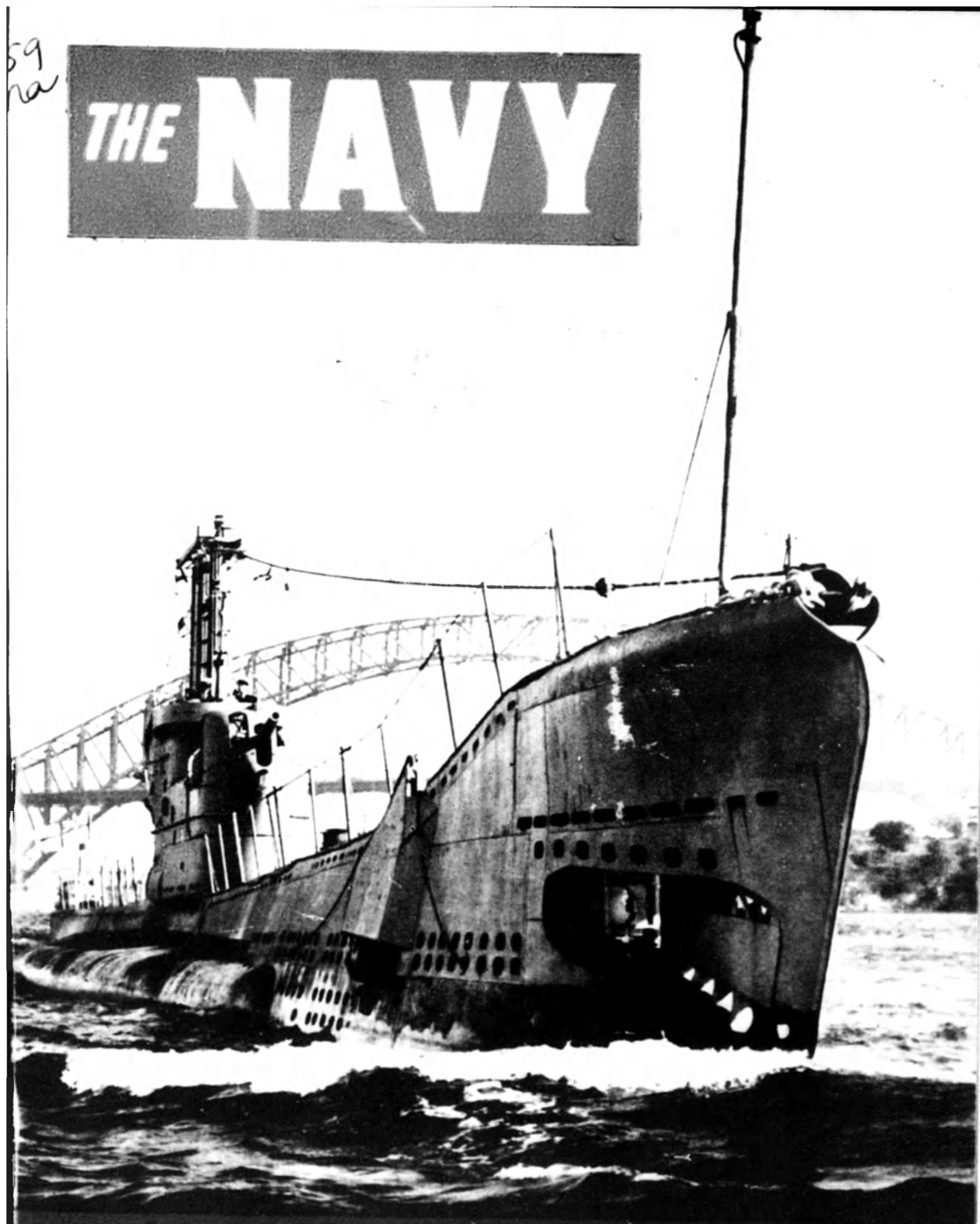
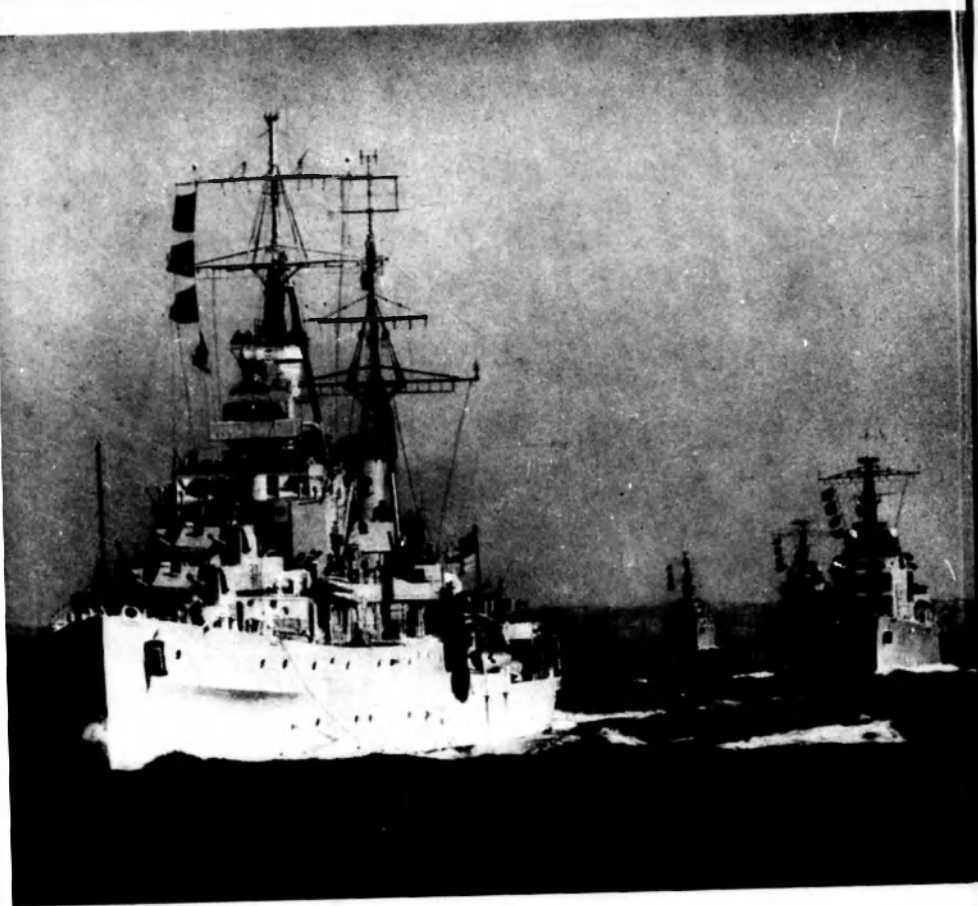


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THE NAVY





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THE NAVY

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— Admiral Sir Herbert Richmond



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THE NAVY

IMMEDIATE READINESS—NAVAL POLICY

FIRST LORD

TELLS ADMIRALTY'S
VIEWS ON THE
ROYAL NAVY'S ROLE

SHORTLY before he left England recently on his visit to Australia, the First Lord of the Admiralty, the Earl of Selkirk, replied to a debate in the House of Lords in which the Earl of Cork and Orrery contended that selling and scrapping of ships of the Reserve Fleet was, under prevailing conditions, becoming a national danger. Having drastically reduced the conventional Navy and not yet having "the start of a nuclear Navy," they were in the position of falling between two stools.

In his reply, the First Lord said that the Government was in a difficult position with a very wide choice of possibilities. They were, for instance, in danger of being accused either of preparing for the next war in terms of the last, or, alternatively, of forgetting the lessons of the last war altogether. What they really had to do was to bring experience and equipment up-to-date; and that was what they were trying to do.

The First Lord continued: "Our central policy is to prevent war from taking place. There is nothing new about that; we have always done so; but it involves perhaps rather a change of method. We do so by the united strength of ourselves and our Allies, and by the instant readiness of all forces for action. I do not mean simply nuclear power alone, but all forces of the Western World. For that reason I want to emphasise the development of new construction, rather than the maintenance in various



The First Lord of the Admiralty, The Earl of Selkirk, speaking in Sydney recently.

