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; synthetic chemicals such as Dilantin. Recent achievements include the first synthetic antibiotic, Chloromycetin. antihistamines, Benadryl and Ambodryl, and the first synthetic antibiotic, Pitressin, Antuitrin "S" and Eschatin; vitamin preparations; and many other contributions to Medicine have resulted.

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
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

1. 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 civilian 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 hygiene of the service; dealing with medical boards, advice re pensions, etc., and in general to advise the Naval Board on all matters affecting the physical well-being 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 Lieutenant, 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 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 Area, 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. Medical 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 Royal 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.

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 Royal 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 anaesthetics 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 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.

H.M.A.S. SWAN, going to your assistance. Do you still require local doctor meet Colombo. We propose sending him MAXOODA meeting you midnight. Reply quickly.

Message from H.M.A.S. SWAN 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 officers 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 saved.

"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. T. JONES,
General Manager for Australia."

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.A.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 acetylsalicylicum? 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

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.

H.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 Naval Area, as well as for sailors from ships in the vicinity, or taken ill while on leave in Victoria. Army cases are also accepted from establishments on the Mornington Peninsula. Civilian, including naval families, are not entered for treatment in cases of sudden emergency. In addition the hospital provides facilities for personnel serving or under training in Flinders Naval Depot, or who are situated from Melbourne.

There is a Medical Training School attached to the hospital, where initial training is given to all sick-berth ratings on joining the Service.

The Medical Officer-in-Charge is a surgeon captain, under whom the surgical and medical sections are supervised. There is a Medical Section consisting of a surgeon captain, under whom the surgical and medical sections are supervised. There is a Medical Section consisting of a surgeon captain, under whom the surgical and medical sections are supervised.

The surgical section constitutes a separate block, containing two wards, offices and the operating theatre, and connected to the remainder of the hospital by ramp and covered way. The block is manned by naval cooks and civilian medical staff, providing facilities for examination and treatment of all ratings serving in Flinders Naval Depot. The latter will eventually become available as a second general medical ward, as it is intended to build a separate WRANS sick-ward for all types are treated, except for those requiring special facilities such as aunts. The surgical section includes a surgeon captain, under whom the surgical and medical sections are supervised.

The medical section contains a 25-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 sick-ward for all types are treated, except for those requiring special facilities such as aunts. The surgical section includes a surgeon captain, under whom the surgical and medical sections are supervised.

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The surgical section consists of a separate block, containing two wards, offices and the operating theatre, and connected to the remainder of the hospital by a ramp and covered way. The brick-built hospital is situated at the rear of the main buildings, and behind it are a number of weatherboard structures housing additional ward units, now closed, a small venereal disease section, the medical stores, and medical training school. A four-bed wooden hut accommodates recreational amenities and a small television set for the patients. The operating theatre suite is 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, and dermatological specialists twice a week, and others as required. The operating theatre is staffed by the surgeons, and staff of medical officers who perform the procedures best conducted in a specialized unit, such as major surgical 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 inoculations, and the custody of ratings' medical history documents. It is at present situated in a temporary wooden building, but is scheduled for permanent location on the adjacent medical ward. It is intended that the out-patient medical officer should travel round the Depot once a week, providing facilities for all types are treated, except for those requiring special facilities such as aunts. The surgical section includes a surgeon captain, under whom the surgical and medical sections are supervised.

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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 capacity for 120 patients, with a daily average of 60 patients over the year. It can cater for 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 carry 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 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 remarkable is 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:

Navy Surgeon Captain R. Armstrong discusses the work 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 McIlwraith, U.S.N., urgently required most delicate medical and surgical attention, which was promptly extended by Balmoral Naval Hospital. For two months, while McIlwraith 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 we wish publicly to pay homage and 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.

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 Commanding medical officer, assisted by nursing sisters and sick berth staff.

In addition to the ordinary hospital patients the hospital also has a large out patient department - responsible as it is for the medical treatment of the Naval Establishments located in Sydney. These include H.M.A.S. Penguin, H.M.A.S. Kuttabul, R.N. Submarines of the 4th Submarine Squadron.

