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The Navy

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A LESSON FROM MANUS

The highlight of the Press coverage of the recent Navy-Air exercises around Manus was a reported slanging match—of the unofficial kind—between the R.A.N. and the R.A.A.F. on the relative merits of land-based and carrier-borne aircraft for anti-submarine work.

Press correspondents differed to some extent in their approach to this revelation. For example, one correspondent who visited the base reported the laurels for the R.A.A.F.'s Neptune wrote from an obviously anti-navy viewpoint. The significance lay in the fact that his dispatches carried a strong flavour of having been inspired by Air Force officers. Another correspondent avoided partisanship but made it clear that the issue was a modern one, and not an old one. He deplored this rift, which had gone beyond good, healthy inter-rivalry.

Submarine-killing is perhaps the most important task which the defence forces will have to face in the event of war. It will demand the best we can muster in tactics, men, weapons, and equipment. If the answer is found to be Army ships armed with harpoons and mounted on surf-boards then that is the method we must adopt—without considering anyone's pride.

Hard-won experience, however, has shown that the answer is the combined skill and effort of the Navy and the Air Force. Jealousy or any stiff-neck nonsense must not be allowed to blunt its effectiveness.

Of course, no one would want to suppress the spirit of competition which normally exists between units of a service and between services. It helps keep men on their toes and livens up routine training for war. But there is a vast difference between that and wasteful "feuding," which is a situation no responsible officer would encourage.

In modern warfare there is no such thing as the independence of any of the three services. Whether they like it or not, and there is no reason on earth why they should not, the services are becoming progressively more dependent on each other. Arising out of the interdependence of the Navy and the Air Force in sea warfare has come the new military expression "maritime power."

This concept of warfare began in the dark days of 1941, when our shipping losses were heavy and escorts were fighting a seemingly impossible battle against the might of Germany's submarine offensive. Gradually joint tactics were evolved for escort ships and long-range, shore-based aircraft. The first joint antisubmarine school was set up at Londonderry, Northern Ireland, to teach the lessons which had been learned in the application of maritime power against submarines.

Those basic principles still apply. In Australia the Australian Joint Anti-Submarine School—known familiarly as "Ajass"—has been responsible for welding together elements of the R.A.N. and the R.A.A.F. into a highly efficient sub-killing team which has made practicable a new strategy for safeguarding our sea communications.

Commander W. Elliot, the first Naval Director of Ajass, recently summed up the importance of Australia's Navy-Air anti-submarine project this way: "People sometimes refer to Australia as being remote. From a military viewpoint is the remote? Certainly not from submarines. They came in the last war, even into Sydney Harbour, and the submarines of the last war were primitive compared with those of the present and of the future. In two years the nation nearly succumbed to cutting our sea communications. Should a third war come it is quite certain the enemy will make every effort to succeed where before he has proved twice failed. Shipping must be protected and the front will be thousands of miles of vulnerable sea communications. The victory over the submarines in the last war has many facets, but presumably the answer is the combined skill and effort of the Navy and the Air Force. Jealousy or any stiff-neck nonsense must not be allowed to blunt its effectiveness."

The other two were auxiliary carriers travelling with convoys which were only lightly screened. Those basic principles still apply. In Australia the Australian Joint Anti-Submarine School—known familiarly as "Ajass"—has been responsible for welding together elements of the R.A.N. and the R.A.A.F. into a highly efficient sub-killing team which has made practicable a new strategy for safeguarding our sea communications.

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The CASE FOR THE CARRIERS

One of the most important and most effective if the many new roles devised in the development of modern naval warfare is the one allotted to the carrier. This was proved beyond doubt in World War II by the part played by carriers in the successful Allied operations in the Atlantic, the Mediterranean, and the Pacific. Since then, it has been proved again in the United Nations operations against the Communists in Korea.

The aircraft carrier is not only an effective technological asset, but it is also a mobile command post. In the carrier, the pilot is not only a specialist skilled in piloting and flying, but also in command and control. He is able to make decisions based on information from various sources, including radar, sonar, and other sensors. This allows the carrier to be a key element in the overall strategy of the navy.

Other similar aircraft attacked other German ships, resulting in her being sunk in a Norwegian fjord. Before carriers began to accompany convoys, the British had not been able to provide air protection for convoys, with the result that in the last war, even into Sydney Harbour, and the submarines of the last war were primitive compared with those of the present and of the future. In two years the nation nearly succumbed to cutting our sea communications. Should a third war come it is quite certain the enemy will make every effort to succeed where before he has proved twice failed. Shipping must be protected and the front will be thousands of miles of vulnerable sea communications. The victory over the submarines in the last war has many facets, but presumably the answer is the combined skill and effort of the Navy and the Air Force. Jealousy or any stiff-neck nonsense must not be allowed to blunt its effectiveness."

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Malta, could not have reached there, owing to the long distance, if they had not been ferried in the Eagle, Argus and Farnia and other carriers which were protected by carriers of the West Mediterranean Fleet. Because carriers are floating aerodromes, R.A.F. fighters from Gibraltar were crowded into those that were used as ferries and were relocated just close to Malta as would allow them to be flown off with a reasonable probability of their reaching their destination. In that way the ferrying carriers were not endangered any more than was essential in the bombing sense. The carrier ferrying of aircraft to Malta continued for many months. It provided the only means by which the air defence of the island was maintained.

But the versatility of the aircraft carrier was demonstrated in the Mediterranean in other ways. In the Battle of Matapan carrier-borne aircraft reduced the speed of Italian ships so much that landing operations in Greece and Crete were made possible. In the 1941-42 battles over Malta, 100 submarines in commission. Of these, 40 were Japanese, and 60 were British. Japanese opposition if carrier-borne aircraft had not supported them. No Allied land-based aircraft could have gotten anywhere near striking distance of them.

Continued on page 20.

THE NAVY

December, 1944.

NEW METHODS ARE MAKING SUBS SAFER

- When a submarine lies helpless on the ocean bed the crew's chances of survival are slender. But the Navy is evolving new escape methods which will make the submariner's life less hazardous.

By Lieutenant-Commander NOWELL HALL in London.

Considerable changes are taking place in the British Navy's submarine escape policy. New methods and a great deal of new equipment are coming into use.

The submarine is perhaps the only warship expressly designed for an offensive role in war. Although only about one-fiftieth of the British Navy's total manpower served in submarines in the last war, British submarines sank 250 enemy warships of various types and nearly 2,000,000 tons of merchant shipping. In addition, they damaged scores of ships, including many major warships.

Because the submarine is primarily a vessel for war, it is not practical to ensure the same degree of safety for the crew as can be done with other types of warships. Nevertheless, the Admiralty has always devoted close attention to evolving methods of escape from sunken boats. Within the limits posed by the problem they have achieved much.

Some of the new methods and equipment were explained during a visit I made to Fort Blockhouse, H.M.S. Repulse. The Admiralty gave me a showing of the new escape and safety gear, which is being installed in all British submarines. These devices are designed to improve the survival chances of the crew in case of sinking of the submarine. The methods of escape are divided into two main categories: "Free escape" and "Closed escape.

Freescape" Drill. By which a man can ascend through 300 feet of water without using any breathing aid, is now part of the training given to all submariners at Fort Blockhouse. A concrete tower 100 feet high, filled with a column of water 18 feet across, is used for the purpose. A man ascends from an "escape chamber" by a mixture of oxygen and nitrogen stored under pressure in a series of bottles. The men will breathe this mixture while the submarine is being "bowed up"—a process to equalise the pressure within and without the hull and to allow the escape hatches to be opened. This will eliminate the need for men to wear the existing oxygen breathing apparatus during a critical period, and also the risk of them succumbing to oxygen poisoning while they are still in the submarine.