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"**M**ay the great God, whom I worship, grant to my country and for the benefit of Europe in general, a great and glorious victory, and may no misconduct in anyone tarnish it, and may humanity of the victory be the predominant feature in the British fleet."

A prayer written in Nelson's diary October 21, 1805.

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stages of obsolescence of our older ships.

Reserve Categories

"I should like to explain how, within the resources which are available, we are carrying out that policy.

"The Reserve Fleet consists of three parts. First, there is the Operational Reserve. This consists of ships which can put to sea, fully equipped and manned, within a very short period. It consists of a quite substantial force which would materially increase the number of escorts that we could make available.

"The second part consists of the Supplementary Reserve. These ships are in good condition, but since they are 'mothballed' they are at rather longer notice for service than the ships of the Operational Reserve. Together these two Reserves form, in destroyers and frigates, a force of about the same size as the sea-going fleet. We are not taking any ships out of 'mothballs' to scrap them. We do not allow any ship to disappear from these maintained Reserves before its useful time of life has ended.

"The third class is the Extended Reserve. The only attraction of the Extended Reserve is that because the ships are unmaintained, they cost a comparatively small amount of money. But they are all ships of war-time design and construction and have not been modernised since then. The majority have not been refitted for four or five years, and in many cases even before that. They are lying unmaintained and therefore they deteriorate. What are these ships? They are cruisers which are from eighteen to twenty years old; destroyers which are from fourteen to seventeen years old; ocean minesweepers of war-time construction; and frigates mostly built between 1911 and 1911.

"I now come to the aircraft carriers, which are really the origin of this debate. All these were laid down either before or during the war. They simply cannot be modernised to bring them into step with the requirements of the aircraft we are using to-day. It is not even a question of money. Even if we cut them down to the waterline, they would still not be suitable. It has been suggested that even if these older carriers cannot carry modern aircraft they could carry anti-submarine helicopters for trade protection. The difficulty of providing carriers for this purpose, with the additional expense of providing helicopters, and keeping both at the right degree of readiness, is that it would cost a very great deal of money. But there is a further objection. We have to hold a reasonable balance between the naval-air side and conventional surface forces. I would ask whether the House would not prefer us, instead of having a rehabilitated carrier, equipped only with helicopters — that is, without fighters; without strike aircraft — to spend the same amount of money on modern anti-submarine frigates."

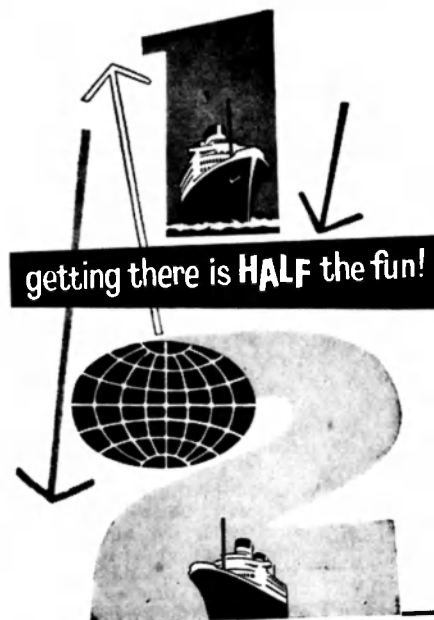
About frigates, the First Lord said: "A great deal of emphasis has been put on the importance of convoy work, and with this I entirely agree. But we are much better in the modern circumstances, having modern equipment, with the more advanced type of anti-submarine weapons and radar, than we should be in bringing up older ships. I should much rather concentrate on the modern ships than I should on the older ships. May I give just one or two examples of what is involved? Naval frigates vary a great deal, but I should like to give you an example of what is involved. Take a "Castle" or a "Bay" class frigate. It would cost several hundreds of thous-

ands of pounds and would take many months of work to bring it to its original condition; that is, the condition it was in when it was built somewhere in the early 'forties. But even then its speed would be quite inadequate to cope with any modern submarine. That is the difference between the position in 1941, when we had American "Town" class destroyers, which I concede were very useful indeed.

"There is another point, and that is that American "Town" class destroyers were maintained by the Americans right up to the time when they were handed over. They went to sea within a week or so of being handed over, and that is a big difference. What I am talking of now is the unmaintained reserve, and, quite frankly, we simply have not the money at the present time to maintain this extended reserve. I cannot pretend that we have. If we do not maintain it, I am afraid I do not think there is a great deal of point keeping it indefinitely. Between the wars, submarines made comparatively little progress, but to-day there has been a tremendous advance in submarine development and in the speed at which they can work. The frigates of the last war would be practically useless against them. What I have to face is that I know that submarine development is going on further still. It is not going to stop where it is now. What are required are frigates with a speed of some 26 knots. The war-time frigates would not really meet the job of anti-submarine chasing at the present time.

Cost of Modernisation

"I accept that we could spend money. We could modernise these war-time frigates. We could spend, perhaps, £1½ million to £2 million over two years, and we could bring them



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up to a modern standard with the whole range of Asdic, anti-submarine weapons, radar and wireless. But once you have done that, if you compare that with a new Type 14 frigate, costing £1½ million and taking 2½ years to build, there really is not any advantage in doing it. And, of course, with a new ship you would get a better hull than the five or ten-year-old hull which you would get with a modernised old frigate. You would have a 20-year life.

"How far is it worthwhile maintaining ships in reserve which would be called into use only at such high cost and after such an extended length of time? Are we likely in any future global war to have enough time to use ships which would take months to bring forward? I must say that I have considerable doubts on that, and I think it is better to concentrate on instant readiness rather than on diverting our resources to a reserve which we should probably never use. I would go further. I would go so far as to say that ideally we should have no reserve at all. All the ships should be manned and ready for service at the proper time.

"There have been suggestions made at some time that we should disperse these ships around the Commonwealth, and particularly to such places as Australia and Canada, but the moment the details of this plan come to be examined it presents considerable difficulties. I have no reason to suppose that the Commonwealth countries have any money to spend on these ships. They would prefer, I believe, to spend their money on new sea-going fleets. If they were modern ships, of course, it would be quite different.

"We could, of course, at great expense, bring these older ships forward to current use, but what I am concerned with is what the position is going to be perhaps seven to ten years hence. I am sure we are wise to keep our eye not on ships which would not even meet the current situation but on those which will meet our requirements in the years to come, and it is for that reason that I should like to concentrate attention on our building programme.

"I am only considering today how I use the resources which Parliament is able to put at my disposal," continued the First Lord. "That is where I think I can tell a not altogether discouraging story. We have coming into the Fleet in the next two years two aircraft carriers, two cruisers, thirteen destroyers and frigates, sixteen minesweepers and seventeen miscellaneous craft and a number of submarines. All these will come into service as either new or completely modernised ships. I am sure that this is the right policy. I believe that the correct emphasis is on a sea-going Fleet rather than on the Reserve Fleet, though I do not underestimate the importance of the Operational Reserve, to which I have referred. But I do not think that we should concentrate on a large Reserve Fleet.

"The immediate readiness and flexibility of a sea-going Navy, maintained on a world basis, from the West Indies to Hong Kong, and from the South Atlantic to the Firth of Forth, is of far greater value than keeping ships which can be used only after a considerable length of time. Moreover, I do not think it is worth keeping the highly trained personnel we have in present circumstances, except with the best equipment. Though the amount of equipment may seem

scarce compared with what we want, I can assure you that the Fleet is maintained at a very high order. In placing our emphasis on a sea-going Fleet and on the Operational Reserve we are acting fully in line with our N.A.T.O. allies. I do not think that they would be in the least interested in an Extended Reserve Fleet which could not be used quickly. That is the emphasis which Admiral Wright (Supreme Allied Commander Atlantic) put on the matter.