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

Twenty emergency 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 supply 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.
The Naval Sick Berth Attendant

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 jack-of-all-trades, and master of at least one. Trained firstly as a 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 berth 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 nursing 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 curricular 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.

During the second twelve weeks the training is entirely professional, and is carried out in Flinders Naval Hospital. Anatomy and physiology, 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 the general work of the hospital 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 up to a month's time.

On qualifying as S.B.A. 2, the trainee 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 Flinders Naval Hospital, the

THE NAVY

- Courtesy Sydney Morning Herald

The pilot of this Navy helicopter landed on Wakehurst Parkway and then went to the rndside (left) to be briefed by the senior police on the search for Grecina Thorns. The helicopter made low-altitude sweeps over the area.

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 assisting Price in their search for the kidnapped boy.

August-September 1962
remainder being transferred to Balmorel Naval Hospital in Sydney, where they continue with similar work and service obligations.

This section of the course occupies 36 weeks, and covers the more practical aspects of the necessary S.B.A.'s work in addition to general nursing, elementary laboratory and X-ray work, operating theatre technique, shipboard routine, medical documentation and store accounting.

Candidate qualifications are held, and those who pass become qualified for advancement to S.B.A. Class 1. Up to two months of further training is required before the candidate may be gained on this occasion. The actual date of advancement depends on the 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 hospital he will be employed either on general nursing duties in the wards, under the supervision of nursing sisters and medical officers, or in an office or medical store under a senior rating. If he goes to sea at this stage he 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.

Sick berth attendants may, and are encouraged to, apply for a further training course in one of the specialist subjects open to them: Advanced nursing, physiotherapy, X-ray, operating theatre assistant, laboratory technician, and several others. The length of these courses varies with the subject, but normally involves three months preliminary training in a naval 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 rating.

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 qualifications 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 attainment 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.R.O.T.O.’s of six years’ seniority may be chosen by a selection board for promotion to warrant rank as a warrant officer. The aircraft carrier, H.M.A.S. Melbourne, carries several, and 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 present deputation of a year, 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 all details of accounting for and administration with which the doctor may not be familiar; if he is single-handed without a doctor he must do the reason another frequently happens, his responsibilities are heavy indeed. He is not, of course, expected to entirely supply the place of a medical officer, and over his much 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 sick-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 hospital work, a fighting service, and there is no period of excitement and not a little drama. Anyone thinking he could do no better than enroll as a sick berth attendant.

Sick berth attendant — Contd.

In 1936, a youth of 15, Mas C. R. McKenzie joined the Royal Navy, the Naval Reserve as a sick berth attendant. For three years in the Reserve, Mac learned how to take care for the sick men of the Navy.

Then came 1939, and when the call came he cheerfully went with it, although 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 the only one, he says, to ever to do so, for he does not wish to leave the Navy. Mac’s is not a dramatic tale of fighting in emergency operations, although he admits to having been scared during some of the early phases of his career.

His first appointment, on joining, was to go to a signal 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. Barcom.

Now for a story, as he knows, that makes a contrast to the first one, and is typical of the men in the sick bay.

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.

From BROOME he went to Milne Bay and from there to H.M.A.S. Barcom, 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 2½ years to Balmorel Naval Hospital and so to sea in H.M.S. SYDNEY, as instructor for the sick berth attendants.

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.

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No long story as he knows, that makes a contrast to the first one, and is typical of the men in the sick bay.
THE DEVELOPMENT OF NAVAL MEDICAL SERVICES

By Surgeon Lt. Cdr. B. J. LLOYD, R.A.N.

In the long history of ships, navies, and sea-battles, the Navy has demonstrated its resilience, battling through long and bloody engagements. The medical care on board has been a crucial component, from the sea-surgeons of the eighteenth century to the modern era. The Navy has developed a comprehensive system of medical services, including the establishment of hospitals and the appointment of medical personnel. 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 both World Wars and Korea, the Naval Medical Service has maintained a tradition of service to the sick established by naval physicians of the Royal Navy four hundred years ago.