Automatic Distress Signals. Radio indicator buoys, housed on the casing and releasable from inside the boat, will be used to show the submarine's exact position to rescue forces on the surface. A buoy is being designed which will automatically transmit distress signals at regular intervals.

Underwater telephones and underwater signal ejectors for firing smoke candles are other new devices.

An American submarine diving bell, which in suitable conditions can be lowered over a sunken submarine and clamped to the escape hatches, is being tested in the British Navy's salvage vessel Kingfisher. This bell can be used effectively 600 feet down.

Inflatable immersion suits are being issued to British submarine crews. These can be blown up by their wearers to protect them from exposure after the ascent.

"Free escape" drill, by which a man can ascend through 300 feet of water without using any breathing aid, is now part of the training given to all submariners at Fort Blockhouse. A concrete tower 100 feet high, filled with a column of water 18 feet across, is used for the purpose. A man ascends from an "escape chamber" by a mixture of oxygen and nitrogen stored under pressure in a series of bottles. The men will breathe this mixture while the submarine is being "bowed up"—a process to equalise the pressure within and without the hull and to allow the escape hatches to be opened. This will eliminate the need for men to wear the existing oxygen breathing apparatus during a critical period, and also the risk of them succumbing to oxygen poisoning while they are still in the submarine.

Continued on page 9.
WHAT'S BEHIND THE RED NAVY BUILD UP?

In comparison with its estimate of Russian naval strength, the Admiralty recently published the following assessment of the naval strength of N.A.T.O. countries, and of British Commonwealth countries outside N.A.T.O.—

N.A.T.O. countries

<table>
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<tr>
<th>Ships</th>
<th>Carriers</th>
<th>Cruisers</th>
<th>Destroyers</th>
<th>Submarines</th>
<th>Minesweepers</th>
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Commonwealth countries outside N.A.T.O.

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<th>Carriers</th>
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<th>Destroyers</th>
<th>Submarines</th>
<th>Minesweepers</th>
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</tbody>
</table>

In varying degrees all the navies also have coastal forces vessels—towing trams, ships, depot, repair, maintenance, and supply ships, and other vessels.

U.K. RESEARCH FOR BETTER PACKAGING

A new research and development centre at Sittingbourne, in south-east England, is working to raise the standard of the U.K.'s export packaging.

In the centre's test-room engineers can simulate every kind of rough handling and climatic condition which a package shipped from England is likely to encounter.

A "bump" machine throws a package up and down four times a second for an hour. Another drop, it comes down at the bottom after taking a deep breath. As he floats to the surface, the air is forced from his lungs, bubbles being expelled from his mouth as the internal and external pressure on his lungs lessens.

After the last war, an Admiralty committee interviewed men who had escaped from sunken submarines of several nationalities. It was then found that almost half of the survivors had used this method of "free escape."

December, 1960.

THE NAVY

Russia is hard at work building a massive navy, with significant emphasis on submarines. The British Admiralty estimates that within two to three years Russia will have 500 submarines—167 more than the present combined submarine strength of all NATO countries.

In every shipyard throughout the Soviet Union men and machines are busy on the task of making Russia a first-class naval power.

A great ship-building programme is under way. Even in the interior submarines are being built and then carried to the sea. Russian technicians for some time past have mastered the difficulties of their transportation.

British Naval Intelligence reckons the value of Russia's naval preparations at one-fifth of her total defence budget. And Russia primarily is a land power. It believes that since 1945 Russia has spent the equivalent of £800,000,000,000 in her navy.

Practically all Russia's warships were built since the war. All except those refitting are kept fully manned and operational. For her navy aircraft she is concentrating on jet ships and 500 submarines with complex anti-sweeping devices, tactical atomic weapons, and guided missiles, both offensive and defensive.

The Admiralty estimated that the Russian naval strength, the Admiralty stated that the Russian navy is manned by 750,000 officers and men, of whom about 270,000 are in ships and 85,000 in the navy air force.

In addition, the Admiralty included in its estimate "numerous" patrol and landing craft.

It said that as well as having all the orthodox guns, torpedoes, bombs, and mines the Russian navy of 1956-57 will probably have long-range torpedoes of a greatly improved type, mines, with complex anti-sweeping devices, tactical atomic weapons, and guided missiles, both offensive and defensive.

Referring to present Russian naval strength, the Admiralty stated that the Russian navy is manned by 750,000 officers and men, of whom about 270,000 are in ships and 85,000 in the navy air force.

"Behind the re-born Soviet navy is Admiral Kuznetsov, who has almost interruptedly been its head since 1937 and who is a personal friend of Molotov, another believer in the need for a strong navy.

"This year, on Soviet Air Force Day, Kuznetsov was asked to take the salute beside the Minister for Defence, an indication of the esteem in which the navy is held by the Soviet leaders."

The Admiralty estimated that the Russians can build a cruiser of the Sverdlov class in about two and a half years, and more importantly still an ocean-going submarine with a radius of action of 20,000 miles in six months. This would mean that Russia would be capable of building at least six cruisers and 60 ocean-going submarines a year, in addition to large numbers of destroyers, escorts, and small craft.

U.S.S.R. government is most concerned to improve the preparedness for war of the ships and the skill of their crews."

The British Navy's main striking power in war will be her Fleet Air Arm, manned by men like these three young Australians.

Continued from page 7.
THE COMET... a great salvage achievement

The Comet court of inquiry in London recently heard expert opinion which reconstructed the last seconds of Britain's ill-fated jet passenger aircraft before it crashed into the Mediterranean early this year. Scientists and technicians worked out the probable cause of the disaster ("a molecular metallurgy fault," according to the Air Regulations Board's chairman, Lord Brabazon) after long and minute examination of bits and pieces of the aircraft salvaged from the sea-bed. This article, published in the London "Navy," tells how that unique salvage job was done.

BY REAR-ADMIRAL H. E. HORAN

T o pick up the bits and pieces of an aircraft — a depth of over 600 ft. is a feat of salvage which stirs the imagination of anyone who has been at sea. But when the location of these bits and pieces is to all intents and purposes only approximately known, the whole operation becomes quite unique in the annals of salvage.

On January 10th at 1110 a Comet aircraft on its way from Rome to London suddenly broke off transmitting a message to an Admiralty control post at Famborough. This was the third time this aircraft had been fitted with a time delay circuit to prevent a recording being made by unauthorized personnel. The aircraft vanished and the Wreckage of the Comet was to be recovered.

The Admiralty announced that the salvage operation at once the need for a special sweeping technique was recognized by the Commander-in-Chief. A thorough search of the Mediterranean early this year. Scientists and technicians worked out the probable cause of the disaster ("a molecular metallurgy fault," according to the Air Regulations Board's chairman, Lord Brabazon) after long and minute examination of bits and pieces of the aircraft salvaged from the sea-bed. This article, published in the London "Navy," tells how that unique salvage job was done.

Now it was that H.M.S. Wakeful (Commander J. G. B. Merrow, D.S.C., R.N.) relieved H.M.S. Wrangler. The former had been fitted with an underwater television camera by Messrs. Pye and this played a great part in the identification of the objects on the bottom. Two of the contacts reported by the Wrangler were identified as old wrecks. One of these was thrilling. To those watching the television screen in the operations room there suddenly appeared, instead of the muddy bottom with its occasional fish, a mass of old Roman junks (figurines) and it can only be assumed that the old ship had been carrying a cargo of wine of very old vintage. As the last jar crossed the screen an enormous eel was seen coming out of it.