"What I am concerned with is what we want to have in ten years' time. It is no good thinking only of today. I do not think that the immediate danger of a major conflict is great, but I am not prepared to say what the position may be in five, six or more years' time. Before the 1914-1918 war it was clear that supremacy at sea would rest on Dreadnoughts. During the period 1918 to 1939 it was equally clear that the aircraft carrier would be the key to naval strength. But what are we going to forecast for today? I do not pretend that I can give the answer, but what I can say is that I have set up with the highest authority and best advice I can get, a Fleet Requirements Committee, under the Deputy-Chief of Naval Staff, to look into this problem, to see what kind of ship we should look for in ten years' time. So far, the Committee has confirmed the correctness of the decisions already made.

"We are building a Fleet with modernised aircraft carriers with the latest aircraft; guided missile destroyers with a new form of anti-aircraft defence; general purpose frigates, embodying all the lessons we have learned on frigate design and incorporating new types of asdic and radar which we believe to be the best in the world; and, most important of all, nuclear-propelled

TRAINING SOUTH AFRICA'S SEA OFFICERS

THE NAUTICAL COLLEGE "GENERAL BOTHA"

At Gordon's Bay in the Cape, 35 miles from Cape-town and in the upper corner of False Bay, a completely rebuilt and up-to-date nautical college is situated. This nautical college succeeds the Training Ship General Botha, which started its activities at Simon's Town in 1922.

The objects of the college are twofold: to give boys who are keen on a seagoing career as an officer in the Merchant Navy a comprehensive grounding in their future career and to develop smartness, alertness, resource and cheerful acquiescence to discipline. The motto of the college is "Honour and Duty."

Although the General Botha is now established alongside the sea and not on it, the atmosphere within its boundaries is entirely that of a ship, and cadets when going out of the grounds go "ashore."

The sea demands high qualifications from its officers in modern times, and in consequence entries from 1957 have been restricted to those boys who have passed junior certificate or equivalent and are between the ages of 14 years 6 months and 16 years 4 months at the time of entry. The course

IMMEDIATE READINESS

from Page 9

submarines. The decision to buy an American reactor for the Dreadnought will, we hope, accelerate its introduction into the Royal Navy by at least two years. These are the things on which I think we ought to spend money, not on obsolete ships. I believe you will agree, when you see the position, that that is a wise decision to take at the present time."

lasts two years and academic and technical training is given to senior certificate standard. The subjects covered are the two official languages, mathematics, physics, geography, navigation and seamanship. An additional and optional final examination is available of matriculation exemption status.

The Union Department of Education Arts and Science subsidises the running of the establishment quite substantially but certain fees are payable by parents, although at the moment for those in need, quite a few bursaries are available. These fees are £120 a year in addition to £3 nomination fee, plus £2 a year medical fee and £5/5/- a year pocket money, which is repaid to the cadets at 2/6 a week. The £120 a year may be paid as parents wish but not less than monthly in advance.

The fees cover hostel expenses, clothing, including uniforms and laundry, transport, haircutting, shoe repairs, technical books, weekly cinema. This is little more than it costs to keep a youth at home.

The cadets on joining are fully kitted up and are no further expense to their parents during the two years, other than a few minor items, such as sheets and sports gear.

As well as practical seamanship, training is given in the management of all types of boats, and normal sports activities include rugby, cricket, tennis, boxing and squash. Facilities are available for other recreation and hobbies. There is a large library with adjoining reading and writing room.

The daily routine of a General Botha cadet starts at

6.30 a.m. with Reveille, followed by showers and the first of the many "clear up decks" until 7.15, when he attends physical training.

After breakfast he parades and attends prayers until 9 o'clock. During the morning he may attend Afrikaans or English classes, geography, physics, mathematics, or a navigation or seamanship class, using many items of practical equipment.

Scholastic studies continue until 4.10 p.m. with one hour for lunch, and after tea comes either boxing, band practice, sports practices or divinity classes and once a week a complete "clean ship" (spring clean) of the whole establishment, where everything is done by the cadets except immediate activities in connection with the catering arrangements. Prep. follows supper from 6.15 to 7.30 p.m. Evening prayers at 8.30 p.m. precede turning in to bed with "lights out" at 9.00 p.m.

Throughout his two years' training, the cadet lives a healthy, well-ordered life. He is taught discipline and self-respect; he learns the value of comradeship and acquires the useful habit of doing things quickly and of being alert at all times. He is taught respect for superior officers and all parents agree that the physical and mental development during the two years is outstanding.

Candidates have to pass the Ministry of Transport eyesight test before being finally entered in the college, and it should be noted that first-class vision and colour vision is necessary for this.

(Please turn to page 27)

THE NAVY

SEA SCHOOL

The Royal Australian Naval College Trains The Navy's Future Officers



Officers, Masters, and Ship's Company fallen in for the Commissioning Ceremony, 20th January, 1958.

SITUATED on a magnificent site amid beautiful surroundings overlooking the deep, broad waters of Jervis Bay, the Royal Australian Naval College is the initial training ground of most of the future officers of the Royal Australian Navy.

All those associated with it are proud of the fact that it is one of the most democratic institutions in the Commonwealth; for every young man who has certain essential qualifications, and comes within the appropriate age-groups, has the opportunity of competing for entry to it so that he may begin training as a cadet-midshipman and enjoy the many much-cherished advantages that entry provides.

The College is the gateway to an attractive and extremely interesting career, in which those who are fortunate enough to be engaged often find themselves taking part in unusual and stimulating experiences. In addition, most of them travel to countries overseas, and all of them share the companionship of intelligent, ambitious, and

energetic brother-officers who, like themselves, seek an outlet for their talents and capabilities away from the hum-drum routine of many of the occupations of civilian life.

Advanced training courses overseas, and exchange appointments with the Royal Navy, not only enable officers selected for them to see a great deal more of the world than many other people see, but also provide them with opportunities for learning more and more of the methods and techniques of the profession they have chosen.

There are two ways of entering the College. One is known as the normal entry, for boys aged between 15½ and 16½ in January of the year in which they join. The other is the matriculation entry, for young men aged not more than 19 in January of the year in which they join.

Candidates must be British subjects, or the sons of British subjects, and be substantially of European descent.

They must be legally domiciled in Australia, although the Minister for the Navy may accept applications from candidates not so domiciled, if acceptable assur-

ances are forthcoming from their parents or guardians that they will be.

Applicants for the normal entry are required to pass a qualifying educational examination about equal to intermediate standard. Applicants for the matriculation entry must have already matriculated for an Australian University, or intend sitting for the examination during the year in which they submit their applications.

Eligible candidates are also required to undergo a specified medical examination. Those who pass both the educational and medical examinations then appear before an interviewing committee, and the selected candidates enter the College at the end of the following January.

In addition to their free clothing and free education, they receive free books.

During the early stage of their training, normal entry cadet-midshipmen receive pocket money and later draw active pay. Matriculation entry cadet-midshipmen draw active pay from the day they enter the College.



The Chief of Naval Staff, Vice-Admiral Sir Roy Dowling, K.B.E., C.B., D.S.O., inspects the Guard on his first visit to the R.A.N.C. after its return to Jervis Bay.

The life of a cadet-midshipman at the College is full of interest. He engages in general studies, gains theoretical and practical nautical knowledge, and takes part in athletic sports and games and other forms of recreation in delightful and healthy surroundings.

Part of his recreation includes sailing and racing in the Tam-O-Shanter and other college yachts and dinghies, cutters and other small boats. Some cadet-midshipmen have been included in the crew when the Tam-O-Shanter has competed in the Sydney to Hobart yacht race.

Religious instruction has an important place in the College curriculum, and all cadet-midshipmen attend church on Sundays and other special days.

Normal-entry cadets graduate at the College in December of their third year, and those of the matriculation entry in August or September of their first year.

They then gain sea-going experience by serving for three

months in the R.A.N. training frigate.

They live and work in the ship under the same conditions as naval ratings, so that they will learn the ship's routine in its relation to the sailor and become acquainted with the mode of life on the lower deck.

They also do a short air course at the R.A.N. air station at Nowra (N.S.W.).