THE NAVY

August-September, 1960
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 the merino ram on top.

**GOLDEN FLEECE**

PETROLEUM PRODUCTS

"...proud to be Australian!"

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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.

**M.O.'s Train for Atomic Defence**

The wholesale destruction and mass casualties 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 Atomic, 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 non-medical scientist, assemble at Balmain 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 peacetime radiation hazards, particularly those due to medical use of X-rays and radioisotopes — the suggestions made for dealing with mass 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.

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**THE NAVY**

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.

The Royal Australian Navy imported from Britain one of the world's most modern re-compression chambers to increase safety and improve training for its underwater diving teams.

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

The Minister for the Navy, Senator Gorton, said that safety and medical factors were the main reasons for obtaining the re-compression 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 re-compression chamber would have training value, and play an important 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 work.

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

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 re-compression chamber could be made available for the treatment of civil divers.

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PORT REMBLA N.S.W.

SEA-AIR RESCUE SHIP ON TRIALS

The Navy's new 10,000 air/sack rescue boat, H.M.A.S. 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. G. Oldham, Flag Officer-in-Charge, E.A. Arm., in a congratulating Mr. Harold Halvorsen, whose firm, Lars Halvorsen Pty. Ltd., built the boat. Air Sprite will be stationed at Jarvis 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), Georgina (10 months), Christine (3 years) and Jacintine (5 years), gathered to greet their father, L/Cdr. G. Wilson, of Seven 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 months in the Far East.

The ship returned via Fremantle and Melbourne.

---

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 “Sealion” MELBOURNE visited Hong Kong, Yokohama and Djakarta.

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 4,000 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 noticeable 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.

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August-September, 1960
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 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.

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

or

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

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.—No did the sailors.
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 H.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 hitherto had no administrative control over the Cape Observatory, he has collaborated fully with H.M. Astronomer as the needs have arisen.

The Cape Observatory fulfills 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.

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H.M.A.S. Vendetta returned recently to Sydney after service in the East. The picture on the right shows Vendetta’s Captain, R. J. Robertson, showing three of his children, Sadie (12), Brian (5), and Quentin (4), a track chart of Vendetta’s 55,000-mile cruise.

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

The first visit to a Russian port for five years by a ship of the Royal 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 Council exhibition of 141 British paintings, loaned by 66 museums and private owners and valued at more than £1 million. 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.
MILITARY EXPLOSIVES FOR PEACEFUL PURPOSES

Old Naval depth charges, 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. ENDEAVOUR. 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 sails, 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 voyage will take her 4,800 miles to eight different South Pacific islands.

ENDEAVOUR will take explosives, stores and mail. She will also carry 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 in learning about those depths that 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. M. Goodson, of Wellington, 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. Metcalf, of Christchurch, 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 Rarotonga, the weather station in the Kermadec, 555 miles north-east of New Zealand. From Rarotonga, 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. B. Burden, a Wellington author, who has been conducting research on the island, in the process.

Apia, 140 miles to the east, will be ENDEAVOUR'S next island. After leaving Apia, depth charges and explosive slabs here, she will sail 130 miles south to Rotongapu, where substantially the same cargo will be unloaded. The last of her explosives will be unloaded at Mangaii, 110 miles to the south. ENDEAVOUR will then make the 1,100 mile passage to Rarotonga to collect the meteorologist's outward mail before returning to Auckland on 6 October.

In the southern islands, the ship will be loaded with explosives, stores and mail before proceeding to the north Pacific islands for the last leg of her voyage.

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

The Minister for the Navy, Senator Gorton, says closer co-operation between the navies of Australia, Britain and New Zealand will result from a series of talks that ended in Canberra last month.

The talks lasted three days, and were attended by the Commander-in-Chief, Far Eastern Station, Vice Admiral Sir David Luce, the Chief-of-Staff of the Royal Navy, Rear Admiral P. H. 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 organisation.