Underwater TV

On 10th February the Italian Squadron engaged in Operation Elba Ida—a special sweeping technique was used to locate the wreckage. Using her own marine equipment and a special grab, all of which had to be lowered and got difficult to maneuver, the Wrangler searched an area some 12 miles south of Elba but with negative results.

But additional information, notably the interpretation of the photograph taken by the Skyways aircraft referred to previously, made it appear that the probable position of the bits and pieces was rather further to the north. This was confirmed when one of the local trawlers charters for the work brought up a piece of the Comet.

These local trawlers were invaluable and under the command of Lieutenant-Commander M. G. Fowlie, R.N., developed a special sweeping technique which consisted of dragging a wire along the bottom with the ship working in pairs. The wire submerged any sizeable object, but unfortunately at first these objects proved to have something to do with a war-time minefield which was laid in the locality. moorings, before the grab was accurately in position.

Three underwater television cameras have been in operation. One of these is of Admiralty design and the other two have been supplied by Messrs. Pye and Marconi-Siebe-Gorman.

Finally the kind co-operation of all the Italian authorities must not be forgotten. From the first Commander Lombardi—the local harbour-master—rendered noble service not only in recovering the bodies of the victims, but in assisting in the "fixing" of the wreckage and providing the trawlers which have done such good work.

The whole operation once again shows the adaptability and resource which the officers and men of the Royal Navy always bring to a job of any kind—and the two divers lent by Messrs. Pye and Marconi—Mr. Bray and Mr. Gilpin—are both ex-naval men.

THE NAVY
A £50 MILLION COMMAND

Next February Rear-Admiral H. A. Showers retires from the R.A.N. after 42 years' service.

As Flag Officer-in-Charge, East Australian Area, Rear-Admiral Showers for the last four years has administered one of the Navy's most important commands. The value of the ships and establishments he administers represents about £50 million of taxpayers' money. The vessels and aircraft headministers range from jets to sailing craft; the personnel from captains in the Navy to apprentices at Garden Island Dockyard.

Here are just a few of his responsibilities:

- Garden Island Naval Establishments and Captain Cook Dock and Workshops (the largest dock in the southern hemisphere).
- Naval Stores, which with subsidiaries at Randwick can provide any item, from a needle to an anchor, which may be required by H.M.A.S. ships.
- Naval Victualling Stores (Royal Edward Victualling Yard), which feed and clothe the Navy.
- H.M.A.S. Albatross (including the Australian Joint Anti-Submarine School) the Royal Australian Navy's first Naval Air Station.
- H.M.A.S. Nirimba, the submarine training centre.
- Naval Stores, which with subsidiaries in the area and in March this year include the R.A.N. dockyard.
- H.M.A.S. Watson, the radar training centre.

Rear-Admiral Showers is also responsible for the operations of ships under his command, including 3 boom working ships and 2 ocean mine-sweepers.

Rear-Admiral Showers dismisses his responsibilities with a smile and a non-committal remark that he has very good staff officers and that there are few problems which come to him.

Four years ago he decided to arrange a yearly display to commemorate Trafalgar Day which would show the public how the Navy lives and works. He felt that a display of this nature would not only be of general interest but would stimulate recruiting.

More than 200,000 people have attended the display in those four years.

Rear-Admiral Showers was born on 24th May, 1899, at Melbourne, Victoria. He was one of the original entry of cadets in 1913. He gained his colours for rugby, cricket and rowing, and at passing out was awarded the Albert prize for practical engineering.

He became a midshipman on 1st January, 1917, sub-lieutenant in 1918, lieutenant in 1920, lieutenant-commander in 1928, commander in 1933 and captain in 1939.

His first ship was H.M.S. Glorious in 1917-18. After serving in submarines as a sub-lieutenant and junior lieutenant he specialised in navigation, taking his courses in 1923.

In 1933 he was appointed commander of the Naval College, being the first graduate of the college to hold that position. He was Squadron (N) Officer and S.O. (On) Third Cruiser Squadron, during the Italian-Abyssinian crisis.

On the outbreak of war in 1939 he was appointed to command H.M.A.S. Adelaide with the rank of acting-captain, being promoted to captain at the end of the year. In the Adelaide he was at Noumea at the time of the establishment there of a Fighting French Administration in September, 1940.

In June, 1942, he was appointed to command H.M.A.S. Hobart and at the end of 1943 went as Chief Staff Officer to the Naval Officer in Charge, Sydney. In May, 1944, he took command of H.M.A.S. Shropshire, his next appointment in October of the same year being that of Second Naval Commander with the rank of commodore.

He was thus the first graduate of the R.A.N. to become a member of this board, which administers the Royal Australian Navy and controls the destinies of all its personnel. In June, 1945, he received the award of the C.B.E. He was appointed Commodore Superintendent of Training in succession to Commodore Parnham, in November, 1946, and thus became Commanding Officer of the old college. He remained there until March, 1948, when he was appointed Second Naval Member of the Naval Board for the first time.

At the end of this appointment he was promoted to Acting Rear-Admiral in May, 1950, and took up the appointment of Flag Officer-in-Charge, N.S.W. (changed later to East Australian Area.)

HOMES FOR RATINGS

Twenty-five houses have been built at East Hills, 20 miles west of Sydney, for ratings of the Royal Australian Navy and their families. They are the remainder of 30 that have recently been erected in the area.

Each contains either two or three bedrooms and has sewerage and hot-water services.

The Minister for the Navy, Mr. J. R. Francis, said that 29 additional houses for ratings will be built at East Hills soon. Sixteen more houses will be built at the R.A.N. Station at Nowra, N.S.W.

Defender is commanded by Captain J. C. C. Henley. She has a complement of 20 officers and 284 ratings.

Three Daring class ships are now being built in Australia for the Royal Australian Navy. They are the Voyager and Vampire, built at Cockatoo Dock, and the Vendetta, being built at Williamstown.

R.N. SHIP VISITS SYDNEY

Defender was launched in July, 1930, and was commissioned for service in December, 1932. After completing a series of trials she attended the Coronation Naval Review of the Fleet at Spithead on June 15, 1953, and the following day sailed for the Far East station.

Since then she has been employed actively in the Korean area and in March this year became the first of her class (of six) to fire her guns in anger when she penetrated the poorly charted Johore River and bombarded Malayan terrorists in Johore State.

The present Defender is the sixth ship of that name in the Royal Australian Navy. The first, a 168-ton gunboat, was launched in 1877.

Obviously determined that his men would make a good showing, Chief Petty Officer W. A. Keeler takes a closer look at his inspection of the Admiral's yard on the Daring class ship H.M.S. "Defender" when it arrived in Sydney recently.

December, 1954.
THE NAVY WANTS AIRMEN

Outstanding opportunities exist in the Royal Australian Navy's Fleet Air Arm for suitable young men to become officers and specialists as pilots or observers.

By A Special Correspondent

EVER since the Fleet Air Arm came into being certain proportion of pilots and observers have been drawn from among younger permanent officers of the executive branch. But in addition to numbers provided from that source, the Australian Commonwealth Naval Board has a system under which young men in civilian life are invited to join the R.A.N. and, if suitable for pilot or observer duties, are given short-service commissions.

The invitation is extended to male British subjects of substantial European descent between 17 and 24.