The Gymnasium and Study Block form the background to this scrum in a Rugby match between the College and Nowra High School.

At the end of this period they are promoted midshipmen, and go to the United Kingdom for further professional and academic training at the Royal Naval College at Dartmouth.

Having completed this training, which occupies 16 months, they are promoted acting sub-lieutenants and — except for electrical specialists — go to sea in ships of the Royal Navy or the Royal Australian Navy.

After that, they can specialise in one or other of the seamen, engineering or supply and secretariat branches. Officers of all specialisations eventually become eligible for high appointments.

Officers who specialise in engineering complete two years' basic training at the Royal Naval Engineering College at Manadon, Devon (England), and may then volunteer for further specialisation in marine engineering, aeronautical engineering, or ordnance engineering.

After their initial training at the Royal Australian Naval College and the Royal Naval College, midshipmen selected to become electrical officers are sent to Australian Universities to study for the degree of Bachelor of Engineering.

"BLESS THIS SHIP"

H.M.A.S. YARRA — Third of her Name

TIME and tide wait for no man, but the Naval Board — and all those hundreds waiting to see the launching of the Royal Australian Navy's latest arrival from the building slips — had to wait for the time and tide to be propitious at Williamstown Dockyard on Tuesday afternoon, September 30. The launching of H.M.A.S. Yarra was timed for 3.45 p.m. All was in readiness except for

one thing. A minute or so after the appointed hour it was announced over the public address system to the waiting multitude that the ceremony

**TYPE XII A/S FRIGATE
LAUNCHED AT
WILLIAMSTOWN
SEPTEMBER 30**

SEA SCHOOL — from opposite page

Some of the officers selected for the supply and secretariat branch are given opportunities to graduate in law.

Officers of the seaman specialisation, those who keep watch on the bridge, navigate ships and command vessels that range from minesweepers to aircraft carriers, may specialise in navigation-direction, gunnery, torpedo, anti-submarine methods and technique, communications, physical training, or as pilots or observers in the Fleet Air Arm.

Officers of the engineering and electrical branches may sub-specialise as pilots or observers.

Whatever specialisation an officer may undertake, he will find that, apart from leading an active and fascinating life, every minute of which is filled with interest, he will have the satisfaction of playing a leading part in the service of his country in peace and war.

And even while he is still at the Royal Australian Naval College, he will realise that his training is being directed towards fitting him for such service both at home and abroad.

would be delayed for a short while owing to the fact that the tide was not right.

When, however, time and tide had arrived at a correct confluence, the word was given, the champagne bottle shattered, and Yarra glided with gathering speed down the ways to a perfect launch.

The day was just right for the occasion, with warm, bright sun; sparkling water: a large and enthusiastic crowd of spectators; and, central figure of attraction, the slim, shapely lines of the ship, gleaming in her suit of new light grey paint, reaching high up to her lifted bows above the launching cradle.

The flag of the Naval Board, with its anchor device, stood out in the breeze from a short staff erected amidships on her hull. Among those on the staging carrying the official guests were the Minister for Defence, Sir Philip McBride, and Lady McBride (who performed the christening ceremony); the Minister for the Navy, Mr. Davidson, and Mrs. Davidson; the Chief of the Naval Staff, Vice-Admiral Sir Roy Dowling, and Lady

Dowling; the Second Naval Member, Rear-Admiral W. H. Harrington, and Mrs. Harrington; Rear-Admiral and Mrs. C. C. Clark; Mrs. Townley, wife of the Minister for Supply; Commodore and Mrs. P. Perry; the Secretary of the Navy, Mr. T. J. Hawkins, and Mrs. Hawkins; Rear-Admiral and Mrs. G. Gatacre; Rear-Admiral A. W. R. McNicoll, Captain R. J. Robertson; the U.S. Naval Attache, Captain Clarence White, and Mrs. White; the Netherlands Naval Attache, Captain F. G. H. van Straaten, and Mrs. van Straaten; the Indonesian Military Attache, Lieut.-Colonel Basoeeki Rachmad, and Mrs. Basoeeki Rachmad.

When all was ready, the Principal Officer of the Dockyard, Captain L. N. Dine, opened the ceremony with the words:

"Seeing that in the course of our duty we are set in the midst of many dangers and difficulties and that we cannot be faithful to the high trust placed on us without the help of Almighty God, we invite you, Reverend Sirs, to invoke the blessing of God upon this ship and upon all who serve in her, now and in the future, that she may sail under His good providence and protection, and that there may never be lacking willing and skilled men to serve in her faithfully."

The Protestant Chaplain then said: "May God the Father, God the Son, and God the Holy Ghost bless and hallow this ship for use in His Service, and may his protection be with her now and always. Amen."

The Roman Catholic Chaplain then said: "May the blessing of God Almighty, Father, Son and Holy Ghost, descend upon this ship and remain with her always. Amen."

All present then joined in the Prayer: "O Thou that sittest above the water floods, and stillest the raging of the sea, accept, we beseech Thee, the supplication of Thy servants for all who in this ship, now and hereafter, shall commit their lives into the perils of the deep. In all their ways enable them truly and godly to serve Thee, and by their Christian lives set forth Thy glory throughout the earth. Watch over them in their going forth and in their coming in, that no evil befall them. nor

mischievous come nigh to hurt their souls. And so through the waves of this troublesome world, and through all the changes and chances of this mortal life, bring them of Thy mercy to the sure haven of Thine everlasting Kingdom: through Jesus Christ, our Lord. Amen."

This was followed by the Lord's Prayer, after which all present sang the Hymn "O Father, King of Earth and Sea, we dedicate this ship to Thee."

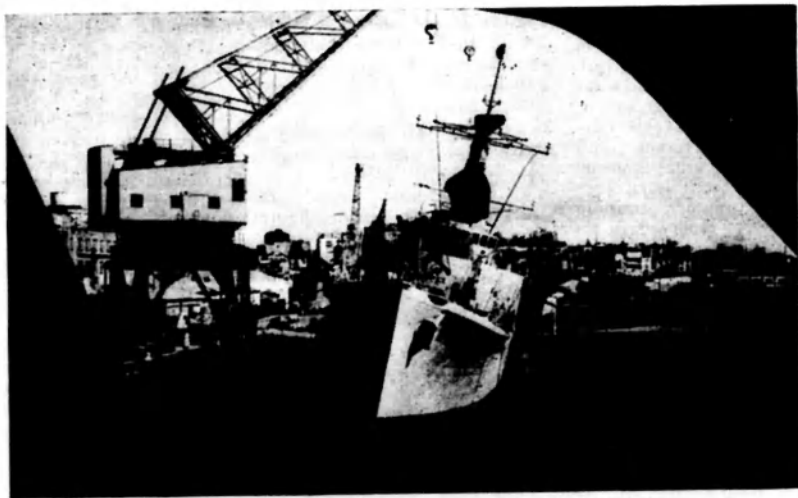
The christening ceremony was then performed by Lady McBride, and Yarra, third of her illustrious name, glided down the ways to the water on which she will live her life.

THE DESTROYER YARRA

H.M.A.S. Yarra the first was one of the original units of the

first Royal Australian Naval Squadron. A torpedo boat destroyer of 700 tons displacement, she was built by Denny Brothers, of Dumbarton, Scotland, and commissioned on the 10th September, 1910.

She departed from Portsmouth on the 19th September, 1910, commissioned as a Royal Navy ship for the voyage to Australia, and in company of her sister ship Parramatta and escorted by H.M.S. Gibraltar, arrived at Broome, Western Australia, on the 15th November, where the two destroyers passed to the control of the Australian Government. They arrived at Williamstown on 10th December, 1910, and represented the first two units of the first Australian Fleet.



H.M.A.S. QUADRANT UNDERGOES TILTING TEST AT GARDEN ISLAND

The angle at which she listed caused many people to ring Naval Headquarters anxiously

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soon (1911) to be designated the Royal Australian Navy.