Rear Admiral Phipps, in a statement after the talks, said the discussions had been of special benefit to New Zealand. The more frequent combined exercises would be of particular value to the New Zealand Navy, although they would contribute to the efficiency of the navies of all three countries.

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

Admiral Phipps said New Zealand also looked to Australia as a potential training centre for its naval personnel. 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 Eastern Station, Vice Admiral Sir David Luce, said the talks had been of considerable benefit and that he now had a first-hand appreciation of the detailed work of the Royal Australian Navy.

Vice Admiral Luce, the Royal New Zealand Navy.
H.M.A.S. VENDETTA WELCOMED HOME

A large crowd of relatives and friends of the ship's 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, 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 Cairns and Queenborough doing the same for children in an orphanage in Darwin.

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THE NAVY 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 4,150 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. DIAMANTINA and H.M.A.S. GASYRONE, 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 uniminished task.

SCHEPPERNESCE LASTS THE WHOLE DRINK THROUGH

August-September, 1960
**Australians in Malayan Review**

Personnel from H.M.A.S. QUEBERON, 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 Naval Medical Staff, particularly Surg. La-Cdr. Lloyd, in preparing the Medical articles in this issue.

It is hoped to cover in the near future the Naval Medical Establishments which were not covered on this occasion.

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**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. Findlay (centre), of Nowra, after their Gannet ditched recently in the South China Sea during Exercise Seallon. —Courtesy Navy News.

**H.M.S. LONDONDERRY TO COMMISSION AT COWES**

Another anti-submarine frigate, H.M.S. LONDONDERRY, 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 LONDONDERRY is actually the third ship of this class, the others being H.M. Ships YARMOUTH and ROYALISTAY, 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 1913. This new anti-submarine frigate bears the name of the small city which is the home of the Joint Services Anti-Submarine School.

The armament of LONDONDERRY 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 Seacom 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 twin 4.5 inch turret is controlled by an electro-mechanical computer 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 standard of accommodation are incorporated in the design of the ship. The messes have bunks which can be collapsed during the daytime 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.

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The galley has been planned with special emphasis on cleanliness and all bulkheads and the deckhead are lined with stainless steel. Special exhaust systems are fitted 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 design, particularly light and compact design. Because of its highly satisfactory service in earlier ships of the class, the modifications in the machinery have been of a minor nature.

After final sea trials and a week-end period at Portland, LONDONDERRY will join the 8th Frigate Squadron for a general service examination at home and on the America and West Indies Station. Her Captain is Commander I. B. 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.
Navy's Clearance Divers in the News

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

Clearance divers 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 USS PEARY in Darwin Harbour are dangerous.

THE NAVY

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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 area. Whilst almost every Australian citizen is aware of the existence of our Navy, proportionately few of our population have any idea of the scope and complexity of the essential components of a modern Navy.

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 opportunity of co-operating with the organisers by opening to the public a wide field of its activities in the Sydney area.

This year the Navy's contribution will include an Open Day at H.M.A.S. WATSON where people will see the latest anti-submarine and radar equipment and witness displays by clearance divers and the massed bands of the Royal Australian Navy. H.M.A. ships MELBOURNE, VOYAGER, ANZAC and QUICKMATCH, as well as the visiting H.M. ship CAVEN, DISII, 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 be.
THE NAVY

Volume 23
October, 1960
No. 8

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Junior Recruits Training Scheme

First Naval Apprentices Pass Out

Welcome Visitor — H.M.S. Cavendish

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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 proud to serve the Royal Australian Navy, and to serve Australia.
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.

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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 promote 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.

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 WARRREGI, with three others building.
Submarines: A.E.1 and A.E.2,
Gunboats: PROTECTOR, GAYUNDAIL,
Torpedo Boats: CHILDERS, COUNTESS OF HOPESTOWN.