If a candidate who responds to the Naval Board's invitation, and can fulfil the requirements of commission, rank, he will be appointed for a minimum period of seven years, and may, at the end of that term, apply for an extension of four years. At any time after he has been a sub-lieutenant for about two years he may be granted a permanent commission in the executive branch of the service and thus find the way opened to promotion to the highest ranks.

Naval officers employed in aviation draw exceptional pay. A single sub-lieutenant in the Fleet Air Arm receives £664 a year and a married lieutenant of two years' seniority £1,271 a year.

An officer who resigns at the end of his seven-year appointment he is paid a gratuity of £350, but if he remains in the service for 11 years the gratuity is increased to £350. To become eligible for the gratuity men must, in full peace, transfer to the reserve list, although a slightly smaller gratuity is paid if he does not with the term.

High Physical Standard

Candidates for entry as pilots or observers under the short-service system must, of course, be of high physical standard and must have reached what might be generally called the intermediate standard in education, with passes in at least four subjects including English and mathematics. They must have gained certificates in one of these public examinations: Queensland Junior, Victoria, Intermediate; South Australia, Intermediate; Western Australia, Junior.

A candidate with the necessary educational qualifications passes the medical board he then undergoes tests to prove personal qualities and flying aptitude. If he succeeds in the tests he is entered as a naval airman (pilot or observer). Although candidates' wishes are carefully considered, the Naval Board decides whether they shall be allocated to pilot or observer duties.

Naval airmen are given three months' general naval training at Flinders Naval Depot, Crib Point, Victoria. On completion of the course they are provided probationary naval airmen. Those selected as pilots do 14 months' flying training with the Fleet Air Arm. Continued on page 24.

THE NAVY

NEW CARRIER JOINS FLEET

The Royal Navy intends Britain's latest light Fleet carrier, H.M.S. "Bulwark," to take over from H.M.S. "Illustrious" as trials and training carrier. She will do this when she has completed her trials and working up.

The Admiralty announced in November that the carrier had been provisionally accepted into Her Majesty's Service.

Built by Messrs. Harland & Wolff Ltd., of Belfast, who are also responsible for her main machinery, the Bulwark will be the third aircraft-carrier of the Hermes class to join the Fleet. The Centaur and the Albion have come into service this year.

H.M.S. Bulwark has an angled deck and will incorporate the latest developments in carrier operating technique, including the mirror deck landing aid. She is 737ft. long. In service, the full complement, excluding the complement of the aircraft, will be 76 officers and 960 ratings.

As in the Centaur and Albion, the Bulwark will be fitted with canvas bunks for all ratings. These bunks can be stowed away during the day so that the bunk spaces, which are provided with nesting tables and chairs, may be used for recreational purposes. The intention is to ensure each man has a sleeping billet adjacent to his kit. Since she was laid down, many changes have been made to her design with a view to improving the comfort of the company. The living quarters have been arranged with large dining-halls close to the galley, and with mess decks equipped with tubular steel furniture. Many of the living compartments are fitted with air-conditioned ventilation so that the temperature can be maintained at a constant level in all climates. The catering arrangements are highly mechanised. Cooking is mainly by electricity, and there is a good allocation of "cold" and "cool" rooms. A fully mechanised laundry is installed.

The design of the Hermes class was the subject of a long series of model experiments to design the best shape of the hull for speed, endurance and seaworthiness. The hull strength and rigidity have also been the subject of special investigations. Electrical welding has been extensively used in the hull construction, and the standard X-ray tests have been made to ensure that the welding is good.

A fully mechanised laundry is installed. The power generating machinery has been made by Messrs. Harland and Wolff at their Queen's Island works and embodies the latest practice in the field.

The ship is equipped with a 300-line automatic telephone exchange. For vital action communications, sound powered telephones groups, independent of electrical supplies, serve the various ship departments.

About 8000 lighting points are installed, 2500 of which are fitted with twin lamp fluorescent fittings. The standard of illumination is extremely high, and the appropriate area of glare is a notable feature of the fluorescent lighting installation.

"Red" lighting is fitted to allow for rapid adaptation of vision at night.

The ship is equipped with a comprehensive system of flight deck lighting to provide for night landing by aircraft.

For escape purposes, in the event of severe damage to the ship, with the normal lighting out of action, a complete system of battery operated emergency lanterns is fitted. These relay-operated miners' type lanterns switch on automatically immediately the normal lighting fails.

"Gild is tried by fire, brave men by adversity."—Seneca.

"Men may be convinced, but they cannot be pleased, against their will."—Samuel Johnson.

Winter, 1954.
RADIO operators, known in the Navy as telegraphists, are one of the R.A.N.'s particular needs. But it also needs seamen who will be specially trained in radar-air and radar-surface track plotting gunnery control, the use of underwater weapons and equipment, ratings who will be taught to operate and maintain electrical equipment, and skilled tradesmen of many kinds.

It has vacancies, as well, for naval airmen, writers, cooks and stewards and sick berth attendants.

The pressing need of telegraphists has, to some extent, been brought about by the rapid expansion of the R.A.N. since the end of World War II, and the establishment of its Fleet Air Arm: for the Navy now has to maintain a much more widely spread system of communications than it did formerly.

Unless speedy and ever-open communication channels were available to all ships and all establishments at all times, the Navy would be seriously hampered in fulfilling the comprehensive functions and commitments that its increased size has enabled it to undertake.

He might also find himself repeating his admiral's or captain's orders by voice through a microphone to ships in company, orders of such significance that an error in repetition might seriously prejudice the safety of the ships. The telegraphist will realise, therefore, that he is performing very responsible duties within the Fleet and is also playing an important part in helping it to keep up its high standards of efficiency.

There will be many opportunities for him to rise to higher rate or rank, and he will be given every encouragement by means of schooling and advanced courses to do so.

In whatever rate or rank he serves, however, he will draw good pay and receive free quarters and food. If he is married he will receive a marriage allowance as well.

His first issue of uniform will be supplied to him free of cost and he will be paid a daily sum to enable him to keep it in good order or to renew it. When he is not quartered in a ship or shore establishment he will receive an allowance for living out.

During his period of service he will be given generous annual leave and will be entitled to free medical and dental attention. On his retirement, provided he has served for the necessary length of time, he will receive a pension and for shorter periods a gratuity.

The advantages and benefits just referred to are enjoyed by all ratings in all branches.

Specialist Schools

Irrespective of the branch that he may wish to join, every man who enters the Royal Australian Navy begins his service at Flinders Naval Depot, Westernport (Victoria). With two exceptions the ages at which men may enlist range from 17 to 26. For naval airmen they range from 17 to 24 and for tradesmen from 18 to 28.

Having entered the depot, a recruit undergoes disciplinary training for six months and is then drafted to the branch in which he intends to serve for specialised instruction. He may go direct to sea or may first attend one of the various specialist schools in the Melbourne and Sydney areas.

Telegraphists and gunnery specialists, for instance, do courses at schools at Flinders Naval Depot. So do electrical branch and engine-room branch ratings. But radar plotters and others using radar equipment undergo the principal part of their specialist training at the navigation-direction school, H.M.A.S. Watson, which is perched high on the top of South Head, Sydney.

Torpedo and anti-submarine ratings do their training at H.M.A.S. Rushcutter, Rushcutter Bay, Sydney, and naval airmen at H.M.A.S. Albatross, the Royal Australian Naval air station at Nowra, New South Wales.