At the outbreak of World War I, Yarra, with her sister ships Warrego and Parramatta, formed the destroyer component of the Australian Fleet commanded by Vice-Admiral Sir George E. Patey.

During the opening phases of the war she operated with the Fleet in the search for Von Spee's Pacific Squadron. Later she took part in the capture of the German colonies in the south-west Pacific, and a number of her sailors were landed at Kabakaul (New Britain) under the command of Lieutenant G. A. Hill, R.N.R., to take part in the operations ashore against the Germans.

Yarra was present at the surrender of German New Guinea at Rahaul on 13th September, 1914, and remained in New Guinea waters for several months. She left Rabaul on 5th February, 1915, for return to Australia, where she undertook patrol duties along the Australian coast for some months.

On 10th May, 1917, she sailed from Sydney in company of Parramatta and Warrego for the Mediterranean, being joined en route by Swan, Huon and Torrens to form an Australian Flotilla of six destroyers. The ships were ultimately based at Brindisi for Adriatic anti-submarine patrol. On this work the destroyers were responsible for blocking the southward passage of submarines through the Adriatic narrows into the Mediterranean and also the safe transit of Italian transports to and from Albania.

On 17th October, 1918, the Yarra and Torrens sailed for Mudros and later in that month sailed for Port Said to assist Japanese units in escorting troops to Salonika. In December, 1918, Yarra served in the

Black Sea and later proceeded to England where she arrived on 11th January, 1919.

On 6th March, 1919, Yarra sailed for Malta, from which port the entire Australian Flotilla sailed for home, reaching Darwin on 26th April, 1919.

The remainder of Yarra's service was confined to the work of a peace-time destroyer in Australian home waters until 30th September, 1929, when she was transferred to Cockatoo Island Dockyard for breaking up after a long and creditable period of service.

THE SLOOP YARRA

H.M.A.S. Yarra the Second (after which the new vessel is named) was a sloop of 1,060 tons standard displacement, built at Cockatoo Island Dockyard, Sydney, and commissioned on the 21st January, 1936.

From January, 1936, until the outbreak of war in 1939, H.M.A.S. Yarra was in Australian home waters. In September, 1939, she was placed on patrol escort and minesweeping duties until 10th December, 1939, when she joined the 20th Minesweeping Flotilla R.A.N. and departed from Fremantle for the East Indies Station on 28th August, 1940.

From September, 1940, until March, 1941, the Yarra was on escort and patrol duties in the Red Sea and took part in action against Italian destroyers 35 miles off Jabal-at-Tair Island, Southern Red Sea, on 20th October, 1940, leading to the destruction of the Francesco Nullo on Harmil Island.

In Persian Gulf operations in May, 1941, Yarra took part in the suppression of the Iraqi revolt led by Rashid Ali. Yarra also played a leading part in the operations leading to the securing of Iranian (Persian) ports and naval base, including the oil refineries at Abadan and

the capture of German and Italian shipping at Banda Shahpur and Banda Abbas. Yarra captured the Italian ship Hilda at the last-named port on the 27th August, 1941.

After escort and patrol duties in the Mediterranean and Red Sea, Yarra arrived at Colombo en route for Java on 30th December, 1941. She then arrived at Batavia on 11th January, 1942, and undertook patrol and escort duties in support of the Malayan Java campaigns. Yarra rescued 1,800 survivors from the burning troop transport Empress of Asia while under air attack at Singapore, and continued escorting duties until the fall of Java.

Yarra sailed from Batavia as one of an escort of a convoy of five merchant ships and a small motor minesweeper, bound for Tjilatjap. Shortly before they reached that port, however, they were ordered not to enter as the Japanese were approaching.

On 3rd March, 1942, Yarra picked up forty officers and men, survivors from a Dutch ship which had been sunk.

HOPELESS FIGHT

At dawn on 4th March, an enemy cruiser force attacked the convoy, whose sole armament consisted of the Yarra's three 4-inch guns and 3 pdrs., one merchant ship's 4-inch gun and the other ship's machine guns.

The action was of short duration, though the enemy's initial firing was bad. The entire convoy was destroyed. Yarra put up a gallant fight in an endeavour to protect the convoy, but it was of no avail. She put down a smoke screen but was rendered helpless within 20 minutes. Against such a weight and power of fire the action was short-lived.

Thirty-three of Yarra's complement got away on two Carley floats, a length of

planking and two small rafts. Only thirteen, however, survived, being eventually picked up by the Dutch submarine K11, 260 miles south of Java after being 105 hours in the water. They were taken to Colombo. None of her officer complement survived.

THE FRIGATE YARRA

H.M.A.S. Yarra the Third is an Anti-Submarine Frigate — the first of four to be built for the R.A.N. A Whitby-class frigate of prefabricated construction, she has a length of 370 ft. and a beam of 41 ft. Her armament will include a twin 4.5-inch gun mounting, two anti-submarine mortar mountings, two double torpedo tube mountings, and eight single torpedo tube mountings. She will be a very effective and valuable addition to the anti-submarine resources of the Australian Fleet. The first of her sister-ships will be launched at Cockatoo Island Dockyard, Sydney, next January.

The occasion of her launching must have brought poignant thoughts to some of those present. For among them was a former Commanding Officer of H.M.A.S. Yarra the Second, who commanded her throughout her war service in the Indian Ocean, the Red Sea, the Mediterranean, and Persian Gulf, and in the ABDA Area almost to the eve of her loss, when he was succeeded by Commander R. W. Rankin, who was lost with her. That former Commanding Officer is now Second Naval Member of the Australian Commonwealth Naval Board — Rear-Admiral W. H. Harrington.

And also among the 650 guests at the launching were eight survivors, and relatives of men who had been lost when Yarra the Second was sunk as a result of her gallant action with a Japanese cruiser and destroyer force in March, 1942.

NEW P. & O. "CANBERRA"

A mechanised model of the new P. & O. liner "Canberra", now on exhibition at the Brussels World Fair, will be shown in Australia later this year.

The "Canberra" will be the largest and fastest ship built in Britain since the "Queens."

Her keel was laid at Belfast in September, 1957, and she will be delivered late in 1960.

She has been called the "ship of the future" because not only will she be the largest turbo-electric liner ever built in Britain, but she is of almost revolutionary design.

Her twin funnels, side by side, and all her machinery will be aft, not only giving her an unusual appearance but providing extra deck and other space for passengers.

She will provide air-conditioning throughout for her 3,250 passengers and crew, and her speed of 27½ knots will shorten the U.K.-Australia return voyage by two weeks.

The display unit for the model embodies a 10 ft. illuminated panel illustrating the main compartments in the ship, each of which in the model lights up when the viewer presses a button.

There are 20 buttons.

Viewers of the model can also "telephone" the ship. Dialling numbers selected from an illustrated panel and lifting the receiver they are able to hear a voice in English, French or German describing the part of the ship they have "contacted."

By pushing levers they can also operate on the model ship scale models of novel equipment which "Canberra" will carry when she is completed.

One is a "transporter" device which will be fitted into the forward part of the ship to load and unload both cars and cargo horizontally through the ship's

side. A miniature car is used to show how the transporter works.

The other is associated with the ship's lifeboats, which will be carried flush with the ship's side, three decks below the traditional "boat deck."

A moving lifeboat on the model shows how the davit mechanism slides the lifeboat into position over the water.

SCIENCE AIDS TUNA FISHING

AUSTRALIAN tuna fishing has expanded from a catch of about 95 tons in 1951-52 to more than 1,000 tons last year, and has become a useful earner of foreign exchange, the Minister for Primary Industry, Mr. William McMahon, said in the House of Representatives recently.

Mr. McMahon said the success of the tuna fleet was due in large measure to the operation of the tuna clipper Senibua, which the Commonwealth Government had brought from Fiji to Australia in 1949.

