D.S.C.,
R.A.N.

Comdr. H. L. Gunn, O.B.E., D.S.C.
Representatives of The Navy Learne:
Comdr. R. A. Nettlefold, D.S.O.,
V.R.D. R.AN.V.R.
L. O. "earson, Esq.: L. Forsythe,

Lieut -Comdr. P. G. Evans, R.A.N.V.R. Hon. Sec. Lieutenant Mackay-Cruiss, R.A.N.E.

.



MELBOURNE STEAMSHIP CO. LTD.

Head Office:
31 KING ST., MELBOURNE
Branches or Agencies
at all ports

Managing Agents for HOBSONS BAY DOCK AND ENGINEERING CO. PTY. LTD.

Works: Williamstown, Victoria HODGE ENGINEERING CO. PTY. LTD.

Works: Sussex St., Sydney

COCKBURN ENGINEERING PTY. LTD.

Works: Hines Rd., Fremantle Ship Repairers, etc.



THE MEDICAL AND DENTAL BRANCHES OF THE ROYAL AUSTRALIAN NAVY

By Surgeon Rear-Admiral L. Lockwood, C.B.E., M.V.O., D.S.C., M.D., F.R.A.C.P., Q.H.S., Medical Director-General

ADMINISTRATION

I. The administration of the Naval Medical and Dental branches of the Royal Australian Navy is under the control of the Medical Director-General, who holds the rank of Surgeon Rear-Admiral, and who is directly responsible to the Second Naval Board Member and Chief of Naval Personnel.

2. Assisting the Medical Director-General, who is stationed at Navy Office, are a Deputy Medical Director-General, and a Deputy Director-General, Dental Services. In the Medical Directorate there are a number of civillan officers headed by the Civil Assistant to the Medical

Director-General.

3. Many and varied are the tasks of the Medical Directorate. Broadly speaking, these cover the recruitment and employment of medical and dental officers, both permanent and reserve; training of all medical and dental personnel; the provision of medical and dental stores to all hospitals, ships and establishments; the maintenance of a high standard in naval hospitals; supervision of the health and hyglene of the service; dealing with service medical boards, advice re pensions, etc., and in general to advise the Naval Board on all matters affecting the physical well-heing of the Naval Service.

4. Medical and Dental Officers are entered from time to time to fulfil the requirements of the service. Recruitment of medical officers has greatly improved during the last few years, due firstly to the utilisation of National Service medical officers from the United Kingdom, and now to the fruition of the Medical Undergraduate Scheme introduced into the Navy several years ago. It would be impossible to mention all the conditions of employment for medical officers in a short article. Briefly, a medical officer joins in the rank of Surgeon Lleutenant, and in the first place is appointed to one of the two well-equipped Naval hospitals, both of which have a full panel of visiting consultants and specialists of high standing. Available to medical officers are short courses in Anaesthesia, Atomic

WHAT THE NAVY OFFERS A DOCTOR

Biological and Chemical Warfare, Aviation Medicine and Diving. In addition, all officers undergo an indoctrination course, which in effect instructs them regarding the rules and customs of the Navy.

Following a term in the Naval Hospitals, medical officers serve in sea-going ships, visiting the South-East Asian Arta, Hong Kong, Japan, New Zealand, Fiji and various other places in the Pacific and at times more distant areas.

Opportunities also exist for service at Manus Island. Darwin, the Naval Air Station at Nowra and other shore establishments. Medial Officers who join the Permanent Naval Forces have the chance of undergoing longer post-graduate courses.

5. The career structure of the dental branch is closely allied to the medical, except that up to the present there has been no dental undergraduate scheme in the Navy. The dental branch of the Boyal Australian Navy has been for many years known for its efficiency, and is always provided with the most modern equipment. High-speed drilling units are now in general use.

Selected dental officers undergo courses in anaesthesia so that they can be of particular value in outlying stations, Courses in A.B.C. and Indoctrination are available. Opportunities for service in sea-going ships are provided

on a rotational basis.

6. The Naval hospitals at Balmoral, New South Wales, and Flinders Naval Depot, Victoria, have been recognised by the Medical Boards of New South Wales and Victoria as approved hospitals for resident medical officers. Doctors who have passed through these hospitals have received excellent training and are encouraged to advance themselves in their profession.

The unique chances available for medical and dental officers of the Royal Australian Navy as regards training, professional opportunity and travel offer them a varied

and satisfactory life.

Navy Doctor helps Merchant Seaman

A dramatic story of one of the many facets of the Navy's role in peace-time is found in the wireless messages reprinted below:

Message received from SOUTH AFRICA STAR, 2.5 p.m., 23/5/60; Require urgent medical assistance. Sailor fallen down hold. Patient unconscious, head wounds. Send doctor with pilot, midnight. Instruct Port Health for advice immediately — Master.

Message sent to SOUTH AFRICA STAR, 3.25 p.m.: Message received. Radio Station Brisbane advises Surgeon II.M.A.S. SWAN, going to your assistance. Do you still require local doctor meet Coloundra. We proposed sending him MANOORA meeting you midnight. Reply quickly.

Message from H.M.A.S.
BWAN to N.O.I.C., Queensland,
3.30 p.m.: Am proceeding to
rendezvous with SOUTH
AFRICA STAR in position 090
Sandy Cape Light 13. Vessel
has injured seaman and has
requested services of medical
officer who will be transferred
by seaboat and rejoin in Brisbane.

Message received from SOUTH AFRICA STAR, 3.45 p.m.: Local doctor not necessary as doctor H.M.A.S. SWAN accompanying us to Brisbane — Master.

Message received from SOUTH AFRICA STAR, 4.53 p.m.: Doctor H.M.A.S. SWAN boarded. Proceeding. Pilot midnight — Master.

Message from H.M.A.S. SWAN to N.O.I.C., Queensland, 5.10 p.m.: Doctor transferred. Message received from SOUTH AFRICA STAR, 6.12 p.m.: Send ambulance to meet ship on arrival — Master.

The following letter of appreciation has been received by the Naval Board from the General Manager of the Blue Star Line:

"I am writing to express our appreciation of the prompt action taken by Commander K. W. Shands of H.M.A.S. SWAN on Monday, 23rd instant.

"As I understand it, on board our SOUTH AFRICA STAR a serious accident occurred to one of the crew. There was an interchange of messages between our Brisbane office and the vessel, which were intercepted by SWAN, as a result of which her Surgeon was put on board SOUTH AFRICA STAR and the possibilities are that the life of the injured person will probably be sayed.

"I feel that this example of co-ordination between the Royal Australian Navy and the Merchant Service is something which you would care to have called to your personal attention.

Yours faithfully,

S. V. JONES,

General Manager for Australia."

The Medical Officer concerned was Surgeon Lieut. Commander E. W. Freshney, R.A.N.R.

Medical Store of the Royal Australian Navy

This Store is the only Naval Medical and Dental Store in the Commonwealth. Issues are generally limited to R.A.N. Ships and Establishments but, when required, issues are also made to visiting ships of the R.N., R.N.Z.N. and other Dominion Navies. Visiting Navies are occasionally supplied.

The store consists of a large 51,000 square feet building at Randwick, housing stocks valued at approximately £300,000. Annual issues of stores are valued at approximately £60,000.

There are approximately 5,000 items of drugs and chemicals, surgical instruments, physiotherapy, X-Ray, medical library, utensils, surgical dressings and dental stores.

Average annual issues of Aspirin and A.P.C. tablets are 2 million, and 1½ million bandages. Tablets are counted by an electronic counting machine and surgical and dental instruments are packed in hermetically sealed polythene bags to guard against rust and corrosion from sea air and adverse climatic conditions.

The latest high speed dental drills are also issued from this store. These drills are considered the ultimate in modern dental surgery technique and comprise a compact high speed drill unit driven at 300,000 r.p.m. by an individual air compressor, and automatically water cooled.

All stocks carried are modern and of high standard and quality and, where necessary, special items are purchased and issued to meet honorary specialists' requirements.

Stores demanded are packed and issued with a minimum of delay either by air, ship, rail or road transport according to the degree of urgency.

MEDICAL SCHOOL EXAM HOWLERS

Epistaxis is hollowing of the arteries.

Three stages of syphilis are: (a) Primary, (b) Secondary, (c) Hereditary.

Asepsis means free from any infected organisms.

Q.: What is the dose of acid acetyl salicylicum? Answer: Dose of acid poisoning. Neutralise with alkaline poisoning!

Barrier Nursing. The dishes must be kept and washed in with the patient. Describing a form . . . Enter the patient's Sir and Christian names.

New Word: Circumstition.

MICROSCOPES AND MANY OTHER MEDICAL AND DENTAL STORES ARE KEPT

Medical and Dental Store Officer, Mr. W. W. Jones, checks one of the microscopes in store.

Mr. Jones, in conjunction with Senior Naval Medical Officers, is responsible for ensuring that sufficient medical stores and equipment is maintained to meet not only peace time requirements, but a sufficient reserve to meet any demand that might arise through a sudden war.

Some of the most modern equipment, both medical and dental, are held in the store for issue as required.

He is assisted by:

Mr. P. G. Hucker, Asst. M. & D S.O.

Mr. K. H. Berry, Technical Officer, Mr. J. Jeppeson, Technical Officer.



RED CROSS BLOOD BANK



A rating from H.M.A.S. Vampire gets relieved of a pint,

Gallons and gallons of blood are given away every year by Officers and Men of the Royal Australian Navy.

Their ready response is in no small measure due to the work of Medical and other Officers in making known the urgent need for blood. Il.M.A.S. WATSON, the Anti Submarine and N./D. Schools hold the record by giving almost 200 pints of blood in one day.

FLINDERS NAVAL HOSPITAL

FLINDERS Naval Hospital provides hospital care for all members of the R.A.N. serving in the South-East Australian Area, sent ashore from ships in the vicinity, or taken ill while on leave in Victoria: Army cases are also accepted from establishments on the Mornington Peninsula, Civilians, including naval families, are not eatered for except in cases of sudden emergency. In addition the hospital provides out-patient facilities for personnel serving or under training in Flinders Naval Depot, within whose boundaries it is situated. There is a Medical Training School attached to the hospital, where initial training is given to all sickberth ratings on joining the Service.

The Medical Officer-in-Charge is a surgeon captain, under whom the surgical and medical sections are supervised respectively by a surgeon commander and a senior licutenant commander. Junior medical officers assist in each section and the Out-patient Department. their number fluctuating according to the numbers of doctors available and the requirements of sea-going ships. Two wardmaster officers attend to administration, and six nursing sisters with proportionate numbers of naval sickberth staff, provide nursing care for the patients. Senior sick-berth ratings with special training operate the ancillary departments, and the hospital galley is manned by naval cooks from the Supply Branch. Civilian staff normally comprise pharmacist physiotherapist, typists and cleaners.

Besides the naval medical officers appointed to the hospital, civilian consultants in the various specialties of medieine and surgery visit regularly from Melbourne.

Structurally, Flinders Naval Hospital is a group of separate single-storey buildings, interconnected by covered collonades. The central brick administration block, housing offices and special departments. is flanked by four wards, two of brick and two weatherboard. occupied mainly by the medical section. The surgical section constitutes a separate brick block, containing two wards, offices and the operating theatre suite, and connected to the remainder of the hospital by a ramp and covered way. The brick-built hospital galley is situated at the rear of the main buildings, and behind it are a number of weatherboard structures housing additional medical wards, now closed, a small venereal disease section, the medical stores, and medical training school. A further wooden hut accommodates recreational amenities and a television set for the patients. with an occupational therapy room staffed by a part-time Red Cross worker.

The total bed space available allows for the occupation of upwards of two hundred beds, but this figure would normally only be required in time of general mobilization or severe epidemic: under peace-time conditions less than half the total are sufficient, and only eightyfive beds are at present kept ready for use. The unoccupied wards are closed, but available for reoccupation in time of

need. Patients who do not need to be kept in bed, but are unfit for duty, may sleep in their own quarters in the Depot but attend during the day for treatment. Patients normally serving in the Depot may also reecive hospital treatment while continuing to perform full or restricted duties, thus further reducing the hospital bed occupancy relative to the total numbers under treatment or surveillance

The medical section contains a 23-bed general medical ward. a 16-bed overflow ward (also available for use as an isolation ward), a small venereal disease ward, and a second 24-bed unit at present used for members of the WRANS. The latter will eventually become available as a second general medical ward, as it is intended to build a separate WRANS sickbay. Medical cases of all types are treated, except for those requiring special facilities such as tuberculosis or severe mental disorders, Consultant physicians attend in rotation. one per week, to see cases in consultation with the medical officers of the section, and a skin specialist visits monthly. The senior medical officer of the section attends officers of the Depot who report sick, and conducts all routine medical examinations, inoculations, etc., on officers.

The surgical section's two wards contain 16 and 6 beds respectively, with two cabins for officer patients. A four-bed resuscitation and recovery room is used for patients returning from the operating theatre still under the anaesthetic, and for immediate treatment of accident cases on admission. The operating theatre suite is shortly to be extensively altered and brought up to date, following an investigation by the Fleet Work Study Team: when completed it will be one of the

most modern and efficient in the country. About two hundred operations are performed in a year, by naval medical officers or visiting surgeons, according to circumstances. General surgeons attend in rotation once weekly, nose and throat specialists every third week, and others as required. A full range of surgery is earried out, excepting only those procedures best conducted in a specialized unit, such as major chest and brain operations.

The Out-patient Department provides facilities for examination and treatment of all ratings serving in Flinders Naval Depot who report sick, and for the carrying out of all routine medical examinations and incenlations, and the custody of ratings' medical history documents. It is at present situated in a temporary wooden building, but is scheduled for transfer to a permanent location adjoining the medical ward. It is also intended that the out-patient medical officer shall travel round the Depot once a day in a specially fitted vehicle so that ratings wishing to report sick may do so with the minimum time lost from work or training. The eyespecialist visits the hospital every third week to see patients in the special ophthalmic examination room: this room is also used by medical officers for routine testing of sight and colour vision of personnel on entry or specialization.

Ancillary departments, including physiotherapy, X-ray, laboratory and dispensary, are well equipped with modern apparatus, and provide facilities for the majority of the tests and investigations required on Hospital patients. The hospital medical store carries stocks of all medical supplies in regular use, and arranges for purchase of special requirements as needed.

The medical training school has two lecture rooms, equipped with projection apparatus, wall charts, skeleton and demonstration models: a small pathological museum is in course of formation. Newly joined sickberth attendants receive the academic and theoretical part of their training in these lecture rooms while undergoing practical instruction in the wards and other departments.

Other training activities include anatomy and physiology lectures for physical training instructors, and first aid classes for all ratings. Clinical meetings are held once a month, at which visiting lecturers discuss subjects of medical interest with the medical officers. nursing sisters and senior members of the sick-berth staff: these meetings are open to, and attended by, civilian medical practitioners.

Service behind the scenes . . .

Sigma congratulates the editors of "Navy" on this special edition highlighting the fine work of the Navy Medical Corps, and is happy to be associated with people who have served their country so well in both war and peace.

Sigma Company Limited is proud to serve the Navy . . . as a supplier of some of their pharmaceuticals.



SIGMA COMPANY LIMITED

Makers of Fine Pharmacautical Products

MELBOURNE. AUSTRALIA

BALMORAL NAVAL HOSPITAL

In the 18 years since it was established Balmoral Naval Hospital has established a proud and enviable record.

SURROUNDED by towering gum trees and with magnificent views of Middle Harbour, Balmoral Naval Hospital can lay claim to being one of the most pleasantly situated Naval Hospitals in the World.

The hospital, housed in two white buildings, has a expacity for 120 patients, with a daily average of 60 patients over the year. It can cater for patients requiring practically any kind of treatment except those few cases requiring special facilities.

It has an extremely well equipped operating theatre in which the Navy Medical staff carries out over 500 operations a year, including all but the most serious brain and chest operations.