Skilled tradesmen join the Royal Australian Navy in somewhat different circumstances from other ratings. They are normally accepted for entry only if they have completed five years of apprenticeship in their particular callings, and they enter the service in the relative rating of petty officer. Some are allowed to enter after they have completed 3½ years of apprenticeship.

Tradesmen required by the R.A.N. at present are qualified fitters and turners, fitters and machinists, electrical fitters, electrical mechanics, instrument makers, shipwrights and boat builders.

The Navy has room for all kinds of men with all kinds of aptitudes. There is probably no other organisation in which so many varied abilities and ambitions can find satisfactory and useful expression.
Ships Wrecked In Gale.

Fierce gales around the British coast late last month wrecked the lightskip South Goodwin with the loss of seven men, snatched in halves the 20,000-ton Liberian liner Vega and a 20,000-ton Liberian, off Ireland on November 30. Twenty-four of her crew of 40 are believed to have been drowned.

The lightskip overturned on the Goodwin Sands. The seven men lost were trapped in a cabin when the ship capsized. Navy frogmen with acetylene cutters tried unsuccessfully to rescue them.

Lifeboats landed crew members from the World Concorde and the Vega.

Sixteen other ships were reported in difficulties during the gales which reached a force of 100 miles an hour.

New Rubber Life Raft.

A new type of inflatable rubber life-saving raft with complete cover from the weather was demonstrated in London. The King George V dock recently. Tests showed that this invention may eventually replace some of the conventional wooden lifeboats now in service, while its value as ancillary equipment was undoubted. The rafts are circular and are made in three sizes for holding six, ten or twenty persons. When packed complete with emergency pack they weigh, according to size, 120 lb., 150 lb., and 240 lb.

Features of the rafts are their ease of launching and the fact that can be positioned at convenient points all round the vessel. One man can launch the six and ten-seaters, while the biggest model needs two men. The pack is thrown into the sea. A pull on the operating cords opens the gas cylinder aboard. The raft bursts from its valise and inflates ready for boarding in about thirty seconds.

The canopies are flame-orange in colour, now proved the most efficient colour for search and rescue. An automatic water operated recognition light in the roof.

The canopy itself has an inner skin enclosing a layer of still air, thus providing an internal thermal layer against either icy winds or the rays of the sun. The floor is also double and inflatable, thus increasing buoyancy and providing the occupants with insulation from the chilling effects of the sea.

All rafts are supplied with emergency gear including water, first-aid outfits, signalling equipment, and many other accessories.

Crew Crisis Averted.

A crew crisis in the big Cunard liner Queen Mary was averted last month after the ship's master, Captain Donald Sorrell, appealed to the men to take the ship to sea.

According to Press agency reports the crew threatened to strike when they heard the owners had decided that the Cunard Line commodore, Captain Ivan Thompson, would replace Captain Sorrell for the ship's voyage to bring home the Queen Mother from America.

Captain Thompson normally commands the liner Queen Elizabeth.

Crew spokesmen said they considered the change of command was a slight to Captain Sorrell, whom they described as "the world's finest sea captain."

Cunard officials said the line's senior captain always took command of any of their ships in which Royalty was travelling.

"Bomb" X-rays Ship Welds.

Every 16 weeks a heavy wooden raft arrives at the Caledon Shipyard, Dundee. It is treated with particular respect since nesting in its centre is a lead ball several inches thick, within which is a pellet of radioactive iridium 192, straight from the heart of the atomic pile at Harwell. For some years shipyards in Britain have been x-raying welds to detect flaws and eliminate bad workmanship. This equipment is invaluable, however, for "safe" work—the lofty perches and odd corners of a ship. Now a new and much more compact source of power has come along—the unseen, the silent, but deadly gamma ray.

When the wooden case arrives from Harwell it goes straight within the foot-thick concrete walls and roof of the radiography department of the shipyard. Then the tricky transfer of the used capsule of iridium 192 from the gamma ray bomb—the name given to the portable machine which is used—was completed, and the "hot" one is installed.

When the picture of the inside of the weld is required, the operator sets out with the ray bomb, a piece of double-coated film 15 x 4 inches, and a geiger counter. The film between two strips of lead foil is placed behind the weld. The bomb is aimed through the steel to the film, the end is uncovered by a spring, and the rays go to work. The exposure takes usually 15-30 minutes but can be several hours for the maximum thickness of two inches of steel. When the negative is developed it is examined under a light by the radiographer, the foreman welder, and the welder who did the job. Faults disclosed include porosity, cracks and incomplete penetration. Much of the skill of the radiographer lies in interpreting the marks on the film.

Sydney Trawler Lost.

Off the N.S.W. coast early last month three crew members were drowned when the trawler Olive Cam was wrecked in a storm.

"He does not believe that does not lie according to his belief."

Thomas Fuller.
by aircraft from aircraft carriers demonstrated once more their extraordinary versatility. These aircraft were not used as they were, for convoy or as submarine hunters or killers. They were used principally for bombing inland targets, such as troop concentrations, gun emplacements, marshalling yards, railway lines, bridges, tunnels, trains, and road transport.

The admiralty had revealed that at the trials cruise H.M.S. Cumberland, recently concluded in the Mediterranean trials of a new method of protection against atomic contamination. The method, known as "pre-wetting," involves washing all the weather surfaces of a ship during and after exposure to contamination.

The purpose is to protect warships against the effects of radioactive particles in the outer fringe of an area in which an underwater explosion of an atomic bomb has taken place.

During the pre-wetting process all means of access to the interior of the ship are closed. Washing down continues until ratings with geiger counters ascertain that upper deck conditions permit normal work to be resumed there.

The experiments in the Cumberland were confined to the fore part of the ship. Contaminated samples were placed in exposed positions and some 300 tons of water were left on deck for spraying from 50 nozzles.

"Our aim was to produce a local rainstorm exceeding the heaviest tropical downpour," one of Cumberland's officers said. Cumberland return to Devonport from her trials on September 29.

A mate for a bull

One of the Royal Navy's recent novel assignments, in the Persian Gulf, was revealed in London recently.

Early this year the frigate Wild Goose presented a miniature pinnace to the Bahrein Government for its experimental rôle in demining waterways. After the Bahrein Government made a request to the Admiralty, through the Senior Naval Officer, Persian Gulf. His signal read: "It would be much appreciated, particularly by the bull, if Darymple while on passage from Zanzibar to the Persian Gulf, could call at Sooretta to obtain a mate of the same species."

The Admiralty replied with the following signal: "In the interest of the bull—approved."

Award For Salvage

Distribution of salvage of the Dutch motor vessel Unitas in January, 1953, by H.M.S. Creole, then commanded by Lieutenant-Commander T. Russell-Walling, R.N., will be made to members of the ship's company at rates ranging from £4/11/4 to £6/10.

Veteran Carrier's Record

Three months before going into reserve, the 14-year-old aircraft-carrier Illustrious, veteran of the famous Fleet Air Arm raid on the Italian Fleet at Taranto, broke previous flying records on board by completing 950 day and night deck landings and 200 helicopter landings in 12 days of flying during three weeks in October.

The Illustrious, commanded by Captain K. A. Short, D.S.O., R.N., was carrying out the duties of trials and training carrier in the Channel. One-third of the ship was due to have sail on passage from Zanzibar to exercises in the Clyde area. It is understood that a signal grenade was found on members of the ship's company at rates ranging from £4/11/4 to £6/10.

Torpedo dump found

The R.N. has flown two officers to Rabaul to delve a large dump of Japanese naval torpedoes which workmen discovered recently when digging the foundations of a new building.