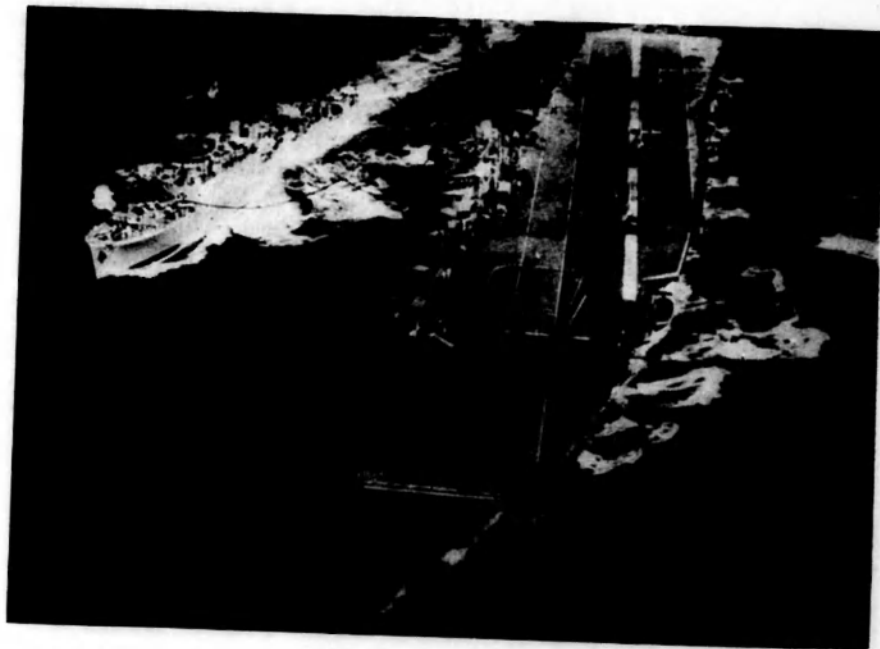
This vessel demonstrated the pole method of taking tuna, now the principal method of catching tuna in Australian waters.

Practically all the tuna caught was canned, and increasing quantities of canned tuna were being exported.

"Provided sufficient quantities of fish are available, there seems to be no reason why the present rate of exports cannot be increased," Mr. McMahon said.

The C.S.I.R.O. hopes to locate valuable new fishing grounds soon with radar.

A vessel equipped with the radar device will try to locate schools of fish 30 or 40 miles out to sea.



H.M.A.S. MELBOURNE launches GANNET Aircraft whilst refuelling H.M.A.S. QUICKMATCH.

AUSTRALIA'S "FLYING" NAVY

Attractive Careers in Fleet Air Arm

THE Royal Australian Navy has vacancies for young men with qualifications that fit them for training as pilots and observers of the Fleet Air Arm, and for the holding of commissions.

Applicants for appointment must be aged at least 17 years and not more than 24 years; be of high physical standard; be able to pass tests involving personal qualities and flying aptitude; and be in possession of the intermediate or equivalent certificate with passes in at least four subjects,

including mathematics and English.

Those who succeed in their applications are entered as recruit naval airmen (aircrew) and spend three months at Flinders Naval Depot, Crib Point (V.) in a preliminary course. At the end of the course their capabilities and aptitudes are re-assessed, and they are selected for training either as pilots or observers.

They then become probationary naval airmen, and the pilot trainees and observer trainees part company. The potential pilots undergo 14

months' flying training with the R.A.A.F. at Uranquinty (N.S.W.) and Pearce (Western Australia), and at the end of that phase are awarded their "wings" and promoted to the rank of acting sub-lieutenant. They are each granted, from that date, a short service commission of seven years. They complete their naval flying training at the well-equipped R.A.N. Air Station at Nowra (N.S.W.).

Subsequently, pilots do further naval courses, which give them an insight into the duties of their fellow-officers.



Royal Australian Navy Aircrew being briefed.

and prepare them for many of the ship-duties that they will be called upon to perform. During these courses they are given opportunities to serve at sea.

Observers, after their preliminary course, are promoted to midshipmen, do a short service officers' course at Flinders Naval Depot, and then begin their specialist training at the R.A.N. Observer School at Nowra. Upon satisfactory completion of the nine months' course, they are awarded their 'wings,' and promoted acting sub-lieutenant with a short

service commission of seven years.

Opportunities occur later for both pilots and observers to do advanced post-graduate flying courses in the United Kingdom.

Promotion to Lieutenant is the same for both pilot and observer. It follows about a year and 10 months to two years' service as sub-lieutenant.

At the end of their short service commission, Fleet Air Arm officers may extend their service for four years. If they volunteer and are recommended, they may be granted permanent commissions.

If they hold permanent commissions, officers in the Fleet Air Arm have opportunities, equal to those of other permanent officers, of reaching the highest ranks in the Navy.

If officers who hold short service commissions do not make the Navy a permanent career, the training they receive in the Fleet Air Arm equips them in a unique way for employment in the great and growing field of civil aviation.

While they are undergoing this training they are helping to maintain the carrier-borne air strength which is vital to

TEETH TO BITE

"In view of the inevitable dominance of air power, purely passive defence would be certain and painful suicide; it is peace with teeth, and the teeth must be able to bite hard and swiftly."

— Marshal of the R.A.F.
The Lord Tedder

the Royal Australian Navy to enable it to defend the fleet and merchant shipping from attack, to hunt and destroy hostile submarines, and to attack enemy surface ships and shore targets in areas beyond the range of our own shore-based aircraft.

The Royal Australian Navy's Sea Venoms and Gannets have proved very successful in service. The Sea Venom is still the only aircraft in the Australian forces that can operate in the night fighter role, and it is also a good day fighter and ground-attack aircraft.

The Gannet, equipped with devices for locating, tracking and killing submarines, is a valuable contribution to the anti-submarine forces.

OIL — AND THE RED DUSTER

BP's Big Building Programme

THE touchy political situation in the Middle East over the past few years, which took the control of the Suez Canal away from the Western allies, has underlined the world dependence on oil and oil tankers. This, coupled with the forecast that the annual consumption of oil will double in the next ten years, has caused the major tanker-owning companies to review their policies and building programmes.

British Petroleum, through its two subsidiaries, BP Tanker Co. and BP (Clyde) Tanker Co., owns the largest fleet of vessels under British registry — both by number of ships and by tonnage — and one quarter of all tankers under the Red Ensign.

This fleet before the war consisted of 93 ships, with a carrying capacity of just under one million tons. They were mostly 8,000 and 10,000-ton vessels, with a few of 12,250 tons which were then believed to be the most useful type of oil-carrying vessel. The present-day fleet consists of 149 ships ranging from 8,000 tons to 32,000 tons, and in addition British Petroleum hires an average of 90 ships from British and foreign owners.

Improved facilities have now made it possible for ships of 16,000 tons to distribute the refined products, which was once the task of the 10,000 and 12,250-tonners, while the smaller type of vessel has been returned to serve the smaller ports.

The temporary loss of Abadan prompted a policy of refining the crude oil near strategic marketing centres rather than near the well-heads. This called for a class of vessel,

designed purely for the carriage of crude, whose size need only be limited by the ports they serve. This fact has been given full consideration in the siting of new refineries and the expanding of existing ones.

In 1951 the first of the new 28,000-ton vessels was commissioned. They were so much bigger than anything known before that they were termed "super tankers" in the oil trade. They were quickly followed by orders for ships of 32,000 and 35,000 tons, which the former Suez Canal Company believed would be the biggest they could handle after their programme of widening and deepening the Canal had been completed.

These huge ships brought with them problems of design, construction, and operation of their own. In particular, economy in running, and steerage in the Suez Canal, demanded vessels of a single screw; and as diesel engines of a suitable size and power were

not available, the less economical steam turbine with water-tube boilers was introduced. However, this permitted the installation of steam turbine cargo pumps, by which an entire cargo could be discharged in sixteen hours.

In operation, the bigger vessels showed the greater economy, and the temporary closing of the canal showed that we might be forced to use the Cape route in time of war, so even bigger tankers would be needed to prevent the time lost from affecting the amount of cargo delivered.

It was then that orders for vessels of 50,000 tons and upwards were placed, and negotiations were put in hand to develop Milford Haven in Wales as an additional port for receiving them.