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' 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 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 CANBERRA. These ships, which did such outstanding work in the last war, were commissioned in 1928. The seaplane tender, H.M.A.S. ALBATHOSS, 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 yeoman service in the Mediterranean, where the Germans called them the "Scrap iron flotilla."

Within six years of receiving these destroyers, Australia increased her cruiser strength by the addition of three new 6-inch ships. The nameake 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. SYDNEY (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.
life at sea

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

In addition to operating its own fleet of cargo vessels, the B.H.P. Co. Ltd. has Australia’s largest shipbuilding yard at Whyalla, there 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.

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 Philippines 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 Colonna and destroyer Espero, and the work of the destroyers in pioneering the “TORBRUK 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 Levee 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 “Yachtsmen’s Scheme” and had had no previous Naval experience, maintained Australia’s reputation as a Naval nation is the fact that of the 1,365 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 decisively named the “SCRAP IRON FLOTILLA.” WATERHEN was sunk by aircraft while engaged in ferrying supplies into besieged TORBRUK.

H.M.A.S. Moubarram which with Stuart, Vendetta, Voyager and Vampire made up the flotilla which the Germans decisively named the “SCRAP IRON FLOTILLA.”

Drribarm 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 Barrack 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 RELAXATION?

Relaxation, too often overlooked, is, according to the medical profession, essential. Yet how many people today, due to constant mental pressure brought about by the ever-increasing tempo of business and life in general, are finding themselves "run-down"? Well, the old adage "Don't let this happen to you" still holds good.

Picture yourself relaxing on board SOUTHERN CROSS on a wonder-ful round-the-world vacation. A cruise pleasure planned for you by Shaw Savill Line, with no worries whatsoever, leaving you completely free to enjoy your choice of either a passive or active vacation.

The round-the-world itinerary of the 20,000-ton one-class liner, SOUTHERN CROSS, includes calls at New Zealand, Fiji, Tahiti, Panama, Casco, Trinidad, England, Las Palmas, Callao, and Durban, whilst a few of its amenities are: Two swimming pools, cinema, air-conditioning in every cabin, spacious lounges, orchestra, 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 —

ROBBIALAC

Colorizer TRADE MARK

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, 80 minesweepers, (20 for the Royal Navy and 4 for the Royal Indian Navy).
3. The acquiring of ships from the Royal Navy — the 8-inch cruiser SHROPSHIRE was a gift from Britain to replace HMAS CANBERRA when the latter was lost by enemy action, 6 destroyers (4 "X" Class and 2 "Q" Class) were manned by the RAN.

HMAS WARRAMUNGA, sister ships ARUNTA and BATAAN, Tribal Class destroyers built during the war.

Osram adds life to your lighting Osram
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 Bureau (Australia) on behalf of:

MARKETING COMPANIES:
- Ampol Petroleum Limited
- Atlantic Union Oil Company Pty. Ltd.
- BP Australia Limited
- Celata Oil (Australia) Pty. Ltd.

REFINING COMPANIES:
- H. C. Sleigh Limited
- Neptune Oil Company Pty. Ltd.
- The Shell Company of Australia Limited
- Vacuum Oil Company Pty. Ltd.
- Australian Oil Refining Pty. Ltd.
- BP Refinery (Kwinana) Limited
- Shell Refining (Australia) Pty. Ltd.
- Standard-Vacuum Refining Company (Australia) Pty. Ltd.

THE NAVY

WATSON MEMORIAL CHAPEL

Those of you who have visited H.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 voyages.

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

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 £19,000 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.

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.
- PORTH: 1/3/42—Night action off Sunda Strait.

Destroyers
- WATERHIE: 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 Mediterranean.
- VOYAGER: 23/9/42—Lost while helping Timor guerillas.
- ARMIDALE: 1/12/42—Sunk by aircraft while helping Timor guerillas.
- GEELONG: 18/10/44—Lost in collision off New Guinea coast.
- BLOOM: 27/11/41—Sunk by sub-marine in Mediterranean.
- WALLABY: 11/6/43—Lost in collision off Fremantle.
- YARRA: 4/3/42—Sunk by aircraft while helping Timor guerillas.