The officers are Lieutenant-Commander R. S. Batterham of Melbourne, the R.N.'s expert on disposing of dangerous weapons, and Commissioned Gunner R. Hillen of Sydney.

In 1947 Lieutenant-Commander Batterham spent nine months in Rabaul disposing of and rendering safe thousands of tons of ordnance which the Japanese had stored there during the war.

New electronic "brain"

Britain's scientists are being aided in their work on guided missiles, radar, and supersonic aircraft by an electronic "brain" as large as six ordinary three-bedroomed houses.

The "brain"—the biggest in Britain and one of the largest in the world—is officially called Triad, short for its full title of "three-dimensional analogue computer." Covering about 6,000 square feet of floor space, it uses
enough electricity to light a small 8,000 valves, has about 2,000 town. It solves its knotty problems in 3-D, and provides the ample. It is asked to work out a chasing a jet bomber through the charts, and animated diagrams in miniature of what would actually happen.

Mr. M. B. Morgan, deputy director of the Royal Aircraft Establishment said at a recent demonstration: "It is very cheap and you can save an immense amount of time and money running through a series of problems instead of having to build a machine enables you to cut down the amount of time and money run."

Mr. Morgan adds, "In great straits, when hope is small, the boldest counsels are the safest."—Livy.

This Little Ship Has a Big Job

IN THE ICY SOUTH

Recently, a small but important vessel sailed from Britain on the first leg of a voyage during which she will cover some 30,000 miles. She is the Royal Research Ship "John Biscoe," now on her way to the south Polar regions carrying stores and reliefs for the bases of the Falkland Islands Dependencies Survey in Antarctica.

by A. Cecil Hampshire, who writes on maritime affairs for many of United King- dom journals.

Wooden-hulled, but sheathed in greenwood to enable her to withstand the buffets of ice-packed seas, the John Biscoe is a one-time warship. Built under the United States under the Lease-Lend Agreement, she entered Britain's Royal Navy as the net-layer Pretext on boom defence. She was formerly the U.S. ship Deck-er. The ship carried three 3-inch guns and had a speed of 12 knots. It was delivered to Na- tionalist China in 1946.

"In great straits, when hope is small, the boldest counsels are the safest."—Livy.

Calling en route at the Cape Verde Islands and Montevideo, the John Biscoe was due to reach her base, Port Stanley, in the Falk- land Islands, towards the end of November. From there she will set off to begin her relief work at South Georgia Island, an 800-mile run southward through the gale-lashed Drake Passage. From there she will visit in turn the other six permanent bases maintained by Britain in the Antarctic.

The bases cover the territories known as the Falkland Islands Depen- dencies. With South Georgia Island (taken possession of for Britain by Captain Cook in 1775), they comprise the South Orkneys (occupied in 1821), South Sandwich Islands (occupied in 1775), the South Shetlands (taken possession of for Britain in 1812) and Graham Land (occupied in 1829), an 800-mile long spur projecting from the Antarctic continent.

The bases are manned by personnel belonging to the Falkland Island Dependencies Survey, an organisation whose task is to survey and map hitherto unexplored territories, to maintain weather stations—their forecasts are of special value to all in the southern hemisphere—and to carry out biological, geological, ornithological and other scientific studies. Now also is being started a geophysical programme, which will include geomagnetism, solar radiation, core measurement.
Uranquinty (N.S.W.) and Point FW Air Arm pilot, Hi. Saa Fur, off a carrier flight Jack (or Andy), 24 years. After a further course in service commissions of seven years, they learn to fly modern operational flight. Each squadron—about 30 pilots and observers—completes for observer training under the squadrons which operate from the squadrons, a squadron which perhaps one day he will command. At the end of that training they are confirmed in the rank of sub-lieutenant after they have served in that acting rank for 12 months. Depending on the results obtained in examinations, they become lieutenants within further periods ranging from 10 months to a year. Any time after that they may be offered permanent commissions.

As may be seen, the way is open to suitable young men to live a life full of interest and travel while they are doing a worthwhile job. It is a life which combines the best of both the sea and the air.

NEW CRAFT ON SHOW.

Sailing and outboard dinghies gleaming in varnished mahogany; motor cruisers of all types built of mahogany and a new development (glass fibre); sailing yachts with auxiliary engines which could be sailed round the world in safety; these were among the exhibits in the marine section of the recent Motor Show at Olympia, London.

Engines for every possible use and pocket were displayed. Among the outboards were tiny motors of only 1 h.p. which can be carried in one hand, larger motors for dinghies and launches, and really powerful outboards which will drive either a small cruiser or high-speed racing runabout.

The range of engines intended for permanent installation was equally varied. Petrol and diesel engines ranged from 13 h.p. upwards.

One firm showed a 34 h.p. air-cooled diesel with a dry weight of only 220 lbs. It is priced at £70 in the U.K. Installed in a lifeboat of 21 feet and 7 feet beam with standard 11-inch revolving propeller, it was loaded with 25 adults and three children and yet gave a mean speed of 5.15 knots.

In the remote Falkland Islands, off the tip of South America, there is no public debt, no unemployment and the colony's revenue exceeds its expenditure.

Although the population is only 2230, deposits in the Government Savings Bank total £805,060, 1888 depositors' accounts.

The United Kingdom Information Office, which released these figures recently, quotes the colony's latest report. It states that the principal industry is sheep farming. Last year wool worth £346,170 was exported. Up to March, 1953, the Falklands received £162,390 in grants provided by the United Kingdom under the Colonial Development and Welfare Acts. Last year this included £10,000 for a new broadcasting transmitter. The Falklands, since 1922, have had the first colonial broadcasting service.

In the Falkland Islands Dependencies, whaling and sealing are the only industries. Last year wool worth £346,170 was exported. South Georgia (first occupied by Britain in 1775) had a seasonal population of 1449, including six whaling vessels and two children. Three whaling seasons (October to April) 2270 whalers were caught and exports were worth £16,000.

Britain maintains six scientific bases in the British Antarctic Dependencies, which conduct valuable meteorological, geological and survey work, as well as medical research and studies in ornithology and biology. To assist whalers, weather bulletins covering two million square miles of the South Atlantic and Antarctic Oceans are issued.

"Though pride is not a virtue, it is the parent of many virtues." —Churton Collins.

"There is no greater hell than the failure in a great object." —Keats.

December, 1954.

R.A.N.'S BIG SURVEY JOB

The Royal Australian Navy has about 25 years' work ahead of it to complete its survey of the coastal waters of Australia.

The Minister for the Navy, Mr. J. Francis, revealed this when he announced details recently of the latest phase of the survey. The Navy had been working on the programme since the end of World War I, the Minister said.

H.M.A.S. Barcoo and H.M.A.S. Warrego sailed last month to continue their charting of waters off the N.S.W. and South Australian coasts. The Barcoo went to Backstairs Passage, between Kangaroo Island and the South Australian mainland. The Warrego went to an area between Montague Island, off the southern N.S.W. coast, and Cape Howe, on the N.S.W.-Victorian border.

Both ships will return to Sydney in time to give Christmas leave, after which the Barcoo will return to Backstairs Passage and the Warrego will begin surveying an area near Cape Otway, on the South-west Victorian coast. They will work in these areas until the middle of March.

In the past few years the Navy has surveyed Yampi Sound, King Sound, and Exmouth Gulf in the north-west of Australia; the approaches to Freycinet (W.A.); parts of Spencer Gulf (S.A.); the approaches to Port Adelaide (S.A.); practically the whole of Bass Strait; Westernport (Victoria); various parts of the Great Barrier Reef waters; and Torres Strait.