In addition it has installed all the necessary additional equipment, X-ray, dispensing, physiotherapy, which is necessary to enable a modern hospital to function efficiently.

Here, not only Australians, but men from many of the navies of the world have come for treatment and have gone away completely restored to health and loud in their praise of the Hospital and its staff.

Letters that have been received testify that Governments are also grateful for the treatment that their nationals have received. Perhaps the most remarked on was the case of a sailor who went to hospital from an American ship with a badly injured throat this is what the U.S. Consul had to say of his treatment.



Surgton Captain K. Armstrong discusses with the Doctor in charge of the ward, the symptoms of a newly admitted patient.

AMERICAN GRATITUDE

Letter from Frank A. Waring, American Consul General, on the departure of an American seaman.

We, in the American Consulate in Sydney are grateful that the life of a U.S. Navy man has been saved by the magnificent co-operation of the Royal Australian Navy. For this we offer our sincere thanks to members of the staff of Balmoral Naval Hospital.

Arriving in Sydney with a crushed larynx, Oscar McGhee, U.S.N., urgently required most delicate medical and surgical attention, which was promptly extended by Balmoral Naval Hospital. For two months, while McGhee was critically ill, he received constant and meticulous care. As a result of great medical skill and every possible consideration, he is now sufficiently recovered to be flown to the Philippines where, after further recuperation, he will be returned to the United States. For this happy outcome, we owe a deep debt of gratitude which I am happy to acknowledge. I wish publicly to pay homage and tribute to the Royal Australian Navy and to express deepest appreciation for assistance rendered in time of need.

LIAISON WITH CIVIL HOSPITALS

The hospital maintains a close liaison with civilian hospitals in Sydney and many of the consultants from these hospitals also visit the Naval Hospital as required.

It is staffed by naval medical officers, the senior Medical Officer is Surgeon Capt. K. Armstrong, who is also the command medical officer, assisted by nursing sisters and sick berth staff.

In addition to the ordinary hospital patients the hospital also has a large out patients department — responsible as it is for the medical treatment of many Naval Establishments located in Sydney, These include ILM.A.S. PENGUIN, ILM.A.S. KUTTABUL R.N. Submarines of the 4th Submarine Squadron.

Doctors at the hospital also maintain close liaison with the staff of the Atomic, Biological Chemical Defence School, which is located in the vicinity.

Two wardmaster officers assisted by civilians attend to the administration of the hospital. Their duties include not only the recording of the entry and discharge of patients but the issue of Medical stores, if and when required.

Special attention has been paid to the supplying of meals to patients and to assist the cooks, some of the best in the Navy are sent to the hospital, which is equipped with the very latest cooking appliances,

To assist in the training of sick berth staff, a Medical Training School was recently established.



nursing sister at Balioral Naval Hospital hecks whether a attent is comfortable, he Sisters have only een appointed to the cospital in the last twelve mouths.

"Enzactin."

Brand of Triacetin

FOR EFFECTIVE ANTIFUNGAL THERAPY



Without Irritation

in the prevention and treetment of separficial dermetophytoses, particularly ATHLETE'S FOOT, RING-WORM OF THE SCALP.

- "Essectio" Cream 10:

Supplied in 1-aunce tubes, such 2-tentus containing 28 MGgipcorpt infacetate (also availate as Powder or Aureus Sprey). A Standard mechane for comcast availation will be supplied to mechan personnel on request, together with bibliography.

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





- Courtesy Sydney Morning Herald

The pilot of this Navy helicopter landed on Waliehurst Parkway and then went to the roudside (left) to be briefed by the senior police on the search for Graeme Thorne. The helicopter made low-altitude sweeps over

R.A.N. Helicopters have been called in on many occasions to assist in taking injured men to hospital or from one hospital to another. When the above photograph was taken, however, they were ass sling Pelice in their search for the kidnapped boy.

by Surgeon Lt. Cdr. S. J. Lloyd, R.A.N.

At sea the Sick Berth Attendant is a man of importance particularly is this so when no Doctor is carried. Then he must advise his Captain on matters that could save the life of a man or cost the rate-payer a lot of money by having the ship diverted to a nearby port.

THE Naval Sick Berth Attendant must be a medical iack-of-all-trades, and master of at least one. Trained firstly as a male nurse, and later as a medical technician in his chosen field, he must nevertheless be able to turn his hand to any medical activity in emergency. often without possibility of supervision by a medical officer. His training has consequently to cover a wider range than that of a nurse or other medical auxiliary, and his responsibilities, when qualified, may be greater. Sick borth attendants are trained from the beginning by the Navy, and the only requirements on joining are physical fitness, reasonable intelligence, and psychological suitability: previous experience in first aid or mursing does not exempt from any of the training, although it is of advantage to the student in getting through his course.

Recruit S.B.A.'s, in common with other branches, start their training with a twelve week course on non-medical matters. to familiarise them with the Navy way of life and the extracurricular duties they will have to perform in their Service career. Candidates who perform better than average in the passing-out examinations may gain up to one month's extra seniority towards their eventual advancement.

weeks the training is entirely professional, and is carried out in Flinders Naval Hospital. Anatomy and psysiology, first aid, and the principles of nursing are taught, mainly by lectures and demonstrations on training models; instructional films are shown, and recruits visit the wards at intervals for practical training and demonstrations on actual patients. Recruits also spend a proportion of their time assisting with

During the second twelve wards. The first professional examination is held at the end of this part of the course, at which successful candidates qualify as Sick Berth Attendants Class II: outstanding candidates may again earn un to a month's "time".

On qualifying as S.B.A. 2, the trainer begins to take his part in the running of the hospital. but remains under training and continues to attend lectures and classes. Half the total number reaching this stage remain in the general work of the hospital Flinders Naval Hospital, the



Recruits for the Sick Berth branch receiving instruction at the Medical School at Flinders Naval Depot.

Balmoral Naval Hospital in Sydney, where they continue with similar work and instruction. This section of the course occupies 36 weeks, and covers the more practical aspects of an S.B.A.'s work in addition to general nursing, elementary laboratory and X-ray work. operating theatre technique. shiphoard routine, medical documentation and store accounting are all taught by lectures or practical example. On comnletion of this course further written and oral examinations are held, and those who pass become qualified for advancement to S.B.A., Class 1: up to two months' seniority may be gained on this occasion. The actual date of advancement depends on completion of two years' service from the time of joining, but is back dated by the amount of seniority gained during training.

The fully qualified sick berth attendant may remain in one of the naval base hospitals, or be transferred to another shore establishment or to a seagoing ship. In a naval bospital he will be employed either on general nursing duties in the wards, under the supervision of nursing sisters and medical officers; or perhaps in an office or medical store under a senior rating. If he goes to sea at this stage it will be in an aircraft carrier or other large ship, where there will be other S.B.A.'s, senior ratings, and one or more medical officers; in a small ship he might be single-handed, with or even without a medical officer, but he would not normally be given an appointment of this nature until having achieved a higher rating, or at any rate considerable experience as an S.B.A.

Sick berth attendants may. and are encouraged to, apply for a further training course in one of the special subjects open

remainder being transferred to to them: Advanced nursing. physiotherapy, X-ray, operating theatre assistant, laboratory assistant, and several others. The length of these courses varies with the subject, but normally involves three months' preliminary training in a payal hospital, followed by three to six months at a civil hospital in one of the capital cities. In each case the length of training is less than that required to obtain the equivalent civilian qualification, but successful candidates become qualified to exercise their specialty within the service. Additional pay is given to those holding a specialist qualification, and possession of one is necessary for confirmation in any higher

> At any time after passing for S.B.A., a candidate may sit the examination for leading sick berth attendant. Training classes for this and other higher examinations are held from time to time, but ratings wishing to sit for them are expected to study mainly in their off-duty hours. After passing the tests certain other conditions have to be satisfied, such as the attain-

ment of eighteen months' seniority as an S.B.A., and passing a simple educational test, and being recommended by his commanding officer, before the aspirant can be put on the roster for promotion. If there is no waiting list he may be advanced immediately, or may be rated Acting L.S.B.A., even if he has not completed all the necessary requirements. The requirements for further advancement to sick berth petty officer, and sick berth chief petty officer follow the same pattern. except that the qualifying period of service is progressively longer, and so, usually, is the waiting list. Finally. S.B.C.P.O.'s of six years seniority may be chosen by a selection board for promotion to wardroom rank as a wardmaster sub-lieutenant with prospects of further promotion to lieutenant and eventually lieutenant commander: before becoming eligible for selection. however, it is necessary to pass a professional examination and a higher educational test, the latter being approximately at matriculation standard.

(Continued on page 13)

Toke VINCENT'S A.P.C. WITH CONFIDENCE For HEADACHE. COLDS. AND ALL PAIN AVAILABLE EVERYWHERE

Sick Berth Attendant - Contd.

Sick berth personnel necessarily spend less of their service career at sea than do members of other branches: the R.A.N. at present consists mainly of small ships which carry but one sick berth rating. usually a leading hand or petty officer. The aircraft carrier. H.M.A.S. Melbourne, which carries several, can account for no more than a small proportion of the total, and in any case is not likely to be replaced when she goes out of service in a few years' time. During his period of sea service, however, the sick berth attendant is a man of considerable importance. If the ship has a doctor, he is his sole assistant, and must take charge of details of accounting, documentation, and administration with which the doctor may not be familiar: if he is single-handed without a doctor, as for one reason or another frequently happens. his responsibilities are heavy indeed. He is not, of course. expected to entirely supply the place of a medical officer, and owes his patients only such skill and care as his training and experience permit, but he must nevertheless advise the captain on medical decisions which may involve diverting the ship to land a patient, at great expense. if nothing worse.

Whether ashore or afloat, the siek-bayman has a job which is interesting and satisfying; if there are periods of drudgery. hard work, and long hours. these are inseparable from any branch of a fighting service, and there are compensating periods of excitement and not a little drama. Anyone thinking of joining the Navy to-day, could do no better than enroll as a sick berth attendant.

MEET SICK BERTH ATTENDANT P.O. C. R. McKENZIE

No Television hero but a man who loves the Navy and is dedicated to his work

TN 1936 a young man by the name of C. R. McKenzie joined the Royal Australian Naval Reserve as a sick berth attendant. For three years in the Reserve. Mac learnt how to care for the sick men of the Navy.

Then came 1939, and when the call came he cheerfully answered his call-up, even though it meant giving up the management of a modern block of flats.

To-day, over 20 years later, S.B.A., now a Petty Officer, is still with the Navy and with only one regret, that very soon now he will have to give up the work that he loves.

Mac's is not a dramatic tale of carrying out emergency operations, although he admits to having been scared during some of the early phases of this career.

His first appointment, on joining, was to go to a signal station north of Cooktown on the Queensland coast; here, with one officer and 16 men. Mae had his first taste of medical life in the Navy. No one even sprained his ankle.

Then to H.M.A.S. BROOME. a corvette that was to see service as escort to convoys between Australia and New Guinea, and later take part in the landing of A.I.F. troops.

It was here that Mae had to make his first diagnosis as to whether a pain in the stomach was appendix. Forutnately. one of the ships in the convoy had a doctor, so over went the patient. He heard later that it was an appendix.

From BROOME he went to Milne Bay and from there to MANOORA for the Balik Papan landing. After the war, P.O. McKenzie went to the ARUNTA and here, as the ship travelled between Australia and Japan, he remained.

It was during his service in the ARUNTA that Mac was called upon to assist at his first and only operation at sea. A rating got his hand caught in the breech of a gun and, as the doctor had to operate. Mac got his first taste of being an anaesthetist.

After leaving ARUNTA, he went to the Royal Melbourne Hospital for an advanced nursing course; then for 21 years to Balmoral Naval Hospital and so to sea in H.M.A.S. SYDNEY. as Instructor for National Service trainees.

After leaving SYDNEY, he was sent to Flinders Naval Depot: then a draft back to his beloved small ships, first to H.M.A.S. SWAN, then, after a short period ashore, to WAR-RAMUNGA, and to-day, as the " DOC." he reigns supreme in H.M.A.S. BARCOO.

Not for long, as he knows that he has to make way for other sick berth sea staff to get their sea-time.

No heroic story is the story of "Tiddly Mac," for this is the way that most men of the Navy know him, but a story of the selfless devotion to dnty that the Navy expects and is typical of the men in the sick bay.

THE DEVELOPMENT OF NAVAL MEDICAL SERVICES

By Surgeon Lt.-Cdr. S. J. LLOYD, R.A.N.

TN the age-long history of ahips, navies, and seabattles, any form of Naval Medical Service is a comparative newcomer: nevertheless, a continuity in provision for medical care is traccable for at least five hundred years, and to-day's medical officers still show in their titles, from surgeon lieutenant to surgeon rear admiral, their descent from the sea-surgeons of the days of Sail.

In ancient and mediacyal times sea-battles were fought exclusively by boarding, tights were short and bloody, and the ships were small and could not keep the sea for long: there was neither time nor any facilities for treating the wounded on board, and they were landed after the engagement, to share the same meagre provision for medical care as the general population. The mediaeval maritime Code, the Laws of Oleron, required the ship's master to have bis wounded cared for, but there was no special organisation for this. and no surgeon was carried in the ships.

By the reign of Henry VIII. however, ships had become large enough to make extended voyages, and the use of cannon led to battles being fought at longer ranges; it became necessary for medical care to be available on board, and surgeons began to appear in warships.

Throughout the sailingwarship era, the ordinary ship's medical attendent was qualified only in surgery, and indeed according to the letter of the law. seldom honored however, he was forbidden to use any internal remedy. This restriction

reflected the situation ashore. where the medical profession was strictly divided into physicians and surgeons: they were trained differently, belonged to different professional organisations, and eschewed each other's specialty. The physicians were university educated, academically minded rather than practical, and considered themselves socially superior to the surgeons; the lutter learned their craft by apprenticeship and developed it. by practical experience. Only surgeons were appointed to ships, on the supposition that their sole function was the treatment of battle wounds: in point of fact far more sailors died of disease than of wounds, and the surgeons had perforce to practice the forbidden science of physic. In the eighteenth century some physicians went to sea, but as memhers of fleet staffs rather than to individual ships. Their function was less to treat disease than to advise on preventive medicine, and in this they were, with one or two notable exceptions, singularly unsuccessful: their academic tendency to theorise, even in defiance of observed facts, led them to disregard, if not to oppose, empiric measures now known to have had a scientific

From the time of the Elizabethan adventurers to the end of the Napoleonic wars, the wooden sailing ship held sway. with comparatively little change in basic form; and surgery also remained static in general principles. The surgeon and his mates occupied the cockpit, a noisome hole below the water- and the physician's inability line, in action: treatment was to draw a logical conclusion

confined to dressing wounds and amoutating limbs, a frequent necessity owing to the shattering effect of low-velocity projectiles and wood splinters. Between battles they redressed the wounds and gave illegal and usually ineffective. medicines to the victims of infections and tropical illnesses. Such nursing care as was given was carried out by the surgeon's mates, assisted by a "loblolly" boy from the ship's company. Sea-surgeons of the period have left textbooks and diaries from which we can indge the standard of their attainments. Allowing for their total ignorance of the causes of infection, their treatments and surgical techniques were surprisingly sound in principle. and their results frequently better than those of their colleagues ashore. They were essentially practical men, untransmelled with bookish theories, and willing to learn by each new observation and experience.

It was disease, rather than battle injuries, that accounted for most of the excessive mortality among seamen in the sailing fleets, and most of it would have been easily preventable if the true causes had been appreciated. Tropical diseases raged for centuries before their insect vectors were discovered: the generally filthy living conditions led to frequent epidemics of infectious diseases, yet the fact that clean ships escaped was searcely noticed; and the badness of provisions, and lack of fresh food, caused food poisoning, malnutrition, and vitancin deficiencies. Scurvy. now known to be due to lack of Vitamin C. remained rife for three hundred years after preventive measures first became known. All this unnecessary loss of life was due to the surgeon's ignorance of physic.

from observed facts. Richard Hawkins introduced lemons and oranges as an antiscorbutie in 1593, and individual captains and surgeons confirmed bis observations at regular intervals thereafter. It was not until 1795, however. that lime-juice was introduced as a compulsory issue, through the efforts of the two most notable naval physicians of the eighteenth century, James Lind and Sir Gilbert Blaue. Even then, occasional outbreaks occurred, through non-observance of the orders or badness of the lime-juice, up to the twentieth century.