OCTOBER, 1940
Gateway to Adventure and
a Career
R. A. N. C.

COMMANDBLY 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 Aus-
stralians, 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 com-
mand.

There are two forms of entry
to the Royal Australian Naval
College: The normal entry is
of boys aged from 14 to 16
years for a course of training
of three years' duration. The
candidate for this mode of
entry to the College is re-
quired to have gained, prior to
selection, the Intermediate
Certificate or its equivalent and
to pass an Entrance Examina-
tion in the subjects of Mathe-
matics and English. Papers for
this examination are set by the
civilian masters of the College
and marked by an outside
authority. The selection pro-
cess involves a psychologist's
interview and intelligence and
aptitude testing, and medical
examination and ultimate pre-
sentation before the Selection
Committee of three which in-
cludes the Captain and the
Headmaster of the College.

The other way in which a
boy may enter the College is
through the Matriculation En-
try. As the name suggests this
method calls for the candidate
to have achieved the educa-
tional 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
for 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 candid-
ate'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 re-
guarly undergo the Instrument
Education and Religious Edu-
cation, Seamanship, Naviga-
tion and Engineering, while
the Senior Year of the Normal
Entry also studies Current
Affairs.

SPORT:
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 out-
side the College are Rugby,
Australian Football, Hockey,
Soccer, Basketball, Cricket,
Tennis, Swimming, Athletics,
Cross-country Running, Pull-
ing (or Seulling), Sailing and
Boxing, Softball and Golf are
engaged in, but on a less
competitive footing.

Cadets regularly form the
bulk of the crew in the Col-
lege Yacht "Tam O Shanter"
in various ocean races includ-
ing the Sydney-Hobart event.

MIDSHIPMEN who graduated from the Royal Australian Naval College at Jervis Bay last December embarked in H.M.A.R. 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 Navy.
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. 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 SEE:
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 Displays and the Diving Displays by Naval Frogmen.

Visitors will see at first hand how the deadly Mortars are fired in exactly the same way as from anti-submarine ships of 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 his friendly and enemy forces and make his plans 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 4.30 p.m. on the Parade Ground.

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

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

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 seating 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 it was used 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.

PROGRAMME OF DISPLAYS

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

ANTI-SUBMARINE MORTAR FIRINGS: 2.00 p.m., 4.25 p.m., 4.15 p.m.
These firings will simulate attacks on enemy submarines and will take place rear of the T.A.S. School.

1. Torpedo Anti-Submarine School.
2. Chief and Petty Officers' Accommodation.
3. Amenities Building.
5. Administration Block.
6. Action Information Training Centre.
7. Radar Block.
8. Lost Children.
10. Antisubmarine Mortar Display.

LOCATION OF INSTALLATIONS

1. Torpedo Anti-Submarine School.
2. Chief and Petty Officers' Accommodation.
3. Amenities Building.
5. Administration Block.
6. Action Information Training Centre.
7. Radar Block.
8. Lost Children.
10. Torpedo Anti-Submarine Mortar Display.