During World War II, the R.A.N. hydrographic service as a prelude to Allied landings carried out surveys in the waters of the Solomons, the Philippines, and Borneo, often under heavy coastal and air attacks.

"Confidence placed in another often compels confidence in return." —Livy.

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244 FLINDERS STREET, MELBOURNE.
NEW FIRST SEA LORD

Admiral the Earl Mountbatten of Burma will take up his new appointments as Commissioner of the Royal Australian Navy, Admiral of the Fleet, and Chief of the Naval Staff, in March.

He succeeds Admiral of the Fleet Sir E. J. Ryan, who was appointed last month to the same position in Canada.

Earl Mountbatten is the younger son of the late Admiral of the Fleet the Marquess of Milford Haven, who as Prince Imperial of France was First Sea Lord at the outbreak of war in 1914.

Earl Mountbatten was born in June, 1900, and entered the Navy as a cadet just before his thirteenth birthday. In World War I he served in Lord Beatty's flagship and took part in the evacuation of Crete, where a bomb hit the ship and sank her.

Earl Mountbatten was then appointed in command of the aircraft carrier Illustrious. In 1942 he was given the rank of Vice-Admiral.

He finished the war as Supreme Allied Commander, South-west Pacific, in charge of the 200,000 sailors, and was appointed to the new naval post in March.

His commands included the battlecruiser Orontes, and his duties included the evacuation of Crete, where a bomb hit the ship and sank her.

Commodore Buchan.

Commodore H. B. Buchan, C.B.E., D.S.O., R.N., Second Naval Member of the Australian Defence Council, and Chief of the Naval Staff, will succeed Admiral of the Fleet Sir H. A. Showers, C.B.E., as the Flag Officer-in-
NAVY GIRLS' NEW JOB

Women can now volunteer for duty afloat in the Royal Naval Mineweighting Service, which in time of war will be responsible for spotting and reporting the position of aerial mines laid around the coasts of the United Kingdom.

Until now they have been allowed only to man the mineweighting posts ashore. The Admiralty has decided that they may serve in small craft such as yachts, manned by the R.N.M.W.S. to cover approach channels to ports outside the visual range of shore posts.

The women will operate instruments which record the time and bearing of mines dropped by enemy aircraft, and the communication equipment by which information is transmitted to a reporting centre.

The Navy hopes that the new policy will encourage the enrolment into the R.N.M.W.S. of women who are “good sailors,” as well as yachtsmen and owners.

During the last war many members of the W.R.N.S. rendered valuable service in ships.

The R.N.M.W.S. is a civilian organisation administered by the Royal Navy, and volunteers may serve in an emergency on either a part-time or whole-time basis.

Volunteers must be at least 26 years old.

“CRETE,” the official history of New Zealand in World War II, has been written by Mr. Davin, who was on the mission. Mr. Davin’s words, “found itself with a garrison which owed its composition more to accident than design, with a plan that no longer fitted the strategic circumstances, and with troops who were to fight because they were there, and not because they must fight.”

To that he adds the facts that, withdrawn from Greece in urgency when the country was evacuated, many of them through too literal observance by embarkation officers of a general injunction against delay in their embarkation—had left all their equipment, their supplies and, some of them, even their rifles behind them; that there had no more air support that could be provided by a few Beaufighters operating from Egypt; and that the German preponderance in the air was such that the naval operations by daylight in Cretan waters proved to be impossible except at the cost of crippling losses that could not be averted; that at least can be said roundly, in the opinion of the true historian. “One thing at least can be said roundly, in a field where little is certain. Soldiers never fought better than they fought on Crete; and not the least among them the soldiers of the New Zealand garrison. No blame for the loss of the island can fall on the rank and file. Nor should this be taken as implying discrediting commanders. No men ever held positions of responsibility in conditions more inimical to success than did the senior officers in Crete; and no one can fairly press on the spot, struggling men and women, and the ordinary soldiers of the British and New Zealand garrison trapped in that important island stronghold, it was only at immense cost that they did so. Such was their overwhelming preponderance in the air, and the pitch of efficiency in the dive-bombing of ships at sea to which the Luftwaffe had been trained, that they operated by daylight in Cretan waters, and flown by the outstanding fair-mindedness and technical military knowledge for which the Royal Navy is famed.

The men were aware of the great odds in great detail, in clear and lucid sentences, and had the time to point out the glaring mistakes of its possession to turn to the British position in North Africa.

Mr. Davin tells the story of the 12-day battle against hopeless odds in great detail, in clear and simple language that needs no technical military knowledge for its comprehension. He sums up his able and impartial study of the whole complex episode in a paragraph which will illustrate the outstanding fair-mindedness of the true historian. “One thing at least can be said roundly, in a field where little is certain. Soldiers never fought better than they fought on Crete; and not the least among them the soldiers of the New Zealand garrison. No blame for the loss of the island can fall on the rank and file. Nor should this be taken as implying discrediting commanders. No men ever held positions of responsibility in conditions more inimical to success than did the senior officers in Crete; and no one can fairly press on the spot, struggling men and women, and the ordinary soldiers of the British and New Zealand garrison trapped in that important island stronghold, it was only at immense cost that they did so. Such was their overwhelming preponderance in the air, and the pitch of efficiency in the dive-bombing of ships at sea to which the Luftwaffe had been trained, that they operated by daylight in Cretan waters, and flown by the outstanding fair-mindedness and technical military knowledge for which the Royal Navy is famed. The Royal Society of St. George has affiliated with the N.S.W. Division of the Navy League of Australia.

The president of the Sydney branch of the society, Mr. John K. Lavett, announced this last month.

The society is also affiliated with the St. George Regiment, the Australian Sea Cadet Corps, and the Empire Day Movement of N.S.W.
For Sea Cadets

A DAY TO REMEMBER

By D.J.M.

SEA CADETS will remember with pride Trafalgar Day, 1954, in Sydney. For the first time they provided the Trafalgar Day guard of honour at the Cenotaph. Until then, it has always been a R.A.N. guard.

The guard comprised cadets from the training ships Sydney, Warrrego, Australia, Shropshire, and Perth. They made an excellent showing.

Cadets from T.S. Albatross (Wellington) and T.S. T乌鲁 (Newcastle) were able to take part in the Sydney Trafalgar Day ceremony and march, having been given permission to hold a week-end reunion on board H.M.A.S. Vengeance. On Saturday afternoon they helped at the display.

T.S. Sirius (St. George) held two ceremonial church parades to commemorate the Battle of Trafalgar. The first was on October 17, at St. George’s Church of England, Kingsgrove. The second, on October 24, was at St. George’s Church of England, Hurstville. T.S. Sirius had special interest in Trafalgar Day. H.M.S. Sirius was in the van during the actual battle.

T.S. Shropshire (Canterbury-Bankstown) is a newcomer to the Corps. The unit has adopted the name because the commanding officer, Lieutenant “Lars” Seymour, had associations with Shropshire in England and with the old ship itself. Lieutenant Seymour and his band of assistants have worked wonders in setting this unit on its course. I visited the unit recently and found the cadets looking after the ship as T.S. Shropshire should go a long way. Two officers, a petty officer instructor, and 35 cadets attended the unit’s first church parade at St. James’ Church of England, South Canterbury, on November 14.