For more than a hundred years after the introduction of surgical care on shipboard, there were no naval hospitals or medical organisation on land. Casualties sent ashore in war-time were the responsibility of the sick and hurt commissioners, who arranged for their treatment by private practitioners or in civil hospitals: in peace-time, however, the commissioners were disbanded, and the sick seamen left to shift for themselves. In 1754 the Royal Naval Hospital at Haslar was opened, although not completed until 1762. The R.N. Hospital in Plymouth opened in the same year, and that at Chatham in 1827, and others were established at overseas bases. The naval hospitals were at first staffed by civilians, the nurses being untrained females of the worst type, later replaced by male pensioners who were equally unsatisfactory. In 1884 these were in turn replaced by trained sick berth attendants. and trained female nursing sisters.

I'm to the beginning of the nineteenth century the seasurgeous and their mates ranked as warrant officers, and were badly paid and generally

Sir treated with contempt. There was no established medical service, and the surgeon was appointed by the Admiralty in peace-time, or the Sick and Hurt commissioners in war; in medical matters he was under the control of the Barber-Surgeons Company, In 1805, however. an organised service was formed, and surgeons and mates wore uniform for the first time officially; control was now vested in the Victualling Board, until 1832, when Sir William Burnett became in effect the first Medical Director-General, although not with that title. In 1833 the "loblolly" boys were replaced by untrained sick berth attendants chosen from the ship's company, who were themselves displaced by the trained S.B.A.'s of 1884. In 1843, commissioned rank was at last granted to surgeons, and to the assistant surgeons, as the mates were now called. The old distinction between physicians and surgeons was now abolished, in conformity with civil practice where a combined degree in four hundred years ago.

medicine and surgery had become the normal qualification. Medical officers retained the title of surgeon, however, and continued to use it as a prefix after 1918, when they were given the same ranks as executive officers of equivalent seniority

The Royal Australian Navy Medical Branch came into existence after the formation of the R.A.N. in 1912, Flinders Naval Hospital was established in 1931, having previously been the sick quarters of Flinders Naval Depot: Balmoral Naval Hospital was opened in 1942. After an impressive record in hoth World Wars and Korea the Branch is playing its part in the smaller, but more technical. Navy of the Nuclear Age. Under the present Medical Director-General, Surgeon Rear Admiral L. Lockwood, C.B.E. M.V.O., D.S.C., the Medical Branch of the R.A.N. maintains the tradition of service to the sick established by Seasurgeons of the Royal Navy





A flight of high-speed jets screams to 30,000 feet from the pitching carrier deck . . . a magnificent test of pilot, aircraft and the Golden Fleece fuel which powers the jet aircraft of the Fleet Air Arm.

The same superb quality is available
to you in every gallon of Golden Fleece
Motor Spirit and Lubricating Oil,
so wherever you drive, look for
the blue and yellow pump with



PETROLEUM PRODUCTS

", . . praud ta ba Australian"



GUIDED MISSILL' FROM A SUBMERCED SUBMARINE

A missile like this, armed with an atomic warhead, could do incalculable damage if it landed in Australia. It is one reason why the Navy Insists that the Medical Officers in the service are kept as up to date as possible in the latest methods of treating casualties from an atomic attack.

-Courtesy Sydney Morning Herald.

Herald.

M.O.'s Train for Atomic Defence

THE wholesale destruction and mass easualties produced by nuclear warfare inspire the pessimists to declare that no defence is possible, and therefore no preparation necessary: the Navy, on the other hand, believes that preparedness is vital, preparedness based on the widest possible dissemination of knowledge of the effects to be expected and of the way to combat them with whatever resources, may remain intact. As the problem is mainly one of casualty handling, a logical starting point is education of the medical profession for nuclear warfare, and this is being carried out by the R.A.N. The Atomie, Biological and Chemical Warfare School in Sydney offers two courses a year for medical and dental officers, both regular and reserve, of all three Services.

During the first week of May and of November each year some twenty doctors and dentists, and an occasional nonmedical scientist, assemble at Balmoral Naval Depot for five days' intensive study of nuclear physics, radiation biology, atomic weapons and their effects, and mass casualty handling: although the syllabus is primarily concerned with atomic warfare some lectures are included on biological and chemical defence. The largest part of the programme is devoted to the study of radiation and its effects, because it is an unfamiliar subject to most doctors, although in fact radiation injuries are not likely to be the major problem in atomic war. Orientation of these studies is not entirely military, and extensive consideration is given to peace-time radiation hazards, particularly those due to medical use of X-rays and radioisotopes: the suggestions made for dealing with

casualties, moreover, are equally applicable to times of civil disaster.

The course is necessarily highly concentrated, a very wide range of topics having to be presented in a comparatively short period, but it could hardly be extended in time

without inconveniencing the majority of the students who are in the reserves, and have their civilian occupations to consider. It is nevertheless popular amongst eligible personnel, as providing instruction not easily obtainable elsewhere, in a group of subjects not only vital to National survival in war, but also of increasing importance in everyday life.

POOLE & STEEL LTD.

43 STEPHEN STREET, BALMAIN N.S.W. Telephone: WB 2511

General Engineers, Boilermakers, Shiphuilders, Dredge Builders

Plans, Specifications and Estimates prepared for Mining Dredges and Plant of all kinds. Electric Welding and Oxy-acetylene Work.

Telegrams:
"POOLSTEEL," BALMAIN, N.S.W



August-September, 1960

RECOMPRESSION CHAMBER FOR R.A.N. DIVERS

The acquisition of the re-compression chamber will greatly assist Medical officers in checking up divers in the R.A.N.

imported from Britain one of the world's most modern recompression chambers to increase safety and improve training for its underwater diving teams.

The unit arived in Australia during July and was installed at the diver's training school at H.M.A.S. RUSHCUTTER, in Sydney.

The Minister for the Navy, Senator Gorton, said that

The Royal Australian Navy were the main reasons for obtaining the recompression chamber. He said the chamber could simulate underwater pressures experience at more than three hundred feet, and would be used to treat divers' paralysis, more commonly known as "divers' bends."

Senator Gorton said that, in addition to its emergency lifesaving role, the recompression chamber would have training value, and play an important safety and medical factors part in the selection of divers.

Volunteers for diving duty would be placed in the chamber so that medical and diving officers could check their physical and psychological reactions to simulated underwater pressures. This would help to ensure that unsuitable men did not undertake diving

Senator Gorton said the unit. which is the only one of its kind in Australia, would also he used for experimental work when the Navy's School of Underwater Medicine got under

He said six thousand pounds was a small price to pay for a piece of equipment that would give additional safety to men who undertook such hazardous duties. In cases of emergency, the recompression chamber could be made available for the treatment of civil divers.

"KEMBLA"

COPPER, BRASS AND OTHER NON-FERROUS WIRE CABLES & TUBES

METAL MANUFACTURES LTD

PORT REMBLA;

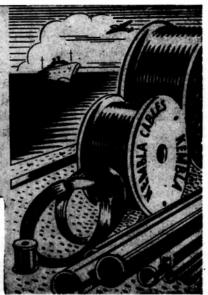
SELLING AGENTS (with Distributors in all States

TUBES AND BRASS WIRE

KNOX SCHLAPP PTY. LTD. Adelaide, Brisbane, Melbourne,

Sydney, Launceston

WIRE AND CABLES BRITISH INSULATED CALLENDER'S CABLES LTD. Melbourne, Albury, Sydney, Newcastle, Wollongong, Brisbane, Hobart, Launceston



SEA-AIR RESCUE SHIP ON TRIALS



SPEED TRIALS

The Navy's new £40,000 air sea resouc boat, H.M.AS. Air Sprite, on a demonstration run. The Navy took delivery of the Air Sprite on July 12 and the picture at right shows Rear Admiral G. C. Oldham, Flag Officer-in-Charge, E.A. Area. con gratulating Mr. Harold Halvorsen. whose firm. Lars Halvorsen Pty. Ltd., built the boat. Air Sprite will be stationed at Jervis Bay. During her trials she travelled at well over twenty knots.





WELCOME HOME DADDY

Three little girls (above) braving the early morning cold to welcome their father. The girls (left to right), Georgine (10 months). Ciristine (2 years) and Jacqueline (3 years), gathered to greet their father, LAG. Wilcox, of leven Hills, when he disembarked. Almost 1,000 relatives and friends of the ship's company of H.M.A.S. Melbourne waited on the wharf to welcome the ship home after three menths in the Far Eart.

—Courtesy Daily Telegraph.

Admiral's Impressions!

Rear Admiral W. H. Harrington, Flag Officer Commanding H.M.A. Fleet, photographed on his return to Sydney in his Flagship H.M.A.S. MELBOURNE.

Rear Admiral Harrington said that the ship had received an excellent reception wherever she had gone. After taking part in the SEATO exercise "Scalion" MELBOURNE visited Hong Kong, Yokohama and Diakarta.

Admiral Harrington said that MELBOURNE was the first Australian Navy ship to visit Indonesia since just after the war. The indonesians had been particularly interested in the visit and over 5,000 had looked over the ship during her stay.

He believed he said from what he had seen that the country was short of trained officials but those that were available had to work very long hours. This was particularly noticable in schools where the school-teachers worked two shifts—one lot of pupils studying from 7 to 1 p.m. the second classes from 2 to 7 p.m.

AUSTRALIANS SHOULD LEARN ASIAN LANGUAGE

Urging the teaching of at least one Asian language to Australians, Admiral Harrington said most Asians were bilingual and many spoke three languages.

The ship's company had noted with interest the eagerness of the Indonesians to perfect their knowledge of the English language.

Also in Japan, everyone wanted to speak the English language perfectly.



-Courtesy Sydney Morning Herald.

NICOL BROS. PTY. LTD.

INCORPORATING

PENGUIN HEAVY LIFTING PTY. LTD.

&

PENGUIN PTY. LTD.

ALL CLASSES OF STEAM, DIESEL
AND GENERAL ENGINEERING
BOILERMAKERS, OXY-ACETYLENE
AND ELECTRIC WELDERS
PLUMBING AND ELECTRICAL WORK
FLOATING CRANE AVAILABLE AT ALL TIMES
(20 TON CAPACITY)
ALL CLASSES OF MARINE EQUIPMENT FOR SALE

10-20 WESTON ST., BALMAIN EAST

'Phones: WB 3121 — 3 lines After Hours: UM 9485, WM 3225, FM 5708



m-—Courtesy Daily Telegroph.

Flag Officer Commanding the Australian Fleet, Rear-Admiral W. H. Harrington, inspects the Indonesian Naval guard during the visit to Diakarta of H.M.A.S. Melbourne.

H.M.A.S. MELBOURNE VISIT TO INDONESIA

During the visit Rear Admiral Harrington and Captain Mesley exchanged calls with Senior Officers of the Indonesian Armed Forces including Rear Admiral Martadinata Chief of Staff of the Indonesian Navy, the Australian Ambassador Mr. Patrick Shaw and other Government officials. A programme of functions, tours and sporting activities were arranged by the Indonesian Navy.

DRIBARM

COMPRESSED YEAST VACUUM PACKED

Dribarm' is a special form of compressed yeast, dried under scientific conditions and carefully compounded with a suitable yeast food. Packed to the high specifications of the Australian Navy.

Obtainable from: Merchants, Stores, Grocers or direct from

THE NAVY

Mauri Brothers & Thomson (N.S.W. Branch) Pty. Ltd. 2-6 Barrack Street, Sydney — Telephone BX 2601



When in Yokohama recently H.M.A.S. Melbourne ship's company gave a party for children from a nearby orphanage. Yes, they enjoyed it.—
So did the sailors.

COCKATOO DOCKS 4 ENGINEERING CO. PTY. LTD.

Shipbuilders
Marine
and
General Engineers
Contractors to . . .

H.M. AUSTRALIAN NAVY

COCKATOO DOCK

Phone: 82 0661 (10 lines)



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

see 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
- 726 Sandy Bay Rd., Lower Sandy Bay, Hobart
 P.O. Box 90, Darwin, N.T.
- 30 Pirie Street, Adelaide, S.A.
- 62 Blencowe St., West Leederville, W.A.
 60 Limestone Ave., Ainslie, Canberra, A.C.T.

August-September, 1960

MERGING OF OBSERVATORIES

The Admiralty have approved the merging of the Cape Observatory with the Royal Greenwich Observatory under the Astronomer Royal.

The Astronomer Royal and II.M. Astronomer at the Cape of Good Hope have been, and will continue to be, responsible to the Admiralty through the Hydrographer of the Navy, and, although the Astronomer Royal has hither to had no administrative control over the Cape Observatory, he has collaborated fully with H.M. Astronomer as the needs have arisen.

The Cape Observatory fulfils, in the Southern Hemisphere, much the same functions as those performed in the Northern Hemisphere by the Royal Greenwich Observatory, whose work it supplements, and there will be many advantages to be gained from the integration of the two Observatories.

WATSON & CRANE PTY. LIMITED

- MANUFACTURERS & DISTRIBUTORS of All Standard and Special Brassware Fittings, including the "WATCRANE" Spring Cock, for the Plumber and Hot Water Engineer.
- SUPPLIERS of

Pull 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 Allovs.
- DIE MAKERS

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

WAREHOUSE:

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

THE UNITED SHIP SERVICES PTY. LTD.

GEELONG

MELBOURNE

PORTLAND

VICTORIA

AUSTRALIA

The largest organisation in Victorian ports for the supply and erection of fittings for the carriage of every description of cargo. Bulk grain fittings a speciality. Dunnage supplied, holds cleaned. Decks caulked. Carpenters, joiners and shipwrights supplied.

88-102 NORMANBY RD., SOUTH MELBOURNE

Telephone: MX 5231

Telegrams and Cables: "FLEETWAYS," Melbourne

H.M.A.S. VENDETTA BACK



H.M.A.S. Vendetta returned recently to Sydney after services in the East. The picture on the right shows Vendetta's Capiain, R. J. Robertson, showing three of his children, Sadie (12), Brian (9), and Quentin (6). a track chart of Vendetta's 55,000-mile craise.

R.N. PAYS FIRST VISIT TO RUSSIA FOR FIVE YEARS

The first visit to a Russian port for five years by a ship of the Roval Navy took place in July, when H.M.S. APOLLO arrived at Leningrad for a three-day call. She is commanded by Captain L. D. Empson, R.N.

When the APOLLO sailed from Leningrad for Portsmouth she brought back to Britain the British Councils exhibition of 141 British paintings, loaned by 66 museums and private owners and valued at more than £‡millions. It had been on display in Moscow and Leningrad.

The exhibition — "British Painting, 1720-1960" — representing a period from Hogarth to the present day has been on display for a month in each of the two Russian cities. In Moscow, where it was hung in the Pushkin Museum, it was seen by 170,000 people.

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

MILITARY EXPLOSIVES FOR PEACEFUL PURPOSES

ALD Naval depth charges. M. Goodson, of Wellington. O'Army anti-tank mines and Air Force bombs will be among the explosives taken to islands in the Pacific during September by H.M.N.Z.S. EN-DEAVOUR. They will be used to blast gaps in the Coral reefs and improve access for small boats

ENDEAVOUR, which is the Navy's only commissioned wooden ship, and the only one to carry sail, is primarily an Antarctic support ship. She goes South to McMurdo Sound each Summer but during the Winter she is employed on a variety of duties. This latest will take her 4,800 miles to eight different South Pacific islands.