11. Ladies' Toilets.
13. Information Centre.
15. First Aid Post.
16. Site of Chapel.
**Programme of Events**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.30 p.m.</td>
<td>Dockyard Gates to be opened.</td>
</tr>
<tr>
<td>2.00 p.m.</td>
<td>Dockyard and H.M.A. Ships open to visitors, Crane Rides begin (10).</td>
</tr>
<tr>
<td>2.00 p.m.</td>
<td>Helicopter Display in Woolloomooloo Bay (7).</td>
</tr>
<tr>
<td>2.10 p.m.</td>
<td>Diving Display in Outer Dock (1).</td>
</tr>
<tr>
<td>2.25 p.m.</td>
<td>H.M.A.S. QUICKMATCH fires A.S. Mortars (5).</td>
</tr>
<tr>
<td>2.30 p.m.</td>
<td>H.M.A.S. ANZAC fires Torpedo (6).</td>
</tr>
<tr>
<td>2.40 p.m.</td>
<td>Helicopter Display in Woolloomooloo Bay (7).</td>
</tr>
<tr>
<td>2.50 p.m.</td>
<td>Frogmen drop and pick up South of South East Pound (8).</td>
</tr>
<tr>
<td>2.50 p.m.</td>
<td>Firefighting Display (9).</td>
</tr>
<tr>
<td>2.55 p.m.</td>
<td>H.M.A.S. ANZAC fires Torpedo (6).</td>
</tr>
<tr>
<td>3.00 p.m.</td>
<td>H.M.A.S. QUICKMATCH fires A.S. Mortars (5).</td>
</tr>
<tr>
<td>3.15 p.m.</td>
<td>H.M.A.S. ANZAC fires Torpedo (6).</td>
</tr>
<tr>
<td>3.20 p.m.</td>
<td>H.M.A.S. ANZAC fires Torpedo (6).</td>
</tr>
<tr>
<td>3.25 p.m.</td>
<td>H.M.A.S. ANZAC fires Torpedo (6).</td>
</tr>
<tr>
<td>3.30 p.m.</td>
<td>H.M.A.S. ANZAC fires Torpedo (6).</td>
</tr>
<tr>
<td>3.45 p.m.</td>
<td>Frogmen drop and pick up South of South East Pound (8).</td>
</tr>
<tr>
<td>3.45 p.m.</td>
<td>Firefighting Display. Rescue of Pilot from Aircraft (9).</td>
</tr>
<tr>
<td>4.00 p.m.</td>
<td>Helicopter Display in Woolloomooloo Bay (7).</td>
</tr>
<tr>
<td>4.05 p.m.</td>
<td>H.M.A.S. QUICKMATCH fires A.S. Mortars (5).</td>
</tr>
<tr>
<td>4.10 p.m.</td>
<td>H.M.A.S. ANZAC fires Torpedo (6).</td>
</tr>
<tr>
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<td>Frogmen drop and pick up (8).</td>
</tr>
<tr>
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<td>Firefighting Display (9).</td>
</tr>
<tr>
<td>4.45 p.m.</td>
<td>Helicopter Display (7).</td>
</tr>
<tr>
<td>5.00 p.m.</td>
<td>H.M.A. Ships closed to visitors.</td>
</tr>
<tr>
<td>5.25 p.m.</td>
<td>Ceremonial Sunset (11).</td>
</tr>
<tr>
<td>5.30 p.m.</td>
<td>Dockyard closed to visitors.</td>
</tr>
</tbody>
</table>

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**A SHORT HISTORY OF H.M.A. DOCKYARD CHURCH, GARDEN ISLAND**

The first known Church service to be held in the present Church was a Thanksgiving Service for peace after 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. 9 ins.
- **Inner Dock:** 369 ft. 9 ins.
- **Outer Dock:** 369 ft. 9 ins.
- **Breadth:** 147 ft. 7 ins.
- **Draft at spring tide:** 45 ft.
- **Maximum Pumping Rate:** 300 tuns 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.
- 3. Main Workshops.
- 4. Apprentices' Display.
- 5. H.M.A.S. "Quiberon" fires anti-submarine mortars.
- 8. Frogmen drop and pick up drill.
- 10. Crane rides.
- 12. Ferry landing.
- 14. Ladies' rest room.

Corresponding figures are on the map above.
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, Gunnera 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 great strength throughout a long life of protection of valuable equipment against the elements.

PLASTYNE PRODUCTS PTY. LTD.

JF3229 Waltham Street, ARTARMON JF3229
Sea Venom jet fighter and Gannet anti-submarine aircraft land on H.M.A.S. Melbourne.

MELBOURNE.

24

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

MADE IN U.S.A.

IMPORTED AND DISTRIBUTED BY

JOHN T. JENNINGS PTY. LTD., SYDNEY

THE NAVY

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.