The BP Tanker Company's present building programme includes:

7 ships of 65,000 tons; 7 ships of 42,000 tons; 14 ships of 15,500

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tons; 9 ships of 50,000 tons; 19 ships of 34,000 tons; 1 ship of 49,000 tons; 5 ships of 32,000 tons — a total of 62 ships with a carrying capacity of 2,271,000 tons.

Even so, the limit of the world's demand for oil is not yet in sight. Treble and quadruple the present annual consumption can be anticipated in the years to come. If by then the atomic propulsion of ships is an accomplished economical fact, we may not be too far from even larger tankers which, designed and built to operate submerged, would sail beneath the sea, where, with sufficient power, even greater speeds than those on the surface are possible. Far below the stresses of storm and wave, perhaps they would even be safe from attack by atomic weapons.

The red ensign may even yet follow in the wake of the Nautilus.

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R.A.N. APPRENTICE TRAINING

A MODERN warship with its complex equipment must have expert maintenance and attention.

Highly skilled tradesmen are essential for the installation and servicing of this equipment, to ensure its operation under all conditions, in peacetime and war. The Navy needs, and must recruit, the following technicians:

Electrical artificers, known ashore as electrical fitters, who maintain all high and low

ship's plating and framing, docking and cable work.

Difficulty has been experienced in recent years in recruiting a sufficient number of suitably qualified technicians and tradesmen to be trained for the above specialisations.

It has also been recognised that the Navy, by itself training technicians completely, from the beginning, will produce better artificers.

Therefore, the Australian Commonwealth Naval Board,

THE NAVY RECRUITS ITS OWN TECHNICIANS

power electrical gear, electronic, radio and radar equipment, gunfire control systems, and guided weapons.

Engine-room artificers, who are skilled fitters and turners or boilermaker-welders, and are concerned with the modern steam propulsion and generating plants, refrigeration, hydraulics, internal combustion engines, air compressors, catapults, and flight deck machinery.

Ordnance artificers, who are also highly-trained fitters and turners as well as specialists on gun mountings, small arms, gunfire control equipment, electrics, hydraulics, guided weapons and anti-submarine devices.

Air artificers, who are either skilled fitters and turners or sheet metal workers, who can cope with any job on air frames, jet engines, helicopters, jet and turbo-jet power plants.

Naval shipwrights, who are capable of all wood work and joinery, boat building, welding, plumbing, painting, polishing, glazing, mast and spar making,

in 1955, decided to introduce apprentice training to the R.A.N.

The site chosen was the R.A.N. air station at Quaker's Hill, N.S.W.

The R.A.N. Apprentice Training Establishment, H.M.A.S. Nirimba, was commissioned, and training started in January, 1956, with 50 boys.

Fifty boys between 15 and 17 years of age have been entered, each half-year since, for the four-year course at Nirimba, and the number under training will be 400 in January, 1960, when the first Navy-trained apprentices join the fleet for their final year of training.

The training objective is to produce the best possible naval artificer for the future navy.

He is to receive a sound education, first-class craft training, and a most up-to-date technical knowledge.

He is trained for manhood and good citizenship, leadership qualities are developed, and he receives naval training to fit him for the rating of petty officer.

Of the 50 entered in January and July of each year, the

INTO THE ROCKS

A TRUE TALE OF LIFEBOAT SERVICE

THE engine had failed at dusk. As the sun sank below the western horizon it had given a final splutter—and stopped. With no steerage-way the yacht pitched and rolled like a log in the squalls, helpless on a lee shore. Through the mists the skipper could see the light of Demie de Pas beacon as it flashed its warning. Rocks!

The skipper dropped the anchor; he knew that the thin wooden planks of the 10-ton Maurice Georges would stand no chance against the hundreds of submerged and half-tide rocks which were scattered about the approaches to St. Helier: within a matter of seconds the ship would be smashed to match-wood. Anxiously the crew watched the straining cable. Would it hold?

It didn't.

The light yacht chain was no match for the heavy seas. There

was a sharp crack as it parted—and before they could let go the second anchor she was in the middle of the danger area, completely encircled by the hungry rocks—dragon's teeth waiting eagerly for a fresh victim.

Coxswain Thomas King glanced at his watch and yawned.

the hot meal which would be waiting for him at home; and bed, a nice warm, soft bed.

Taking it all round, he reflected, it had been quite a day. It had been three-thirty that afternoon when they left St. Helier, barely nine hours ago. Nine hours of tossing about on the squally seas, bodies bruised

For Sea Cadets

By KEN LOMAX—in London

ed. He leaned his aching body against the wheel and peered into the simply lit compass bowl. Should sight the beacon any minute now, he thought; and not before time, either. As he strained his eyes to pick up the first glimpse of the light through the swirling mists he thought of

by the constant budgeting, skins chapped by the salt-laden wind, clothing soaked by the driving spray—in spite of their oilskins; and their eyes were red-rimmed and aching from the constant straining into the mists which at times closed down visibility to less than three hundred yards.

Nine hours at sea, six of them spent in a monotonous search for the aircraft which had crashed into the sea in their area. And to add to their discomfort the search had ended in failure — the plane must have sunk immediately, leaving no trace of wreckage behind.

The coxswain straightened as he heard Nicolle call from the bow, "Light dead ahead, Tom. That'll be Demie de Pas, I reckon".

King chuckled. He 'reckoned,' did he? If Nicolle said that it was Demie de Pas then so it was; the crew of the Hearts of Oak knew this coast better than they knew their own faces. He noted the time in the log. Midnight. In another half-hour they would be home. It was a great thing, the wireless, he mused. How hard it must have been in the old days. No engines in the

R.A.N. APPRENTICE TRAINING — from opposite page

allocation to branches and trades is as follows:—

16 E.R.A. (fitters and turners); 4 E.R.A. (boilermaker/welder); 10 elect. artificers; 8 ordnance artificers; 5 air artificers; 7 shipwright artificers.

These artificer apprentices are eligible for promotion to commissioned rank through each of three schemes of promotion:—

(a) Matriculation entry to the R.A.N. College.

(b) Promotion to sub-lieut. from artificer V class in the upper yardman scheme.

(c) Promotion to sub-lieut. on the Special Duties List as for

all artificers, including direct entry.

All relevant trade unions and the Apprenticeship Commission have signified their complete recognition of the naval apprenticeship course. Also, Navy trade training for electrical and engineering ratings who join as recruits is comprehensive and thorough. It is carried out in electrical, radio, and engineering schools of the Navy.

As petty officers, these tradesmen can qualify for Trade Proficiency Certificates, and may apply for recognition as qualified tradesmen as electrical mechanics, radio tradesmen, aircraft electricians or fitters and turners.

October, 1958

THE NAVY

boats; no decks to shelter under; no cabin where the crew could take it in turns to get a little warmth before they were all needed on deck; and no radio to signal their recall, and to send their E.T.A. so that the womenfolk could have a hot meal waiting.

He heard the muffled voice of the operator speaking over the radio-telephone and turned enquiringly as he came to the helm, a message pad in his hand.

"There's a light been sighted among the rocks, Tom: they want us to go and look".

"The coxswain sighed. This could be tricky. They had been recalled because their fuel was low; there was not sufficient margin for a long search, or for much manoeuvring when they found the ship. He called to the motor mechanic.

"How much fuel is there left, Gubby?"

"Less than an hour, I guess, Tom. We'll have to look sharp or we'll be adrift, too".

King nodded, and without hesitation he spun the wheel and headed for the position they had been given.

It was some time before they spotted the light; it was difficult; one dim glimmer in the mist and driving spray. And when they did find it there was a horrified gasp from every member of the crew.

The yacht was encircled; buried deep among the sharp fangs of rock.

It was a bad enough place even on paper, thought Tom as he took a quick look at the chart. Here the dangers were clearly marked; rocks above high water mark; rocks awash at low water; and submerged rocks. He would hate to go in there in the day-time, but on this dark night there was nothing visible except the dim light from the yacht, swaying from side to side as the boat rolled in the swell. And the lifeboat was the old reserve boat, not easily manoeuvrable with her single screw.