ENDEAVOUR will take explosives, stores and mail. She will also earry scientists from various divisions of the Department of Scientific and Industrial Research who will work on a wide range of projects. In addition, the ship will take soundings on the approaches to each of the islands she visits, at the request of the Department of Island Territories, who have fishing gear designed to work in 100 and 600 fathoms and are interested to learn where those depths can be found.

ENDEAVOUR will also carry a doctor for the ship's company and in case medical care is required on the more remote islands she will visit. A naval volunteer reserve officer, Surgeon Lieutenant G.

will go from Auckland to Apia, leaving her there and returning to New Zealand by air. He will be replaced by Surgeon Lieutenant N. C. McGill, of Christehurch, who will fly to Apia, join the ship and remain in her until her return. Eleven other volunteer reservists three each from Auckland. Christchurch and Dunedin and two from Wellington - will comprise one quarter of her ship's company of 44 ratings. ENDEAVOUR will leave

Auckland on 1 September and sail to Raoul, the weather station in the Kermadees, 535 miles north east of New Zealand, From Raoul, she will go 700 miles north to Suva for fuel, and 600 miles east to Nine, where she will unload explosives and stores.

Next stop will be Apia, 345 miles to the North. She will leave explosives there and go 560 miles to visit Palmerston in the Cooks, picking up Mr. J. Burland, a Wellington author, who has been conducting research on the island, in the process.

Aitutaki, 190 miles to the

East, will be ENDEAVOUR'S next island. After leaving mines, depth charges and explosive slabs here, she will sail 130 miles South to Rarotonga where substantially the same cargo will be unloaded. The last of her explosives will be unloaded at Mangaia, 110 miles to the South, ENDEAVOUR will then make the 1,100 mile passage to Raoul to collect the meteorologist's outward mail before returning to Auckland on 6 October.



CANBERRA TALKS **BRING INCREASED** NAVAL **CO-OPERATION**

Increase in exercises between ships of the Royal Navy, Royal Australian Navy and Royal New Zealand Navy.

The Minister for the Navy, exercises would be of particu-Senator Gorton, says closer co- lar value to the New Zealand operation between the navies Navy, although they would of Australia, Britain and New contribute to the efficiency of Zealand will result from a the navies of all three counseries of talks that ended in tries. Canberra last month.

The talks lasted three days, and were attended by the Commander-in-Chief, Far East Station, Vice Admiral Sir. David Luce, the Chief-of-Staff of the New Zealand Navy, Rear Admiral P. Phipps, and members of the Australian Naval Board, headed by the Chief of the Naval Staff, Vice Admiral Sir Henry Burrell.

Senator Gorton said one tangible outcome of the conference would be more frequent and closer co-operation in sea exercises between Australia, Britain and New Zealand. The three countries would endeavour to make ships available for combined exercises. This would lead to closer integration of the naval power of the three Commonwealth countries, both among themselves and as part of the highly successful SEATO organisa-

Rear Admiral Phipps, in a statement after the talks, said the discussions had been of special benefit to New Zealand. The more frequent combined

It was much closer than Britain. and the increased use of Australian facilities for training New Zealand personnel had been discussed at the meetings. The Commander - in - Chief. Far East Station, Vice Admiral Sir David Luce, said the talks

Admiral Phipps said New

Zealand also looked to Australia as a potential training

centre for its naval personnel.

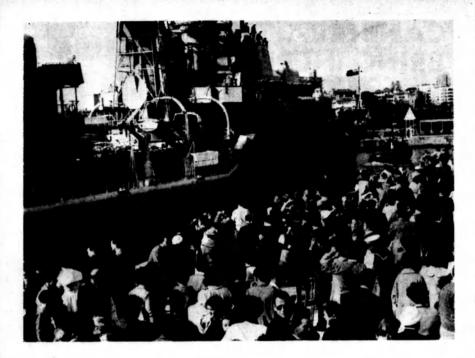
had been of considerable benefit and that he now had a firsthand appreciation of the detailed work of the Royal Australian Navv.

Vice Admiral Luce, together with Rear Admiral Phipos. was given a briefing on the organisation and activities of the R.A.N. by senior Australian officers in Canberra.



Vice Admiral Sir David Lace, Commander-in-Chief, Far Eastern Station inspects members of the 4th Submarine Squadron attached to H.M.A.S. Penguin during his recent visit to Sydney.

August-September, 1960



H.M.A.S. VENDETTA WELCOMED HOME

A large crowd of relatives and friends of the ships' company welcomed H.M.A.S. Vendetta when she returned home recently, after eight months' service in the Far East.

She was accompanied by H.M.A.S. Queenborough, which had also been in the Far East for four months.

Many children were among the crowd and for them it was a second Christmas for, as one Officer described it: "The ship was a floating toy ship".

Both ships remembered those not so fortunate, Vendetta landing toys for an orphanage in Cairm and Queenborough doing the same for children in an orphanage in Darwin. WE ARE SUPPLIERS OF SEA FRESH LOCAL FISH and

Direct Importers of United Kingdom and Continental

QUICK-FROZEN FISH

Wholesale Suppliers to Hotels and Restaurants

WE SPECIALISE IN SHIPS PROVIDORING

BULK COLD STORE AND WHOLESALE DEPT .:

Corner of Gibbons and Marjan Streets, Redfern-MX 5688

A. A. MURRELLS FISH SUPPLY

Head Office:

195 George Street, Sydney-BU S945. After Hours-FY 5470.

REVIEW OF R.A.N.

The Royal Australian Navy has just completed one of its busiest post-war years, in which its ships visited forty-one overseas ports.

The Minister for the Navy, Senator Gorton, recently reviewed Royal Australian Navy activities during the twelve months just ended.

Senator Gorton said the eighteen ships in commission steamed more than 405 thousand miles and called at 238 ports. Of these, forty-one were overseas.

He said aircraft of the Fleet Air Arm had logged ten thousand flying hours in covering nearly one and a half million miles.

During the year, Royal Australian Navy ships took part in four major exercises arranged under International Defensive Organisations. In addition, two ships were constantly provided for the British Commonwealth Strategic Reserve in Malaya.

Senator Gorton said a highlight of the year had been the introduction of oceanography and a stepping-up of survey work by the R.A.N. Two training ships, H.M.A.S. DIAMAN-TINA and H.M.A.S. GAS-COYNE, had been commissioned during the year, and had since steamed 64 thousand miles on oceanographic surveys.

The year had also seen the largest underwater search in Australian waters when Navy Divers helped with the recovery of a crashed airliner.

and on the civil side a works study survey and a Committee to enquire into store holdings to help the Service to operate at maximum efficiency. Some redundant Shore Establishments had been closed down to provide more money for new equipment, and the closing of others was under review. A Boys' Training College at Leeuwin Western Australia had been started.

The number of uniformed

personnel had fallen by 70 during the year and the total was now 10,629. During the same period there had been a reduction of 184 in civilian numbers.

The year had ended with the future shape of the Navy under review following recommendations made by the Chief of the Naval Staff who had been overseas to study latest trends of Naval Defence.

Senator Gorton said the next twelve months would see the Royal Australian Navy adjusting itself to cope with current defence policy and to secure the latest in surface and underwater ships and weapons, consistent with finance available.

The continued dependence of Australia on sea communications, and its international commitments, presented and would continue to present the R.A.N. with an undiminished task.



Australians in Malayan Review

Personnel from H.M.A.S. QUIBERON, at present serving in the Strategic Reserve, represented the Royal Australian Navy in a review of the Armed Services which was held in Kuala Lumpur on Monday, 1st August.

The review formed part of the celebrations to mark the end of the emergency in Malaya.

It consisted of a march past by contingents of the Federation Services — Police, Territorial Armies and Commonwealth Navies, Armies and Air Forces.

A fly past by Service aircraft and a drive past by mounted Contingents provided one of the most spectacular reviews ever seen in Malaya.

Colour parties representing Malaya, Australia, Fiji, Kenya, Rhodesia and the United Kingdom led the parade.

The salute was taken by H.M. the YANG-DI PERTUAN AGONG — the paramount ruler of Malaya.

ACKNOWLEDGMENT

"The Navy" wishes to acknowledge with thanks the assistance given by Surgeon Rear Admiral Lockwood, and other members of the Navail Medical Staff, particularly Surg. Lt.-Cdr. Lloyd, in preparing the Medical articles in this issue.

It is hoped to cover in the near future those Naval Medical Establishments which were not covered on this occa-

Rescue from Ditched Aircraft



Lieut. A. R. Horton, of Sydney, presents his Squadron crest (816) to Commander J. D. Hope, R.N., Captain of H.M.S. Cavalier, in recognition of Cavalier's speedy rescue of himself and Lieut D. Findiay (centre), of Nowra, after their Gannet ditched recently in the South China Sea during Exercise Seallon.

-Courtesy Navy News

"VULCATEX" Caulking Compound
"HORNEX" Rubber Concrete
"HOLZON" Pigmented Rubber Paint
"ADFAST" Rubber Adhesive
"RUBBATEX" Plastic Rubber Underlay

Sponsored by

FORBES, RANKEN & SONS PTY. LIMITED

24 BOND STREET, SYDNEY, N.S.W.

'Phones: BU 3461-2, BU 3807

H.M.S. LONDONDERRY TO COMMISSION AT COWES

Another auti submarine frigate. H.M.S. LONDON-DERRY, was provisionally accepted into service on Friday. 22nd July, from her builders, J. S. White & Company Ltd., at Cowes.

The highly successful hull form, twin screws and rudders of the Whitby class of frigates have been retained, but the LONDONDERRY has a modified internal layout based on the experience gained with the Whitby's. To distinguish the modified ships, a new Class name — Rothesay — has been introduced and LONDON-DERRY is actually the third ship of this class, the others being H.M. Ships YARMOUTH and ROTHESAY, which were accepted earlier this year. Six more Rothesay class ships are expected to follow.

LONDONDERRY is the second ship to bear the name, her predecessor being a sloop built in 1935. This new antisubmarine frigate bears the name of the Uster city which is the home of the Joint Services Anti-Submarine School.

The armament of LONDON-DERRY consists of two 4.5 inch guns in a twin mounting and a single 40 mm. A.A. gun which will eventually be replaced by a Seacat guided missile launcher and director. For anti-submarine use there are two triple-barrelled mortars, each of which can fire a pattern of projectiles with great accuracy, set to explode at a predetermined depth. Two twin and eight single torpedo tubes are also installed. The

Another auti - submarine twin 4.5 inch turret is conigate. II.M.S. LONDON- trolled by an electro-mechani-ERRY, was provisionally cal computor system.

> She has a length of 370 feet and a beam of 41 feet and the peace-time complement is 9 officers and 191 men, of whom approximately one-third are technical ratings.

> High standards of accommodation are incorporated in the design of the ship. The messes have bunks which can be collapsed during the day-time to form settees. Other amenities on board include the use of coloured plastic-topped tables, patterned linoleums and floral designs of chair and settee over-cases. There are domestic refrigerators in all messes, and bathrooms have hot and cold showers and stainless steel fittings.

The galley has been planned with special emphasis on clean-liness and all bulkheads and the deckhead are lined with aluminium. Special exhaust systems are fited to each range to ensure that steam and cooking smells are not allowed to penetrate into adjacent compartments.

The ship is powered by steam turbine machinery of modern and particularly light and compact design. Because of its highly satisfactory service in earlier ships of the class, the modifications to the machinery have been of a minor nature. After final sea trials and a work-up period at Portland. LONDONDERRY will join the 8th Frigate Squadron for a general service commission at home and on the America and West Indies Station. Her Captain is Commander I. S. Primrose, R.N., a gunnery specialist who was previously in command of H.M.S. STRIKER. serving with the Amphibious Warfare Squadron in the Mediterranean.



BABCOCK BOILERS

... are used in 900 POST-WAR MERCHANT VESSELS and for over three-quarters of the British post-war naval programme.

BARCOCK E WILCOX OF AUSTRALIA PTV. LTD. HEAD OFFICE & WORKS: GEBERTS PARK, R.S.W.



An unusual view of the French frigate, La Capricieuse, in dry dock at Captain Cook Dock during her recent refit in Sydney.

-Courtesy Dally Telegraph.

Navy's Clearance Divers in the News



Clearance rivers of the R.A.N. have had a busy few weeks.

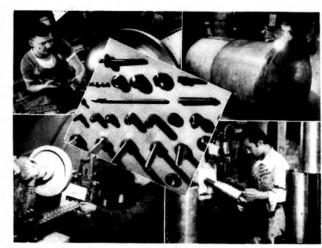
Their experience was varied and consisted of:

Destroying a mine North of Manus.

Disposing of a bomb near Cairns.

Searching for a wrecked aircraft near Cairns,

Are now investigating whether torpedoes in a sunken destroyer U.S.S. PEARY in Darwin Harbour are dangerous.



SERVICE TO INDUSTRY

COPPER · BRASS · BRONZE · ALUMINIUM

Austral Alloys of Copper, Bronze and Aluminium possess all the chemical, physical and mechanical properties demanded by modern industry. Fabricators know that Austral Bronze Company supply the highest quality material to their most exacting requirements and tolerances.

NOTE: Sheet and Strip products are available in continuous length coils to cut production cost.

- · Extruded Rod, Bars, Wire and Special Sections
- Strip
- Circles
- Sheet
- Plate

AUSTRAL (11) BRONZE

473-479 Swan St.,

128-130 Rathschild Av., Basebery, MU 4443 443 Terrens Rd.,

Burnley. 18 4324. Perth. BA 7073.

224 Mentagre Id. West End | 4542 101 St. Gearge's Tor., Bax 42, P.O., Glenarchy, Nebert. 74887 Nebert

Considerable stocks are available in all Austral Bronze warehouses to satisfy the requirements of labricators of all types of non-ferrous products

A8128/8.3



USED BY THE R.A.N.

and by most navies of the free world

LEDERLE SPECIALTY MEDICINES

Foremost in research, Lederle has introduced new antibiotics, steroids, and other drugs which have saved countless lives and relieved untold suffering the world over.

Lederle, a vast organisation with branches in 89 countries, including Australia, is proud to supply the Royal Australian Navy with its fine pharmaceuticals.

and D. and G. SUTURES

a product of Australian origin used exclusively by the R.A.N.



Redocto LEDERLE LABORATORIES

A DIVISION OF AMERICAN CYANAMID COMPANY

359/na

THE OFFICIAL ORGAN OF THE NAVY LEAGUE OF AUSTRALIA

NAVY WEEK SOUVENIR PROGRAMME ISSUE



INCLUDING PROGRAMME of OPEN DAYS at

H.M.A.S. "WATSON," WATSON'S BAY, 3rd OCTOBER, 1960

AND

H.M.A. NAVAL ESTABLISHMENTS, GARDEN ISLAND 8th OCTOBER, 1960





There is no substitute

for

STEEL SHEET

When it comes to protection there is no substitute for steel sheet. As strong as only steel can be and available in a wide range of gauges and finishes, it guards property against fire and the elements . . . safely houses machinery and equipment . . . and provides the raw material for countless "unbreakable" products in the manufacturing field.

As one of the major suppliers of steel sheet through its works at Newcastle and Port Kembla, John Lysaght (Australia) Pty. Ltd. is proud of the contribution it is able to make in this vital section of the national economy . . .

John Lysaght (Australia) Ptv. Ltd.

Offices in all capital cities of the Commonwealth



A Message from the Minister for togal YCHELL LIT ON Seak for ...

area. Whilst almost every Aus-

tralian citizen is aware of the

essential components of a

In an endeavour to give impetus to the Festival, and at

the same time give the man in

the street a better appreciation

of the activities and problems

associated with his Navy, the

Royal Australian Navy is

happy to be again given the op-

portunity of co-operating with

the organisers by opening to

the public a wide field of its

activities in the Sydney area.

tribution will include an Open

Day at H.M.A.S. WATSON

where people will see the

latest anti-submarine and radar

equipment and witness dis-

plays by clearance divers and

the massed bands of the Royal

Australian Navy, H.M.A. ships

MELBOURNE, VOYA-

GER, ANZAC and QUICK-

MATCH, as well as the

visiting H.M. ship CAVEN-

This year the Navy's con-

modern Navy.