Below:

H.M.A.S. Air Sprite

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

OCTOBER, 1940
H.M.A.S. ANZAC — BATTLE CLASS DESTROYER


Armament: (tuns—1 4.5 in., 12 40mm. a.a.; torpedo tubes—5 21-inch: A/S Weapons— Triple barreled depth charge mortar; Speed—30 knots.

THE UNITED SHIP SERVICES PTY. LTD.
GEELONG MELBOURNE PORTLAND
VICTORIA AUSTRALIA


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Telephone: MX 5231

JOIN THE NAVY LEAGUE

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

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, 88 Clarence Street, Sydney, N.S.W., or The Secretary, Room 8, 8th Floor, 528 Collins Street, Melbourne, C.F., 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 93, 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 QUADRANT). These ships were built as destroyers, but have been converted to A/S Frigates.

Displacement tonnage, 2,700 tons fully loaded; 358 feet in length; 35 feet in breadth; and a mean draught of 9 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.

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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.

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.

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OCTOBER, 1960

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WRITE FOR FULLY DESCRIPTIVE INSTRUCTION MANUAL
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 Dockyard, 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.

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OCTOBER 1960
Junior Recruits' Training Scheme

Many a recruit to the Navy in the first half of the century endured the taunts of the ancient mariners that the era of "wooden ships and iron men" had been succeeded by one of "iron ships and wooden men." Today this jibe 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 technically qualified personnel 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.P. 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 15 to 16-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 H.M.A.S. LEXIWIN, Fremantle, Western Australia, under the command of Commodore R. Rhiobes D.S.C., on July 1940. This year, when 155 Junior Recruits were entered from all States of Australia to commence a twelve months period of training, in January, 1941, 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 15 at which some of them leave school and the age of 17 at which the Navy will accept them under the existing system.

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The Recruiting Officer, Lt. Cdr. Clark-Smith swears in some of the 35 New South Wales boys who joined the Navy recently as Junior Recruits.

The Recruiting Officer, Lt. Cdr. Clark-Smith swears in some of the 35 New South Wales boys who joined the Navy recently as Junior Recruits.

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First Naval Apprentices

"Pass Out"

Guided Missile Technicians

of the Future?

ON 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.H., on the occasion of the successful comple-

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

The Passing-out Parade was followed quickly by a Prize-giving Ceremony, and a speech by Vice Admiral Burrell and Captain B. W. Munsare 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.

The necessity for setting up such a training organisation 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.

Several trades are taught at 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 Engineering Room, Electrical Shipwright and Ordnance Branches.

To provide the necessary educational background for arts and science subjects, on 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 the chosen 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 the 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.

OCTOBER, 1960

THE NAVY
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 specialisation 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 specialisation 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 as well as 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.

BOYS!

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 Refitting work in the largest and best-equipped Naval Yard and Dry Dock in the Southern Hemisphere.

APPRENTICESHIP is available at Garden Island Dockyard, Sydney, conducted by the Commonwealth Government, under conditions which will enable you not only to become an efficient tradesman but give you, the opportunity of earning a living as a Naval Dockyard Apprentice.

The period of apprenticeship is for 5 years and, subject to satisfactory progress, Technical College fees will be paid by the Commonwealth Government.

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

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

VACANCIES exist for the following trade apprenticeships: Fitter and Refitter, Shipwright, and Boatbuilder, Turner, Scientific Instrument Maker, Refrigeration Mechanic, Radio Mechanic, Electrician, Blacksmith, Sheetmetal Worker, Upholsterer, and various other trades.

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

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carries four and two 3-bar-
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tacking submarines.

H.M.S. CAVERNISH is the
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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 com-
missioned 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 priva-
teering voyage which he com-
pleted in 1588, having sailed
around the world and passed
unseen through the remains of
the defeated Spanish Armada
as he came up the Channel.

During his voyage he passed
through the Straits of Magel-
lan and, after attacking
Spanish ships and towns on the
coast of Chile, captured a
treasure ship from the Philip-
pines — the Manila Galleon —
and took from her 22,000 pesos
of gold and 600 tons of
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