Anyone going alongside T.S. Sydney (Snapper Island) these days will find a great difference. Cadets of the unit find a new wharf for themselves, with the exception of the pile driving. The force behind the work was Commander L. E. Fysh–our divisional senior officer—who never asks anyone to do what he cannot himself do. I have a copy of an old “Sydney Mail” photograph taken in 1927 which shows the commander helping cadets build the Drummoyne depot. Now, 27 years later, he still shows ‘em how.

An interesting feature of the new wharf is that it is fitted with the old Stuart’s gangway. If gangways could speak what tales this one could tell.

Sydney’s commanding officer, Lieutenant “Alf” Adam, recently returned from Port Moresby, where he took an air-sea rescue boat. He had left two stretches of seawater from the moment the boat left the calm waters of the Barrier Reef until it reached Port Moresby. He tells how he passed the Shropshire—H.M.A.S. Shropshire, that was on her way for scrapping. He said she still looked formidable and proud although her teeth had been drawn.

Cadets from T.S. Australia (Waverley) helped at the H.M.A.S. Penguin fair. This was something the Australia cadets are very ready to do because Penguin has the responsibility of mothering the Boom Defence Depot, in which the unit parades. It is pleasing to see the strength of this unit, and others, increasing.

T.S. Warrrego (Woolwich), looked like a sinking ship not long ago, has suddenly sprung to life. From a strength of near enough to zero it now has about 30 cadets on strength, and I believe a few more are likely to be added very soon. What is the secret of this splendid recovery? I believe it lies in individual effort. Warrrego is an old school and made a show a few months ago which gave the grown-ups who watched it an insight into what the Sea Cadet Corps does.

Parents must be shown that in a steady 10 to 15 knots.

THE NAVY

December, 1954.

THE GALLANT FIGHT OF H.M.S. "GLOWWORM"

A Story Of Heroism In Battle, by W. G. RUTLAND.

The North Sea has rather a notorious reputation for dirty weather. On a certain April afternoon in 1940 this reputation was being very much maintained. It was the famous little German destroyer Glowworm, and how she was at it. To begin with, Glowworm was a first-class destroyer. She was fitted out with full speed in an effort to catch up with the British ships. She was never able to catch up, but for a time she was a difficult opponent. The German guns were then fitted with a new type of gun, which was not very effective against British destroyers. However, much time was spent on these guns, and Glowworm was once more able to take on her opponent. She fired her guns and was able to hold her own, and in the end she was able to escape. It is not surprising, therefore, that a British ship should have been able to catch her. Glowworm proved as thrilling and gallant a fight as any in naval history.

The first incident to record in this brave adventure is the cry: "Man overboard—starboard side, which echoed through Glowworm during the afternoon. Immediately this happened the ship was swung off course and rescue preparations were made. The first change was made, and the German gunnery was unable to score any hits. Glowworm was now able to keep station and launch her attack. The second discharge of torpedoes was made at top speed. In spite of the changes continued for some minutes before either side was able to keep on their feet, and even "B" gun's crew would fare little better. It is not surprising, therefore, that under these circumstances exchanges continued for some minutes before either side was able to register a hit upon their target. Then it was the crew of Glowworm who had the responsibility of seeking and destroying submarines. Her fire power could prove as thrilling and gallant as any in naval history.

The gallant fight of H.M.S. "GLOWWORM" was H.M.S. Glowworm, and how she proved as thrilling and gallant as any in naval history. The nation was being threatened by the German navy, and Glowworm had the responsibility of destroying the German ships. The ship was fitted out with a new type of gun, which was not very effective against British destroyers. However, much time was spent on these guns, and Glowworm was once more able to take on her opponent. She fired her guns and was able to hold her own, and in the end she was able to escape. It is not surprising, therefore, that a British ship should have been able to catch her. Glowworm proved as thrilling and gallant a fight as any in naval history.

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be denied, and with a grinding crash she dug her bows deep into the Hipper's side. As she slid back from the impact and drifted clear, those of her crew still alive abandon the ship, and shortly afterwards, still under intense bombardment, she settled in the water, and finally sank below the surface.

At the start of the battle, Glowworm's total complement was 140. When all was over, and the Hipper's crew were trying to save life as earnestly as they had wanted to destroy, 30 men were picked up and taken aboard the German cruiser. One hundred and ten, including the captain, had been lost. As a result of the action Hipper was badly holed, but managed to limp her way back to Germany, where she remained. The Glowworm's valiant captain, Lt.-Comdr. Roope, R.N., was posthumously awarded the Victoria Cross.

The story of the Glowworm is a sad but proud one. Circumstances had forced her into a lone battle against overwhelming odds. Everyone on board must have known what the ultimate result would be, but they did not waver, and by their sacrifice and devotion to duty there is little doubt that many hundreds of lives were eventually saved.

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FOR SEA CADETS

Continued from page 30.

Joining the Sea Cadets their boys are not being recruited for war. I am sure many parents, if they realised the objects of the Corps, would want their boys to become sea cadets.

Keep it up Warrego. Remember the exploits of the ship whose name you have adopted. It is a name to be proud of.

Appointments:

L. J. Seymour, appointed to T.S. Shropshire, in the rank of Lieutenant.
A. L. Brookers, T.S. Shropshire, sub-lieutenant.
D. Keily, T.S. Perth, sub-lieutenant.

H. Lawson, T.S. Tobruk, chief petty officer instructor.
B. Walsh, T.S. Perth, sub-lieutenant.
G. Don, T.S. Tobruk, chief petty officer instructor.

Advanagements:

Cadet leading seaman to cadet petty officer: 722 A. Gillett, T.S. Sydney.
Cadet leading seaman to cadet petty officer: 534 G. H. Stevens, T.S. Australia.
Recruit sea cadet to cadet ordinary seaman: 1101 B. S. Crossweller, 1117 H. Lovewell, 1128 S. Seitz, Warne (all T.S. Perth).

Recruits, October Entry:

T.S. Albatross: 1197 W. Scott.

TASMANIAN CADETS

G.E.W.W.B.—In Hobart, T.S. Devonport held an “Open Day” at the naval depot H.M.A.S. Huon to mark the sea cadets’ final parade of the year.

About 100 parents and friends saw the cadets under instruction in classes of gunnery, seamanship, and signals, including a sea boat’s crew called away without warning.


Mr. Hand presented prizes to the cadets. He said he was impressed by their smart turn-out.

Cadet Able Seaman L. Abbott won the cup for the best cadet of the year.

Two cadets have reached the age limit and will do their national service training with the R.A.N.

They are cadet petty officer J. Bramling and able seaman G. Picken.

In Launceston on November 13 the Governor of Tasmania, Sir Ronald Cross, unveiled a memorial to Lieutenant W. Collins, who landed from the brig Lady Nelson in 1804 at the place now known as King’s Park.

On arrival at the Park the Governor inspected a guard of honour drawn from the sea cadets of T.S. Tamar under the command of Lieutenant G. Cutts, A.S.C.C.

After the unveiling ceremony the landing of Lieutenant Collins was re-enacted. Cadets from T.S. Tamar, dressed in period uniform, manned the whaleboat which pulled Lieutenant Collins ashore.

The following have received appointments in the Tasmanian Division A.S.C.C.: Sub-Lieutenant H. I. Ingram, T.S. Leven, Ulverstone; Sub-Lieutenant D. Heath, T.S. Devonport; Sub-Lieutenant Heath, a former sea cadet, has just completed his national service training with the R.A.N.
Sycamores are in quantity production for the British Services, and are already in operation with the Royal Air Force, the Army, the Royal Australian Air Force, the Royal Australian Navy, the Belgian Air Force and British European Airways.
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