Senator The Hon. J. G. Gorton SVONEY

Navy Collaborates with

Waratah Festival

28 NOV 1960 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

For some years now the Royal Australian Navy has been collaborating with the organisers of the Waratah Festival by giving the people of Sydney and its environs the opportunity of inspecting some of the Naval activities in their existence of our Navy, proportionately few of our population have any idea of the scope and complexity of the

Senator J. G. Gorton

DISH, will be open to public inspection. Displays by aircraft of the Fleet Air Arm. including helicopters, will be given over the city, and the massed bands will perform in Hyde Park. .

Garden Island will be open to the public on Saturday 8th October, and highlights there will be the firing of torpedoes by H.M.A.S. ANZAC and exhibitions of Search and Rescue by a Naval helicopter.

I hope that the Naval contribution to the Festival will add to its attractions and assist in ensuring that the event is the outstanding success I'm sure it is destined to

* BRETT *

is still the leading name in

CANVAS

For:-

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

Consult:-

E.H.BRETT & SONS PTY, LTD.

4 Bratt Avanue, East Balmain WB 2096 Sydney WB 2096

OCTOBER, 1960

BATTLE OF THE NILE

Master's Medal

The medal reproduced here by courtesy of Mr. Kenneth C. Bruff Macdonnel, 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. Macdonnel 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 actting 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

THE NAVY

Vol. 23

OCTOBER, 1960

No. 8

CONTENTS

						P	age
A MESSAGE FROM THE MINISTER FOR NA	AVY						- 1
THE ROYAL AUSTRALIAN NAVY							5
WATSON MEMORIAL CHAPEL							15
ROYAL AUSTRALIAN NAVAL COLLEGE							16
H.M.A.S. WATSON — PROGRAMME				, ,			18
H.M.A. SHIPS AND ESTABLISHMENTS, GAR	DEN	ıs.	-PR	oe	RAM	ME	20
ROYAL AUSTRALIAN NAVY PICTORIAL							23
JUNIOR RECRUITS TRAINING SCHEME							34
FIRST NAVAL APPRENTICES PASS OUT							36
WELCOME VISITOR - H.M.S. CAVENDISH							39

Published by The Navy League of Australia, 66 Clarence St., Sydney, 61 8784 SUBSCRIPTION RATE: 12 issues post free in the British Commonwealth, 20/-.

Copies of "Herald" photographs published may be obtained direct from Photo Sales, "Sydney Morning Herald," Hunter Street, Sydney.

Inserted by the Petroleum Information Bureau.

COVER: H.M.A.S. VENDETTA, after undergoing a refit, is towed from Captain Cook Dock by the Sydney tug "Sydney Cove".

The main machinery of this giant dock is worked by electricity, but the power house from which the supplies of electricity are drawn is dependent on oil.

The Petroleum Information Bureau (Aust.), on behalf of the Australian oil industry, is pleased to sponsor the cover for this issue of "The Navy".

Fast ships like the Daring Class Destroyer VENDETTA are vital to the defence of this country. Oil provides the fuels, and is the source of hundreds of different lubricants from huge engines to the most delicate radar equipment.

Because Australia is an island continent, the world's shipping lanes are our industrial lifelines. Without the Navy these lanes could quickly become closed to us. In peace or war, the oil industry is proud to serve the Royal Australian Navy, and to serve Australia.

THE NAVY LEAGUE OF AUSTRALIA

PATRON:

His Excellency The Governor-General. The Rt. Hon. Viscount Dunrossii, P.C., G.C.M.G., M.C., K.St.J., Q.C. FEDERAL COUNCIL:

President: Rear Admiral H. A. Showers, C.B.E. (Retd.). Deputy President: Cdr. R. A. Nettlefold, D.S.C., V.R.D., R.A.N.R. Secretary: Lieutenant L. Cruise, R.A.N.R. Mackay-

New South Wales Division: Patron: His Excellency The Governor of New South Wales.

President: Rear Admiral H. A
Showers, C.B.E.

Secretary: Lieutenant L. Mackay-Crulse, R.A.N.R. Hon, Treasurer: R. I. Rae, Esq. Victorian Division: Patron: His Excellency the Governor

of Victoria.

President: Lieut.-Comdr. A. N. Bouston, R.A.N.R.

Secretary: Miss. E. C. Shorrocks, 528
Collins Street, Melbourne.

South Australian Division: Patron: His Excellency The Governor of South Australia.
President: Surgeon-Comdr. R. F.

Matters (Retd.). Hon, Sec.: R Sutton, Esq., 30 Pirie Street. Adeluide Tasmanian Division:

asmanian Division:
Patron: Vice Admiral Bir Guy Wyatt,
E.B.E., C.B., R.N. (Retd.).
President: Comdr. A. H. Green, O.B.E.,
D.S.C., R.A.N. (Retd.).
D.S.C., C. Comdr. G. E. W. W. Bayly,
C.S. E. C. Comdr. G. E. W. W. Bayly,
C.S. E. C. R. D. R.A.N.V.R. (Retd.),
R. C. B. C. R. G. Cower Sandy
Ray Hobytt.

Bay. Hobart. Western Australian Division: Patron: His Excellency The Governor

of Western Australia.
President: Roland Smith, Req.
Hon. Sec. - Hon. Treas.: K.
Esq. 62 Blencows Street. Leederville, W.A.

Queensland Division: Patron: His Excellency The Governor

of Queensland. N. S. Pliley,
M.B.E., V.R.D., R.A.N.R. (Retd.),
R.Yan House, Eggis Street, Brisbane,
Hon. Sec.: G. B. O'Neill, Esq., Box
376E., G.P.O., Brisbane. Australian Capital Territory Division:

utifalian Capital jeriffory Division:
President: Lt.-Cdr. J. B. Howse,
R.AN.V.R., M.P., Parliament House,
Canberra, A.C.T.
Hon. Sec.: Lieut. D. M. Blake,
R.AN.V.R., 60 Liunestone Avenue,
Alinsile, A.C.T. "Phone: J 237,

Northern Territory Division:

Patron: His Honour the Administrator. J. C. Archer, Esq. O. B.E. President: Captain S. H. E. Spurgeon, D.S.O., O.B.E., R.A.N. (E/L). Hon. Sec.: C. A. J. McRae, Esq., c/-Welfare Branch, Darwin, N.T.

AUSTRALIAN SEA CADET COUNCIL: Representatives of the Naval Board: Director of Naval Reserves, Cap-tain W. B. M. Marks, O.B.E., D.S.O. Comdr. H. L. Ounn, O.B.E., D.S.C.

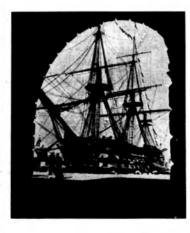
Representatives of The Navy League: Comdr. R. A. Nettlefold, D.S.C., V.R.D., R.A.N.V.R. Esq. Lieut.-Comdr.

RAN.V.R. Hon. Sec.: Lieutenant L.

OCTOBER, 1960

TIMBER-THE NAVY'S FRIEND

It is a far cry from the ships of Trafalgar, from Nelson's "Victory," to the capital warships of to-day. Each succeeding war, indeed each generation, even decade, has seen momentous developments in the armaments and armour of war vessels.



Modern aircraft carriers, submarines and missile carriers make even the proudest ships of World War II look like historical antiques.

The ships of commerce, likewise, have, through science and technology, developed enormously in comfort, safety, speed and facilities, whether for the carrying of passengers or for lifting the world's cargoes — a tremendous contrast to the days of old. But, whether they belonged to the era of sail or to the progressive present, be they designed for war or for commerce, ships have always, and will always, excite the imagination of young and old. For in the sea there lies perpetual challenge — the challenge of the elements, and of adventure beyond the horizon's rim.

And, throughout the history of ships, timber has played, and continues to play, a significant part. In whatever age, and of whatever type, ships require timber in their fabrication, maintenance and servicing. In the fleets of the world, as in every other field, timber is the Navy's great friend.



Wallis Bros. Pty. Ltd.

Timbermen Since 1838

In Support of THE NAVY LEAGUE OF AUSTRALIA

THE ROYAL AUSTRALIAN NAVY

A PROUD HERITAGE

THE Crimean War, with its rumours and threats of Russian warships in the Pacific, gave rise to the first efforts of any Australian Government to provide for local Naval defence.

The Government of the Oolony of New South Wales built a 65-ton wooden gunboat, SPITFIRE, while the Victorian Government ordered from England the 580-ton steamer Victoria, armed with six 32-pounders and a 9ft. 6in. swivel gun. She reached Melbourne in 1856.

With the formation of the Commonwealth of Australia at the beginning of this century.

there rose a public demand that Australia should have its own Navy. The feeling of the people at this time may well be judged by a statement by the then Prime Minister, who said:

"But for the British Navy there would be no Australia. That does not mean that Australia should sit still under the shelter of the British Navy. Those who say we should sit still are not worthy of the name of Briton."

At an Imperial Conference in London, in 1911, final agreement was reached on the form of the new Royal Australian Navy.

(Continued on page 7)

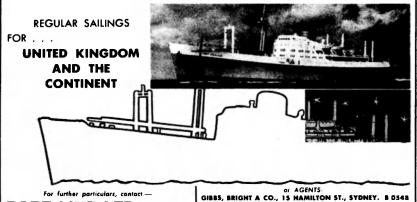


H.M.A.S. MELBOURNE, Flagship of the R.A.N., 1960, in Milford Sound, during a recent cruise to New Zealand.

PORT LINE ...

. . . taking wool, refrigerated and general cargo. Specialists in the carriage of livestock.

Excellent accommodation for limited number of saloon passengers.





PORT LINE LTD. (Inc. in Eng.)

50 YOUNG STREET, SYDNEY. 27-5301

People

in all walks of life

Also at Brisbane, Melbaurne, Adelaide, Fremantle, Hobart and Newcastle

A. G. WEBSTER A WOOLGROWERS LTD., Launceston

AUSTRALIAN ESTATES LTD., Rockhampton and Townsville

bank at the 'Rural'

Tradesmen, professional men, housewives — in fact, people from every walk of life, find complete, friendly, banking service at the Rural Bank.

They know it's good business to bank with the bank that does so much to prompte the prosperity of N.S.W.

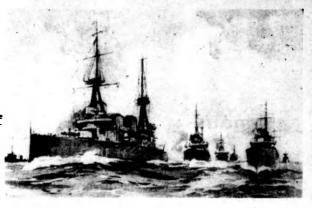
RURAL BANK FOR EVERY CLASS OF TRADING BANK BUSINESS "makes money work"
HEAD OFFICE: Martin Place, Sydney

First H.M.A.

Squadron Arrives

An artist's impression of the arrival in Sydney of the first Australian Naval Squadron,

Blocks-Courtesy "Navy News"



On the 4th October, 1913, the first H.M.A. Squadron, led by the Battle Cruiser "AUSTRALIA," sailed into Sydney Harbour. When the First World War broke out on 4th August, 1914, the Squadron was a formidable one and consisted of:

Battle Cruiser AUSTRALIA.

Light Cruisers: MELBOURNE, SYDNEY, BRISBANE (building), ENCOUNTER (lent by Admiralty) and PIONEER (gift from Admiralty).

Destroyers: PARRAMATTA, YARRA and WARREGO, with three others building.

Submarines: A.E.1 and A.E.2.

Gunboats: PROTECTOR, GAYUNDAH.
Torpedo Boats: CHILDERS, COUNTESS

OF HÔPETOUN.

Personnel in the R.A.N. at the outbreak of war were: Permanent Forces, 3,800 (22 per cent. on loan from the Royal Navy), with 1,646 in the R.A.N. Brigade. By the end of the war the personnel had almost doubled.

The presence of the squadron, particularly AUSTRALIA, was a distinct deterrent to hostilities on the part of German warships — particularly the cruiser squadron under Vice-Admiral Von Spee, who was known to be in the Pacific. That the danger was real was proved by H.M.A.S. SYDNEY when, in November. 1914, she attacked and destroyed, near the Cocos Islands, the German light cruiser EMDEN.

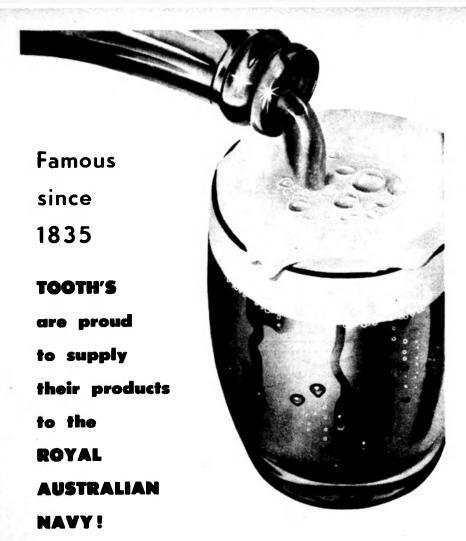
During the war, H.M.A. Ships saw service in all parts of the world and, although the bigger ships's story was largely the continuous drudgery of patrol work, it provided valuable experience. This experience, with that of the smaller units more closely connected with the immediate defence of Australian waters, moulded the new Navy into a compact body with a practical experience of sea warfare.

Both the submarines were lost during the war — A.E.1 disappeared while on patrol off Rabaul in September, 1914, while A.E.2, after

having achieved the distinction of being the first submarine to pass through the Dardanelles into the Sea of Marmora, was sunk by the Turks in April, 1915.

The first H.M.A.S. SYD-NEY had the honour of being the first Australian ship to sink an enemy slip.

OCTOBER, 1960



TOOTH & CO. LIMITED

DRAUGHT BEERS: Tooth's XXX (Old)—Tooth's Woverley—Tooth's Lager—Tooth's New—Tooth's Old Kent—Resch's XXX—Resch's Country Special.
BOTTLED BEERS: Tooth's KB Lager—Resch's Dinner Ale—Resch's Pilsener—Tooth's Sheaf Stout.

SOFT DRINKS: "Blue Bow" in a wide variety of gerated waters and cordials

T.6.FPA THE NAVY

The Australian Navy, as with the Navies of other nations, was considerably affected after the war by the Washington Conference. which set a limit to Naval strengths and was responsible for the dismantling and sinking of H.M.A.S. AUSTRALIA on 12th April, 1924. and by the world economic depression.

The building of H.M.A.S. ADELAIDE, which started during the war, was continued and she was commissioned in August, 1922. By 1923, however, the number of ships in commission had fallen from 25 to 13.

In 1925 the Australian Naval Board, faced with the obsolescence of most of its cruisers. ordered from Britain two new 10,000-ton cruisers, H.M.A. Ships AUSTRALIA and CAN-BERRA. These ships, which did such outstanding work in the last war, were commissioned in 1928. The seaplane tender, H.M.A.S. ALBATROSS, which was ordered from Cockatoo Dock in 1925, commissioned in 1929.

In 1933 the British Government made a gift to Australia of the destroyers STUART (Flotilla Leader), VAMPIRE, VENDETTA, VOYAGER and WATERHEN. Far from new when they commissioned in 1933, they did veoman service in the Mediterranean, where the Germans called them the "Scrap iron flotilla "

Within six years of receiving these destrovers, Australia increased her cruiser strength by the addition of three new 6-inch ships. The namesake of H.M.A.S. SYDNEY commissioned in 1935, HOBART in September, 1938, and PERTH in June, 1939, the war breaking out on her way to Australia.

H.M.A.S. HOBART

Sister Ships H.M.A.S. SYD-NEY (the second: sunk and was herself sunk by German raider KORMORAN in Nov., 1941. H.M.A.S. PERTH-sunk by Japanese early in 1942.

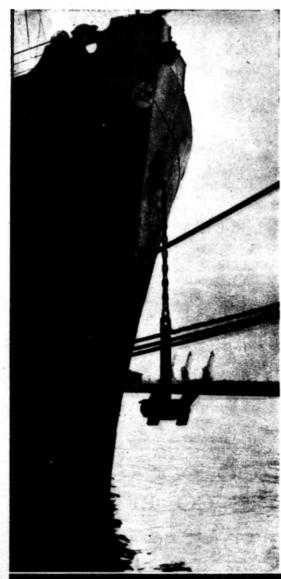


A Company of the Vickers Group

COCKATOO DOCKS & ENGINEERING CO. PTY. LTD.

BUILDERS OF MANY OF THE NAVY'S FINEST FIGHTING SHIPS

COCKATOO ISLAND, SYDNEY



life at sea

is a good lite, 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 widespread and vital national project.



THE BROKEN HILL PROPRIETARY CO. LTD

SECOND WORLD WAR

In the Second World War the Royal Australian Navy was represented by ships or men, or both, on all the world's seaways: Egypt, United Kingdom, Libya, Somaliland, Persian Gulf, West Africa, Russian convoys, the Battle of the Atlantic, the invasion of Normandy, Sicily, Italy, the Aegean, Malaya, Singapore, Sumatra, Java, Timor, Madagascar, the Bay of Bengal, Papua, the Solomon Islands, New Guinea, the Philippine Islands, Borneo, the China Sea, and the Japanese mainland.

It is not possible in this short survey to tell of all the actions in which our ships took part — these are but a few:

In the Middle East, where, in collaboration with ships of Royal Navy, they took part in many actions, including the Battles of Calabria and Matapan, the evacuation of Greece, the sinking by H.M.A.S. SYDNEY of the Italian cruiser Bartolomeo Colleoni and destroyer Espero, and the work of the destroyers in pioneering the "TOBRUK FERRY SERVICE."

And in the Pacific, where, with units of the United States Navy, they took part in the Battle of the Coral Sea, the landings at Levte and Lingayen and practically every other action that was fought.

In addition, H.M.A. Ships of all types supported Australian Army operations in the New Guinea, New Britain and Solomons area.

Many men from the Royal Australian Navy also served with the Royal Navy in many theatres of the war. In June, 1944, there were approximately 510 Australians on loan to the Royal Navy, of whom more than 400 were members of the Royal Australian Naval Volunteer Reserve.

Indicative of the way in which these Reservists, many of whom enlisted under the 'Yachtmen's Scheme' and had had no previous Naval experience, maintained Australia's reputation as a Naval nation is the fact that of the 1,107 decorations and awards won by Australian Naval personnel, 164 went to this group of Reservists.



H.M.A.S. WATERHEN which with Stuart. Vendetta. Voyager and Vampire made up the flotilla which the Germans derisively named the "SCRAP IRON FLOTILLA." WATERHEN was sunk by aircraft while engaged in ferrying supplies into beselged TOBRUE.

DRIBARM

COMPRESSED YEAST VACUUM PACKED

Dribarm' is a special form of compressed yeast, dried under scientific conditions and carefully compounded with a suitable yeast food. Packed to the high specifications of the Australian Navy.

Obtainable from: Merchants, Stores, Grocers or direct from

Mauri Brothers & Thomson (N.S.W. Branch) Pty. Ltd. 2-6 Berrack Street, Sydney — Telephone BX 2601 At the head of this list stands Australia's most decorated Naval Officer -- a Lieutenant-Commander, R.A.N.V.R., holding the George Cross, the Distinguished Service Cross and the George Medal. This Officer, with several other Australians, was engaged in rendering safe, bombs and mines which were dropped by the enemy.

Are you denying yourself



Belasation toin mental and unestate is according to the earlies leading physicians, essential. Yet how many people loday, due to constant mental pressure brought about by the ever-increasing tempo of business and life in general, are finding themselves "fun-down". Wall, the old adage "Don't let this happen to rou"

Picture yourself relaxing on board SOUTHERN CROSS on a wonderful round-the-world vacation. A crusa pleasure-planned for you, by Shaw Savill Line, with no morries whatsoever, leaving rou completely free to recuperate and to enjoy your choice of either a passive or active vacation

The round the world itinerary of the 20,000 ton one class liner, SQUIMERN CROSS, includes calls at New Zealand, Fiji, Tabiti, Panama, Caracae, Trialigad, England, Las Palmas, Capatism, and Durban, Whilst a few of its amenities are: Two swimming pools cinema, air-conditioning in every cabin, spacious lounges, orches tra, stabilisers, unencumbered sports decks, children's playrooms and air-conditioned dining rooms

FARES TO ENGLAND FROM £145 STERLING

ROUND THE WORLD FROM £287 STERLING

Travel Shaw Savill

The Exact Colour You want with —





AND READY MIXED PAINTS

- Suede Luxury Wall Finish
- Satin Dull Enamel
- Super Gloss Enamel
- Plastic Flat Finish
- All-purpose Undercoat

For Inside and Outside Use



SHIPBUILDING PROGRAMME DURING SECOND WORLD WAR

Australia's Fleet, small and well balanced as it was, was not sufficient to meet the war's demand, so three methods of expansion were adapted:

1. Conversion of merchant ships as armed merchant cruisers - later converted to landing craft (infantry), store carriers, etc.

2. Construction of new ships - 3 Tribal Class destroyers, 60 minesweepers (20 for the Royal Navy aml 4 for the Royal Indian Navy), 12 River Class frigates and many Fairmile motor launches, Harbour Defence launches, water and oil lighters were all built or started during the war.

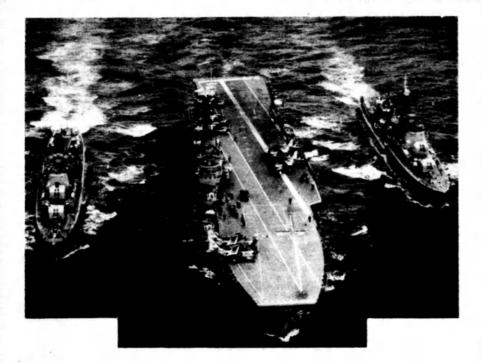
3. The acquiring of ships from the Royal Navy - the 8-inch cruiser SHROPSHIRE was was a gift from Britain to replace II.M.A.S. CANBERRA when the latter was lost by enemy action, 6 destroyers 14 "N" Class and 2 "Q" Class) were manned by the RAN



H.M.A.S. WARRAMUNGA, sister ships ARUNTA and BATAAN, Tribal Class destrovers built during the war.







OIL SERVES OUR NAVY WELL

Yes, to-day every ship in the R.A.N. is powered by oil. Each year more than 12 million gallons of petroleum products are used to maintain the Royal Australian Navy's mobility and fighting power.

Inserted by the Petroleum Information Sureau (Australia) on behalf of

MARKETING COMPANIES

Ampol Petroleum Limited

Atlantic Union Oil Company Pty. Ltd.

BP Australia Limited

Caltex Oil (Australia) Ptv. Ltd.

H. C. Sleigh Limited

Neptune Oil Company Pty. Ltd.

The Shell Company of Australia

Vacuum Oil Company Pty. Ltd.

REFINING COMPANIES

Australian Oil Refining Pty. Ltd. BP Refinery (Kwinana) Limited Shell Refining (Australia) Pty

Standard-Vacuum Refining Company (Australia) Pty. Ltd.

WATSON MEMORIAL CHAPEL

THOSE of you who have ■ visited 11.M.A.S. WATSON will have seen the skeleton of the new Memorial Chapel. which when completed will be the first Memorial in New South Wales to the men of the Royal Australian Navy who died in the service of their country.

It is fitting that this Chapel should be erected at WATSON the main operational training establishment of the Navy and that it should be sited so that it is a landmark to all who enter the harbour of Sydney from where the first ships, and most of them were Naval, to come to Australia anchored after long and perilous voy-

Here in this chapel, we hope that many men of the Navy through prayer aml meditation will find that spiritual nourishment that will enable them to face whatever perils may befall them either from man or

The design and the stonework walls of the chapel are in keeping with the surroundings, and it will be surmounted by a cross, which will be illuminated at night, so that

people coming in from sea or looking from the harbour side will see this symbol of God.

Beyond the altar, which will incorporate stones from many other parts of the Christian world will be a magnificent view of the entrance to the harbour and North Head

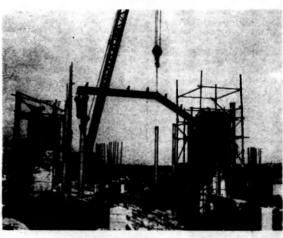
In the 16 months that our

appeal has been running we have already raised over £21,000 but another £9,000 is required before we can complete the building.

WILL YOU HELP?

You can do so by placing a donation in the box near the model of the Chapel or by sending your donation to:

> CHAPEL APPEAL FUND. H.M.A.S. WATSON, WATSON'S BAY.



First roof truss in placed in position

CASUALTIES

Total R.A.N. casualties from 3rd September. 1939, to 30th April, 1946, excluding deaths from natural causes, were 2,608, while the following ships were lost:

8-inch Cruiser

CANBERRA: 9/8/42-Night action off Savo Island.

6-inch Cruisers

SYDNEY: 19/11/41-Raider action off W.A. PERTII: 1/3/42-Night action off Sunda Strait.

Destroyers

WATERHEN: 30/6/41-Sunk by aircraft on "spud run" to Tobruk.

VAMPIRE: 9/4/42-Sunk by aircraft in Bay of Bengal.

NESTOR: 15/6/42-Sunk by aircraft in Medi-VOYAGER: 23/9/42-Lost while helping

Timor guerillas.

Sloops

PARRAMATTA: 27/11/41-Sunk by submarine in Mediterranean.

YARRA: 4/3/42-Sunk in action S. of Java.

Corvettes

ARMIDALE: 1/12/42-Sunk by aircraft while helping Timor guerillas.

WALLAROO: 11/6/43-Lost in collision off Fremantle.

GEELONG: 18/10/44-Lost in collision off New Guinea coast.

Gateway to Adventure and

a Career

R. A. N. C.

OMMANDINGLY situated on Captain's Point in the South-Western corner of Jervis Bay are the white walls and red roofs of the buildings that form the Royal Australian Naval College where, within constant sight and sound of the sea, the task of educating and training the future officers of the R.A.N. is carried out.

What of its task! The aim of the College is to take in a group of normal young Australians, and to give them such an education and training as will fit them for the task of going into the Australian Fleet as officers capable of fulfilling the responsibilities of command

There are two forms of entry to the Royal Australian Naval College: The normal entry is of boys aged from 141 to 161 years for a course of training of three years' duration The candidate for this mode of entry to the College is required to have gained, prior to selection, the Intermediate Certificate or its equivalent and to pass an Entrance Examination in the subjects of Mathematies and English, Papers for this examination are set by the civilian masters of the College and marked by an outside authority. The selection process involves a psychologist's interview and intelligence and aptitude testing, medical examination and ultimate presentation before the Selection Committee of three which ineludes the Captain and the Headmaster of the College.

The other way in which a boy may enter the College is through the Matriculation Entry. As the name suggests this method calls for the candidate to have achieved the educational level of Matriculation for University studies, prior to his entry to the College, Such candidates must be not more than 19 years in January of the year of entry. There is no further College examination tor this type of entry and a boy may apply while still studying for Matriculation. The selection process is exactly as for the Normal Entry but takes place rather earlier in the year, ultimate acceptance being subject to the candidate's achievement of his Matriculation at the end of the year. A boy entering the service in this way undertakes a course of only one year in the College.

Education is similar to that of a normal secondary school but in addition all cadets receive instruction in Physical Education and Religious Education, Seamanship, Navigation and Engineering, while the Senior Year of the Normal Entry also studies Current Affairs.

As it is believed that a naval officer should have some knowledge of most games, a wide variety of activity in this field is undertaken. The games played on an inter-divisional basis and in competition outside the College are Rugby. Australian Football, Hockey. Soccer. Basketball. Cricket. Tenuis, Swimming, Atheletics, Cross-country Running, Pulling (or Sculling), Sailing and Boxing, Softball and Golf are engaged in, but on a less competitive footing.

Cadets regularly form the

SPORT:

bulk of the crews in the College Yacht "Tam O Shanter" in various ocean races including the Sydney-Hobart event.

THE NAVY

MIDSHIPMEN GO TO SEA



MIDSHIPMEN who graduated from the Royal Australian Naval College at Jervis Bay last December embarked in H.M.A.S. SWAN in January for a four months sea training cruise to New Zealand and Pacific Islands. During the cruise they carry out every job in the ship. They have since flown to England for further training with the Royal Navv.

MARITIME MAINTENANCE

PTY, LTD.

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

All forms of Ships' Husbandry and Service

Consult:

MARITIME

Maintenance

Ptv. Ltd.

SHELL HOUSE, SYDNEY BL 1159 (Day) WB 3640 (Night)

BLUE STAR LINE

Regular sailings of fast and modern ships to the United Kingdom and Continental 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

113 Eagle Street, BRISBANE Scottish House, 17/19 Bridge Street, SYDNEY Scottish House, 90 William Street, MELBOURNE 198 North Terrace, ADELAIDE

Piston Rings

For Super-heated and Wet Steam

Dissel Engines

end All
Types of Compressors

Compression, Oil Control and Double Seel Rings from 6in. to 60in.
Diemeters

All kinds of
Metallic Rod Pecking

We ere the Pioneers of Austrelia for Piston Rings. Suppliers to the Nevy, Shipping Companies, Power Houses and Industrial Plants.

W. A. HARRINGTON PTY. LTD.

15 EAST STREET LIDCOMBE, N.S.W.

> Telephone: YX 7052 Telegrems: "RINGTON," Sydney

See Your Navy at Work

H.M.A.S. WATSON'S "OPEN DAY" 3rd OCTOBER, 1960

The first major function during the 1960 Navy Week in Sydney will be at H.M.A.S. -Watson, when this establishment will be open for public inspection from 1.30 p.m. to 5.00 p.m.m on Monday, 3rd 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.

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

WHAT TO BEE:

H.M.A.S. Watson is the home of the Torpedo Anti-Submarine School, the Navigation Direction School, The East Australian Area Naval Band, and an Advanced Cookery School.

Throughout the afternoon men for the two first mentioned schools will demonstrate for the benefit of visitors, the tasks for which they are trained.

TORPEDO ANTI-SUBMARINE DISPLAYS:

Perhaps the most spectacular events will be the Anti-Submarine Mortar Firings and the Diving Displays by Naval Frogmen.

Visitors will see at first hand how the deadly Mortars are

The first major function fired in exactly the same way uring the 1960 Navy Week in as from anti-submarine ships of ydney will be at H.M.A.S. the Royal Australian Navy.

Naval Frogmen 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 missions in enemy waters and make good their escape as quickly as possible.

Within the school, 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.

NAVIGATION DIRECTION AND HYDROGRAPHIC DISPLAYS:

In the Action Information Training Centre and Radar Block all 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.

The Hydrographic Display will enable visitors to see how charts are made and Navy surveyors work.

BAND MARCHING DISPLAY:

Throughout the afternoon the combined Naval Bands of H.M. Australian Fleet, the East Australian Area and H.M.A.S. Albatross will play incidental music on the Parade Ground immediately in front of the

Amenities Building. As a finale they will give a marching display at 4.45 p.m. on the Parade Ground.

REFRESHMENTS:

Around the establishment visitors will find refreshment stalls to eater for their immediate requirements and Afternoon Tea may be obtained in the Amenities Building at 3.30 n.m.

RATINGS' ACCOMMODA-TION AND AMENITIES:

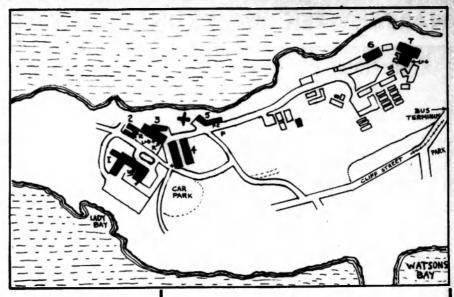
The lower floor of the northern Junior Ratings' Accommodation Block will be open so that visitors may see the comfortable living conditions in H.M.A.S. Watson.

An inspection of the first floor of the Amenities Building will show how pleasantly ratings may spend their 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 scating capacity of 400.

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-Submariue School, which has been located at Rusheutter 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.

A fund has been started to provide for the erection and fitting of a Memorial Chapel, about which you have read elsewhere in this issue.

LOCATION OF INSTALLATIONS

- Torpedo Anti-Submarine School.
 Chief and Bath, Officers' Assembly
- Chief and Petty Officers' Accommodation.
- 3. Amenities Building.
- 4. Junior Ratings Accommodation.
- 5. Administration Building.
- 6. Action Information Training centre.
- 7. Radar Block.

- L. Ladies' Toilets.
- G. Gents' Toilets.
- C. Lost Children.
- P. Information Centre
- R. Refreshments.
- + First Aid Post.
- + Site of Chapel.

PROGRAMME OF DISPLAYS

FROGMAN DIVING DISPLAYS: 2.15 p.m., 3.00 p.m., 3.45 p.m., 4.30 p.m.

Novy Frogmen will enter the water and be picked up by a fast moving boat, simulating action in clearing an enemy beachhead of obstructions. This will take place in Lady Bay at rear of T.A.S. School.

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. BAND MARCHING DISPLAY: 4.45 p.m. On the Parade Ground.

ANTI-SUBMARINE MORTAR

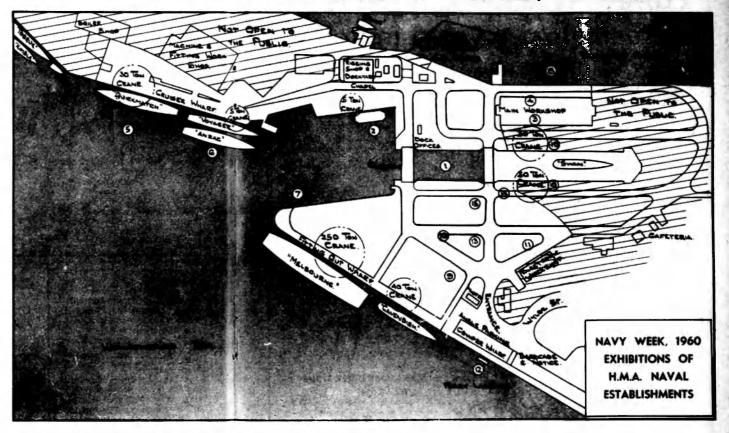
2.00 p.m., 2.45 p.m., 3.30 p.m., 4.15 p.m.

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

NAVY WEEK IN SYDNEY - DISPLAY AT GARDEN ISLAND, OCTOBER 8

Programme of Events

1.30 p.m. Dockyard Gates to be opened. 2.00 p.m. Dockyard and H.M.A. Ships open to visitors, Crane Rides begin (10). 2.00 p.m. Helicopter Display in Woolloomooloo Bay (7). 2.10 p.m. Diving Display in Outer Dock (1). 2.25 p.m. H.M.A.S. QUICKMATCH fires A.S. Mortars (5). 2.30 p.m. H.M.A.S. ANZAC fires Torpedo (6). 2.40 p.m. Helicopter Display in Woolloomooloo Bay (7). 2.50 p.m. Frogmen drop and pick up South of South East Pound (8). 3.00 p.m. Firefighting Display (9). 3.10 p.m. Diving Display in Outer Dock (1). 3.15 p.m. H.M.A.S. QUICKMATCH fires A.S. Morter (5) 3.20 p.m. H.M.A.S. ANZAC fires Torpedo (6). 3.30 p.m. Helicopter Display (7). 3.45 p.m. Frogmen drop and pick up South of South East Pound (8). 3.50 p.m. Firefighting Display. Rescue of Pilot from Aircraft (9). 4.00 p.m. Helicopter Display in Woolloomooloo Bay (7). 4.05 p.m. H.M.A.S. QUICKMATCH fires A.S. Mortar (5). 4.10 p.m. H.M.A.S. ANZAC fires Torpedo (6). 4.20 p.m. Frogmen drop and pick up (8). 4.30 p.m. Firefighting Display (9). 4.45 p.m. Helicopter Display (7). 5.00 p.m. H.M.A. Ships closed to visitors. 5.30 p.m. Ceremonial Sunset (11), 6.00 p.m. Dockyard closed to visitors.



A SHORT HISTORY OF H.M.A. DOCKYARD CHURCH, CARDEN ISLAND

The first known Church service to be held in the present Church was a Thanksgiving Service for peace on the termination of the South African War. This would make the date of the present Church about 1902. Much can be said of this unusual Church (see brochure inside entrance door of Church). The Church

unique of its kind, and I doubt whether you would find another church in Australia. not on the ground level, yet having an outside entrance. The history of the Royal Australian Navy can be traced by looking at the stained glass windows, which depict many gallant ships.

DIMENSIONS OF THE CAPTAIN COOK DOCK

Length: 1.139 ft. 5 ins. Inner Dock: 706 ft. 5 ins. Outer Dock: 393 ft. 10 ins. Breadth: 147 ft. 74 ins. Draught of water on cill at spring tide: 45 ft. Maximum Pumping Rate: 360 tons per min, per pump, The whole dock can be emptied

in approximately 4 hours.

Key to Garden Island Displays and Installations

- 1. Diving Display—outer Captain Cook Dock.
- 2. Floating Dock.
- Main Workshops
- Apprentices' Display.
- 5. H.M.A.S. "Quiberon" fires anti submarine
- 6. H.M.A.S. "Vampire" fires torpedoes.
- Helicopter sea-air rescue display.
- 8. Frogmen drop and pick up drill.

- 9. Firefighting display.
- 10. Crane rides.
- 11. Ceremonial Sunset by combined Navy Band.
- 12. Ferry landing.
- 13. Lost children.
- 14. Ladies' rest room.
- 15. First aid.
- 16. Mines and diving equipment.

Corresponding figures are on the map above.

Fairey Aviation Company of Australasia Pty. Limited

Bankstown. N.S.W.



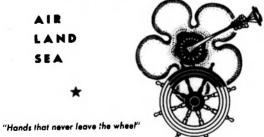
Contractors To Her Majesty's Forces

BURNS, PHILP & COMPANY

FOR ALL TRAVEL

AIR LAND

SEA



Scheduled Rates No Fees Apply to 7 BRIDGE STREET, SYDNEY TEL.: B 0547

EXECUTOR TRUSTEE ATTORNEY

Appoint

LIMITED COMPANY BURNS

7 BRIDGE STREET, SYDNEY TEL.: B 0547

H.M.A.S. MELBOURNE, a light carrier, has a displacement tonnage of 16,000 tons standard and 20,000 tons fully loaded.

She has a length of 701 feet overall, a width of 128 feet on the flight deck including the 6 degrees angled deck. She has a draught of 23 feet, a speed of 25 knots, and operates Sea Venom day and night jet fighters, Gannet turbo-prop anti-submarine aircraft and Sycamore helicopters.

To assist in landing on her aircraft, she is equipped with a mirror landing aid.



P. V. C. COATED NYLON AND TERYLENE **FABRICS**

to protect valuable Marine Equipment

P.V.C. coated Nylon and Terylene fabrics have been developed especially for marine uses . . . in big ships they are used extensively for numerous vital purposes, including lifeboat and winch covers. and gangway screens. The Naval uses include engine covers for aircraft in R.A.N. Carriers.

P.V.C. fabrics are ideal in small craft . . . for overall or engine, etc., covers.



The overwhelming advantages of P.V.C. covers lie in comparatively light weight, resistance to sea air and retention of greet strength throughout a long life of protection of valuable equipment against the elements.

PLASTYNE PRODUCTS PTY. LTD.

Waltham Street, ARTARMON

THE NAVY



Sea Venom jet fighter and Gannet anti-submarine aircraft land on H.M.A.S. Melbourne. MELBOURNE.





FEATHERBITE — Protective Mouthpiece

Protects your teeth against chipping and fracture when playing football or boxing and in other contact sports. Reduces the risk of concussion through a blow to the chin.

Fits snugly and securely around the upper teeth, permitting mouth breathing and speech.

Valuable in shock treatment and treatment of night-grinding of teeth.

As FEATHERBITE requires professional fitting,

CONSULT YOUR DENTIST

IMPORTED AND DISTRIBUTED BY

JOHN T. JENNINGS PTY. LTD., SYDNEY

SEA AIR RESCUE



Sycamore Helicopters

taking off from the deck of H.M.A.S. Melbourne.



Helicopters stand by during take off and landing of an aircraft from the carrier.





H.M.A.S. Air Sprite

which is stationed at Jervis Bay for Sea Air Rescue duties.





H.M.A.S. ANZAC - BATTLE CLASS DESTROYER



H.M.A.S. ANZAC—Battle Class destroyer (sister ship, TOBRUK). Displacement tonnage, 3,375 tons fully loaded. Length, 379 feet. Breadth, 41 feet. Draught, 12| feet mean, 13| feet max. Armament: Guns-4 4.5 in., 12 40 mm. a.a.; torpedo tubes-5 21-inch; A/S Weapons- Triple barrelled depth charge mortar; Speed-30 knots.

THE UNITED SHIP SERVICES PTY. LTD.

GEELONG

MELBOURNE

PORTLAND

THE NAVY

VICTORIA

AUSTRALIA

The largest organisation in Victorian ports for the supply and erection of fittings for the carriage of every description of cargo. Bulk grain fittings a speciality. Dunnage supplied, holds cleaned. Decks caulked. Carpenters, joiners and shipwrights supplied.

88-102 NORMANBY RD., SOUTH MELBOURNE

Telephone: MX 5231

Telegrams and Cables: "FLEETWAYS," Melbourne



H.M.A.S. VAMPIRE

H.M.A.S. VAMPIRE - a Daring Class destroyer (sister ships, VOYA-GER and VENDETTA). All three were built in Australia and are the largest and most complicated destroyers to be constructed here.

They have a displacement tonnage of 2,800 tons standard and 3.600 tons when fully loaded, a length of 390 feet, breadth of 43 feet and a draught of 12 feet mean and 17 feet max

Their armament consists of guns 6 4.5-inch in twin turrets, 6 40 mm. Bofors A.A.), 5 21-in torpedo tubes and three barrelled depth charge mortars for anti-submarine wea-

The ships are powerfully equipped for both offensive and defensive nurnoses and have a speed of over 30 knots.

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.1. Victoria

or one of the Hon. Secretaries at:

- Box 376E, G.P.O., Brisbane, Queensland
- 726 Sandy Bay Rd., Lower Sandy Bay, Hobart
- P.O. Box 90. Darwin, N.T.

- 30 Pirie Street, Adelaide, S.A.
- 62 Blencowe St., West Leederville, W.A.
- 60 Limestone Ave., Ainslie, Canberra, A.C.T.

H.M.A.S. QUICKMATCH



H.M.A.S. QUICKMATCH: Anti-submarine Frigate (sister ships, QUEENBOROUGH, QUIBERON and QUADRANTI). These ships were built as destroyers, but have been overeted to A/S Frigates. Displacement tonnage, 2,700 tons fully loaded; 358 feet in length; 35 feet in breadth; and a mean

Displacement tonnage, 2,700 tons fully loaded; 358 feet in length; 35 feet in breadth; and a draught of 91 feet, max.

These ships are fitted with the most modern anti-submarine equipment and with a speed in excess of 30 knots are capable of dealing with a nuclear submarine.

Enjoy a fabulous holiday afloat!



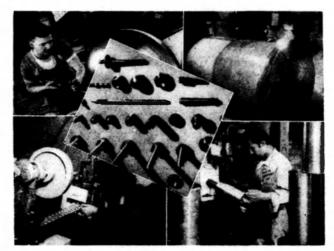
waters just 20 miles north of Sydney . . . in a Halvorsen Luxury Cruiser! Relax and fish in beautiful bays, down quiet river reaches! A well appointed Halvorsen Crulser from Bobbin Head has everything for your comfort. Cruisers sleeping from 4-8 available. Write or phone for details.

HALVON SEN

Maiversee Baets, P.O. Bax 13, Terramerra, Sydney, Phone IJ 1227, Halvorsen Cruisers are built by Lars Halvorsen Sons Pty. Ltd. contractors to the Royal Australian Navy. Complete
Protection

The Red Hand Compositions Company offers you a complete range of protective and decorative marine paints and varnishes. Whether your craft be large or small, protect and smarten its appearance with Red Hand Marine Finishes.

Red Hand Compositions Co. (Aust.) Pty. Ltd., No. 2 Whard, Circular Quay, East, Sydney.



SERVICE TO INDUSTRY

COPPER . BRASS . BRONZE . ALUMINIUM

Austral Alloys of Copper, Bronze and Aluminium possess all the chemical, physical and mechanical properties demanded by modern industry. Fabricators know that Austral Bronze Company supply the highest quality material to their most exacting requirements and tolerances.

NOTE: Sheet and Strip products are available in continuous length coils to cut production cost.

- Extruded Rod, Bars, Wire and Special Sections
- Strip
- Circles
- Sheet
- Plate

HUSTRAL (🔀 BRONZE

DMPANY PTY. LTD

128-130 Bothschild Av., Rosebery, MU 4443 463 Torrens Rd., Woodville, JL 5344 473-479 Swan St., Burnley J8 4324 101 St. George's Ter., Porth: BA 7072 224 Mentague Rd., West End J 4542 Rex 42, P.O., Gleserchy, Hebert, 74887 Hebert

Considerable stocks are available in all Austral Branze warehouses to satisfy the requirements of fabricators of all types of non-ferrous products.

AB128/U.3

H.M.A.S. GASCOYNE



GASCOYNE, River Class Frigate, is at present employed in surveying in the Gulf of Carpentaria. Sister ships DIAMANTINA is surveying in the Indian Ocean: BARCOO is surveying off the North Coast.

For Carefree TRAVEL



By SEA, AIR and LAND

BOOK WITH

UNION STEAM SHIP CO.

WORLD-WIDE TRAVEL SERVICE

BOOKING AGENTS for P & O-ORIENT, SHAW SAVILL, DUTCH MAILS, MATSON, HUDDART PARKER, CANADIAN PACIFIC RAILWAYS & STEAMSHIPS, and many others, including all Principal AIR LINES.

SYDNEY: "Union House," 247 George Street - 'Phone: 2 0528.

Also cnr. Martin Place and Pitt Street — 'Phone: 25 3023.

MELBOURNE: 59 William Street - 'Phone: 62 2331.

Branches and Agents throughout Australia, New Zealand and Overseas

FRIGATE EX SLOOP, H.M.A.S. SWAN



Two sister ships were sunk during the war. PARRAMATTA was sunk by a submarine in the Mediterranean. YARRA was sunk when she tried to protect a convoy against three Japanese cruisers and destroyers in the Indian Ocean. Sister ship WARREGO on surveying duties.

You can't avoid accidents, but you can

PREVENT SERIOUS RESULTS!

with a

EE Oxy-viva

PORTABLE ()XYGEN RESUSCITATOR

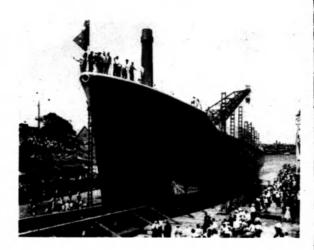


Oxy-viva is essential in your factory!

Every man who is responsible for the well-being of workers knows that a good safety-record is good for production. Many a fatality, and chronic side effects will be avoided if an OXY-VIVA is kept always at the ready. Easy to operate the Oxy-viva will restore life where hyrathing has been halted through beart-attack, shock or a hundred other causes.



H.M.A.S. PARRAMATTA



H.M.A.S. PARRAMATTA LAUNCHED AT COCKATOO DOCK. An Anti-Submarine Frigate H.M.A.S. PARRAMATTA launched last year, is expected to commission in 1961. A sister ship YARRA has also been launched at the Williamstown Naval Dockvard, Victoria. Two sister ships are at present being built. It has been stated that these two ships will be the first H.M.A. Ships to be fitted with guided missiles. It is claimed that their high forecastle enables them to maintain a high speed even in bad weather.





Diesel Fuel Injection Equipment

- Repairs
- Maintenance
- Consulting and
 Manufacturing Engineers

NEPTUNE ENGINEERING COMPANY

LAVENDER BAY

XB 2004 PH

PHONES XB 2695

PORT SERVICE is better than

Look to WARBURTON FRANKI LTD.

For Highly Skilled MARINE ELECTRICAL and REFRIGERATION REPAIRS and INSTALLATION SERVICE IN ALL THREE PORTS —

SYDNEY, MELBOURNE & BRISBANE

One organisation on the job saves time confusion and cost:

WF WARBURTON FRANKI

SYDNEY: 307 Kent Street 'Phone 29 1111.
BRISBANE: 233 Elizabeth Street. 'Phone 31 2081.
MELBOURNE: 359 Len.dalo Street 'Phone 67 8351.

For THE NAVY and You!

As contractors to the Royal Australian Navy, we provide them with all classes of electrical installations and repairs, motor and generator winding, radar installations, etc.

These services are also available to private enterprise for ships, factories, commercial buildings, etc.

We Offer Our Services

ELECTRICAL INSTALLATIONS PTY. LTD.

6 NAPOLEON STREET

BX 5311

SYDNEY

BX 5311



Reliability is the watchword of

J. FENWICK & CO. PTY. LTD.

also at ... NEWCASTLE, PORT KEMBLA and KURNELL



MELBOURNE STEAMSHIP CO. LTD.

Head Office. 31 KING ST., MELBOURNE Branches or Agencies at all ports

Managing Agents for HOBSONS BAY DOCK AND ENGINEERING CO. PTY. LTD. Works: Williamstown, Victoria HODGE ENGINEERING CO. PTY, LTD. Works: Sussex St., Sydney

COCKBURN ENGINEERING PTY, LTD. Works: Ilines Rd., Fremantie Ship Repairers, etc.

and

Junior Recruits' Training Scheme

century endured the taunts of the ancient mariners that the era of "wooden ships and iron men" had been succeeded by one of "iron shins and wooden men." Today this libe is seldom heard for anyone with a passing knowledge of the changes in naval warfare during the past two decades is well aware that both the iron men and wooden men have been replaced by a body of highly skilled technicians from whom higher and higher standards of attainment are demanded each year.

In an expanding economy such as that of Australia the Royal Australian Navy, in common with the other Services, has faced a major problem in endeavouring to attract sufficient recruits of the required calibre, and, of necessity, has had to make considerable adjustments to methods employed in past years to recruit and train the

MANY a recruit to the Navy in the first half of the required.

Recent years have seen the widening of officer training to include University courses and a diversity of overseas courses while the establishment of R.A.N.A.T.E. ensures a regular flow of artisans sufficient to meet most of the requirements of the Royal Australian Navy in these categories. To these established methods of recruitment and training has now been added the Junior Recruits' Training Establishment. designed to train 151 - 161 year old youths for eventual selection and technical training for the Seaman, Communications, Engineering, Electrical and other general branches of the R.A.N.

This establishment was commissioned in 11.M.A.S. LEEU-WIN, Fremantle, Western Australia under the command of Commodore R. Rhondes D.S.C., on July 18th this year, when 155 Junior Recruits were entered from all states of Australia to commence a twelve months period of training. In January, 1961, a second intake. of approximately 150 will bring the complement of Junior Recruits to the desired 300, which number will be maintained by six monthly selections of the same size to replace those moving on to the normal technical training establishments of the R.A.N.

It is hoped that the introduction of junior recruit training will attract to the Royal Australian Navy intelligent boys who would normally be absorbed and retained in civil employment between the age of 154 at which some of them leave school and the age of 17 at which the Navy will accept them under the existing system.

The Recruiting Officer, Lt. Cdr. Clark-Smith swears in some of the 25 New South Wales bovs who

joined the Navy recently as Junior Recruits.

Rest . . . Relax . . . Recuperate

Travel in comfort, the care-free "Cunard" way. You enter a new kind of life the moment you step on board . . . a life of peaceful relaxation,

fine food, worm comradeship and superb comfort. You couldn't wish for smoother service, or a more pleasant introduction to the delightful days ahead.

Getting there's half the fun with

Cunard Line

PORT LINE LTD. (Inc. in England), SO YOUNG STREET, SYDNEY DALGETY and COMPANY LTD. (Inc. in England), 2 O'CONNELL STREET, SYDNEY Also BRISBANE, MELBOURNE, ADELAIDE and PERTH

WE ARE SUPPLIERS OF SEA FRESH LOCAL FISH

Direct Importers of United Kingdom and Continental

QUICK-FROZEN FISH

Wholesale Suppliers to Hotels and Restaurants WE SPECIALISE IN SHIPS PROVIDORING

BULK COLD STORE AND WHOLESALE DEPT .:

Carner of Gibbans and Marian Streets, Redfern-MX 5688

A. A. MURRELLS FISH SUPPLY

Head Office:

195 George Street, Sydney-BU 5945. After Hours-FY 5470.

J. Murray-More (N.S.W.) Pty. Ltd.



173 PHILLIP STREET, WATERLOO



MERCHANT STEEL SECTIONS, SHEETS, PLATES and BARS STRUCTURAL and REINFORCING



Telephone MX 3201

First Naval Apprentices " Pass Out "

Guided Missile Technicians of the Future?

WEDNESDAY, 15th June, 1960, a memorable occasion for the Royal Australian Navy occurred at H.M.A.S. Nirimba, the R.A.N. Apprentice Training Establishment. when before the full Naval Board, Senior Officers, training staff and a large crowd of parents and friends, the 315 Naval Artificer Apprentices under training were reviewed by the First Naval Member. Vice-Admiral Sir Henry Burrell, K.B.E., C.B., on the occasion of the successful comple-

The necessity for setting up such a training organisation

Several trades are taught at and Ordnance Branches.

tion of four years of intensive training by the Senior Term.

The Passing-out Parade was followed quickly by a Prizegiving Ceremony, and speeches by Vice Admiral Burrell and Captain B. W. Mussared R.A.N., the Captain of Nirimba, pointed out the high standard attained by the 38 members of this, the first Entry, their smart appearance and bearing and the eventual value to the Fleet of their skill of hand and technical knowledge in the maintenance of ships and machinery.

by the Navy was due to a variety of reasons, the main being that with the increasing complexity of the machinery and equipment installed in the ships of the Fleet it required a superior type of artificer, who not only needed skill of hand but who also needed to have a high degree of intelligence and an ever increasing technical background. It was also felt that a naval trained apprentice would be better disciplined, more adaptable, self reliant and conscientious. Over a long term the future officers of the engineering and electrical specialisations will be chosen from the reserve of talent. In the meantime the successful apprentices will at first become 5th class artificers and after a year be promoted to the equivalent of Petty Officer and Chief Petty Officers with an ever increasing degree of responsibility.

Nirimba, and associated with each trade is a complementary technical course to augment the professional requirements of the Branch. At present openings exist in the Engine Room, Electrical Shipwright



To provide the necessary educational background to absorb all these technical subjects, an average of 10 hours per week for the first six terms is devoted to school subjects such as mathematics, mechanics, physics, chemistry and English.

Naturally with excellent playing fields, compulsory sport on Wednesday afternoons is extremely well catered for. particularly in the Winter season when Rugby Union. Soccer and Hockey are played.

To supplement the training the apprentices are sent to sea for a fortnight at least, usually in fourth and fifth terms, to get the feel of living on board ship, whilst in sixth term it has been the practice to cooperate with the R.A.A.F. on a three day Combat Survival Exercise. There is an Assault Course within the establishment, used to train the lads in physical fitness and self reliance so that they know of what effort they are capable.

POOLE & STEEL LTD.

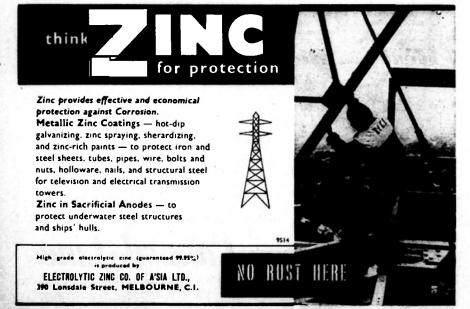
13 STEPHEN STREET, BALMAIN N.S.W.

Telephone: WB 2511

General Engineers, Boilermakers, Shipbuilders, Dredge Builders

Plans, Specifications and Estimates prepared for Mining Dredges and Plant of all kinds. Electric Welding and Oxy-acetylene Work.

Telegrams: "POOLSTEEL," BALMAIN, N.S.W



An LST at Heard Is.

The name H.M.A.S. LABUAN—she took the main party to the Antarctic.

At the end of the Second Year the Cadet is asked to nominate his branch specialization and in his Third Year his studies are of such a nature as to lean slightly towards that particular branch. However, only the very first inclinations towards specialization are apparent in the College curriculum, the real work in that direction not being undertaken until the Cadet graduates from the College and commences further training in the United Kingdom, initially at the Royal Naval College, Dartmouth.

At Graduation, after three years, or one, dependent upon his form of entry, the Cadet Midshipman is ready for the serious business of entering upon the further task of gaining the technical knowledge required for the branch of his choice. At the Royal Australian Naval College, he is brought to Matriculation level in the subjects of his curriculum and the Graduate is recognised by all Australian Universities as equipped to commence a degree course. He is also given a sound knowledge of Seamanship and Navigation and a rudimentary knowledge of Engineering. He is academically well qualified to handle his future courses of study and the endeavour has been made, too, to see that he is physically, morally and professionally fitted to undertake the enormously responsible task for which he has been trained, that of the proper care and command of the ships and men of the Royal Australian Navy.





This is your chance to take a part in Australia's ever-developing 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 Rentting work in the largest and best-equipped Naval Yard and Dry Dock in the Southern Hemispnere.

APPRENTICESHIP is available at Garden Island Dockyard, Sydney, controlled by the Commonwealth Government, under conditions which controlled by the commonwealth Covernment, under conditions which will challe the commonwealth Covernment, under conditions which will challe the commonwealth of the commonwealth of the commonwealth conditions of the commonwealth covernment. The period of apprenticeship is for 5 years and, subject to satisfactory progress. Technical College fees will be paid by the Commonwealth Covernment.

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 Intermediste Certificate examination is desirable, but not essential.

VACANCIES exist for the following trade apprenticeships: Fitter and Turner, Scientific Instrument Maker, Refrigeration Mechanic, Radio Tradesmen, Bollernsker and Welder, Shipwright and Boatbuilder, Ships Plumber, Painter, Moulder, Copperanith, Engineemith, Motor Calamaker, Shipmen, Shipmen, Patterbmakers, Johners, Johners, Patterbmakers, Johners, Johne

APPLICATION must be made on the form prescribed. For application form and copy of canditions of entry, apply to your District Employment Office, or the General Manager, Garden Island Dockyard, Sydney, closing date 11th November, 1960.

SUBSCRIPTION FORM

To "The Navy" Box 3850, G.P.O. Sydney, N.S.W.

I enclose 20/- (postal note, money order or cheque) for 12 issues of "The Navy," post free, commencing from

(Please add exchange where applicable)					
Name	And the street beauty to the control of the control				
Street					
City	State				
Data					

WELCOME VISITOR

T is particularly fitting that H.M.S. CAVENDISH should be participating in our Navy Week, for she was built as a result of a Navy Week organised in 1942 by the Borough of Kendal, at which was collected £480,412 towards providing a destroyer for the Royal Navy.

She is 362 feet long, displaces 2,600 tons and a speed of over !! knots. She commissioned in 1944 and saw service in the European and Far East theatres before being paid off in 1946.

She was modernised in 1955 and recommissioned in 1956 with her armament consider-



to be smooth, warming gentle and very satisfying

★ 1st PRIZE R.A.S., '58

★ 1st PRIZE R.A.S., '59

* TRULY A

CHAMPION

Trade Enquiries: TALLERMAN & CO. PTY. LTD. 60 YORK STREET, SYDNEY 'PHONE: BX 3411

THE NAVY

For That Efficient PASSENGER / CARGO

Service

between All Australian States, Tasmania, New Zealand, Fiji

Call or Phone . . .

ADELAIDE STEAMSHIP CO. LTD. 22 Bridge Street, Sydney. B 0539.

AUSTRALIAN STEAMSHIPS PTY, LTD. Agents: Howard Smith Ltd. 269 George Street, Sydney. BU 5611.

A.U.S.N. CO. LTD. Agents: Macdonald Hamilton & Co. Pty. Ltd. 247 George Street, Sydney. 27 8031.

HUDDART PARKER LIMITED 10 Bridge Street, Sydney. BU 1245.

McILWRAITH McEACHARN LTD. Caltex House, 167 Kent Street, Sydney. BU 1481.

MELBOURNE STEAMSHIP CO. LTD. Clarence/Barrack Streets, Sydney. BX 4511.

UNION STEAM SHIP CO. of N.Z. LTD. Union House, 247 George Street, Sydney. B 0528.

JAMES PATERSON & CO. PTY. LTD. Agents: Huddart Parker Ltd. 10 Bridge Street, Sydney. BU 1245.

OFFICES AND AGENCIES IN ALL STATES

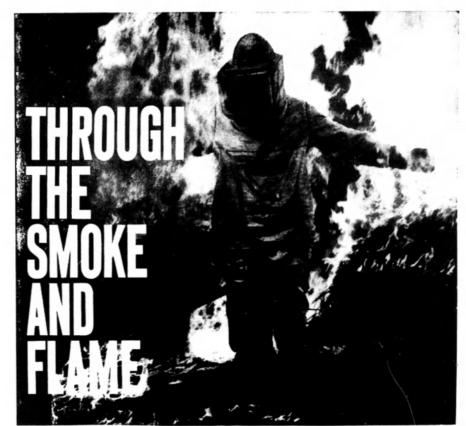
SHIP OWNERS · TUG OWNERS · COLLIERY OWNERS · BUNKERING CONTRACTORS

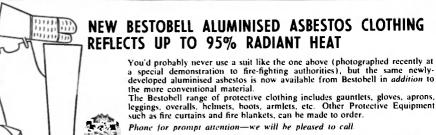
ably enhanced. She now carries three 4.5-inch dual purpose guns, in single mountings controlled by one of the latest electronic systems in the Service, four 40mm. Bofors anti-aircraft guns. Her anti-ship armament is completed by four 21-inch torpedo tubes and she carries Asdic and two 3-barrelled "Squid" mortars for attacking submarines.

II.M.S. CAVENDISH is the first ship of that name to serve in the Royal Navy, being named after Thomas Cavendish, the third circumnavigator of the world. In his youth, Cavendish served at sea in the then fashionable employment of piracy. In 1585 he commissioned a ship of his own in the Fleet sent out under Sir Richard Grenville to make the first settlement in Virginia. In 1586 he sailed from Plymouth in the Desire, with two other ships in company, on a privateering voyage which he completed in 1588, having sailed around the world and passed unseen through the remains of the defeated Spanish Armada as he came un the Channel.

During his voyage he passed through the Straits of Maglan, and, after attacking Spanish ships and towns on the coast of Chile, captured a treasure ship from the Philippines—the Manila Galleon—and took from her 22,000 pesos of gold and 600 tons of rich merchandise.







BELLS ASBESTOS AND ENGINEERING (AUSTRALIA) LTD

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

40

THE NAVY