There was only one thing to do if they were to get the men off that yacht, and Tom King knew it. He stationed two men in the bow with the searchlight; then he spun the wheel and headed the Hearts of Oak straight for the rocks. He put

his faith in the strong build of the boat to save himself and his men if she should hit anything—and the odds were a hundred to one that she would.

But somehow she didn't. With the strong westerly wind astern, helping to drive her on, she pushed her bow through the crashing seas and threaded her way through the rocks. The closest escape came as she neared the yacht and came round to pass a line—she was caught by a beam sea and carried bodily over a ledge of rock!

A few minutes later a line was thrown over and made fast to the yacht. Under normal circumstances her crew would have been taken off, but after quickly reviewing the situation the coxswain decided that it would probably be better to attempt to tow the boat out; he did not want to remain in his present position a minute longer than necessary.

So the nightmare trip through the rocks began again, this time in the teeth of the wind—and hampered by the dead weight of their tow. To their utter amazement both ships gained the open sea without so much as grazing the paint.

Half an hour after midnight they reached St. Helier—only thirty minutes later than their estimated time of arrival.

Some time later Thomas King sailed the district inspector of lifeboats out to examine the scene of the incident. The day was fine, there was not a breath of wind and the sea was flat and placid. As they lay about a mile from the rocks the inspector turned to the coxswain.

"Take her in a bit, Tom, I'd like to get a closer look at it".

King looked at him and shook his head. "Oh no, sir, I wouldn't like to go in there. We might hit something".

"The Sea Cadet"—London.

SEA CADET ACTIVITIES

VICTORIA POLICE UNIT CADETS IN BAY RESCUE

CADETS of the newly-formed T.S. Voyager effected a dramatic off-shore rescue during their first camp early this year, and showed by their actions that they have gained plenty of boating experiences of the right type.

The cadets, under the able command of Lieut. D. McKinlay, were in a 16 days' camp at Rye, on the southern extremity of the Mornington Peninsula, when one afternoon the duty-watch gave the alarm that a small yacht had capsized to seaward.

Through the telescope it could be seen that the occupants were trapped under the sail. One of these turned out to be an attractive young girl, a comparative non-swimmer. The other was her boy-friend.

Lieutenant McKinlay quickly manned the five-oared whaler with its full complement and, in a freshening breeze, the double-ender pulled smartly to the scene, a quarter of a mile off shore.

The boat's crew soon had the anxious couple on board, after which they towed the capsized boat to the shallows of the beach.

Just previous to this incident two cadets had a similar experience, and this time the rescue was effected by Petty Officer Willcocks with only a skeleton crew in the whaler.

These, and other lesser incidents, proved to the executives at the camp the need for maintaining signal and boat equipment in first class order, and the necessity of making

Some Victorian Notes by K. McLAUGHLIN

contact when and where possible at all times.

The camp, which was held from December 26 to January 11, was so great a success that cadets of T.S. Voyager—although their unit is little more than a year old—are endeavouring to make it an annual affair.

The camp, by the way, was no ordinary holiday home. "Work before pleasure" was the motto, and it entailed keeping 24-hour watches in compliance with naval routine.

The journey to the camp was made in a power launch, 30 miles down Port Phillip Bay against a hard, biting southerly; and the voyage gave many cadets their first taste of salt water, more especially as the launch voyage was protracted through having to tow the 27 ft. whaler.

Incidentally, the T.S. Voyager—the Victoria police unit of the Australian Sea Cadet Corps—was founded only on May 3, 1957, under the patronage of the Chief Commissioner of Police, General S. H. Porter, C.B.E., D.S.O. In addition to the commanding officer, Lieut. D. McKinlay, the personnel are Sub-Lieutenant R. Applebee (Second-in-Command) and Petty Officer instructors E. Todd, D. Carpenter, T. Swindon, T. Jordan and A. F. Willcocks.

SCHOOL CORPS HAS HISTORIC NAME

T.S. Avalon, the Geelong Grammar School corps, which incidentally now has a record complement of 77, derived its name in an unusual but very appropriate manner.

Although the corps was founded only in July, 1950, a

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troop of sea scouts was formed at the school in 1930. In that year the Minister for the Navy found an old double-ended boat which had been discarded, and this was given to the school and repaired there.

Unfortunately, this double-ended was not very satisfactory — it was heavy, old, with rotting timbers, and it leaked — so in 1936 some old-boys gave the troop an old fishing boat which bore the insignia "R.F.B.—1."

It was soon evident that this name had to be changed, but to what? It was then decided that she be rechristened Avalon after the motor boat which, when the school first moved to Corio from Geelong in 1914, used to transport the day-boys across Corio Bay. Avalon was the name of the pastoral property across the lagoon from the school, which belonged to the Austin family, who were the first family to import rabbits into Victoria.

In later years, the boys came by train and the Avalon was sold. Later she was taken over by the Americans during the last war, and this 56-footer, driven by a Diesel, ended her days on active service in the British Solomon Islands.

The second Avalon — the former fishing boat — when the sea scout troop was abandoned in 1941 in favour of a school yacht club, became flagship to the club's 15 sailing dinghies.

At the same time many boys learnt to sail in the old boat, including Commander Ian McIntosh. This old-boy, as a naval officer, sailed a lifeboat with 80 survivors, after his ship had been torpedoed in the Atlantic, to Brazil. It was an arduous 23 days' voyage, and Commander McIntosh was the only experienced small boat sailor in the lifeboat. The members of T.S. Avalon today



THE SCHELDT

As the Book Society has recommended this book there must be something that tickets it as not just another In The Steps of Chester Wilnot who resolved clearly all that the generals could have done had they had his hindsight.

It is a detailed and particular account of the military action by all Services following the fall of Antwerp in September, 1944, in the sector of the Scheldt.

The author makes it immediately clear where he stands in these events of 13 years ago: the Scheldt affair of attrition could have been avoided "if Montgomery had his eye clearly on the

left bank of his 21st Army Group." Perhaps "Monty" had other more important jobs to keep his eye on, but "Monty" did not have hindsight.

This is a painstaking account of a corner of the canvas of War: it could have been of more value if it had been entirely objective, had remembered that all wars are muddles. The claim that these 85 days of combat could have been avoided disregards the acumen of the opposing Germans but this record fairly describes the limited horizons on which its sights are set.

"The Eighty Five Days." By R. W. Thompson (Hutchinson).

LILLIPUT FLEET. By A. Cecil Hampshire. (William Kimber, U.K.)

Too often, the exploits of the little ships are inadequately recognised. Naval history is weighted by major battles fought by big units and the work and achievement of smaller vessels are seen only in the shadow of the battleship, the aircraft carrier and the cruiser.

A. Cecil Hampshire's "Lilliput Fleet" is a timely account of the activities of some of the smaller ships of the World War II era. It is a story of the Royal Navy patrol service, a tribute to the trawlers and drifters of the fishing fleet which were pressed into service to defend harbours and coastal convoys, sweep the shipping lanes of mines, support land operations and hunt the U-boat. It is also a tribute to those men of tough fibre and weathered faces who ceased reapp-

THE NAVY

ing the harvests of the seas in order to rid them of the menace of war, and to those amateur yachtsmen and unashamed landmen who joined them in their task.

Few have heard of the Daisy Bell or the Moonstone, or the names of those who commanded and served in them, but theirs, and that of others of their calibre, is a story of resolution and courage unequalled by any other branch of the Service. They fought the U-boat, the dive-bomber, the E-boat and sometimes the surface raider, too frequently with miserably inferior gun power. They took the sting out of the magnetic mine and acoustic mine, when the devilish ingenuity of the enemy threatened our vital supply routes. Above all, they battled continuously against the ancient antagonist, the sea, which alone would have daunted less resolute men.

"Lilliput Fleet" tells only a part of their magnificent story, but its pages contain sufficient to bring a proper balance to book-shelves which carry many volumes about the naval war at sea. It is an authentic and reliable contribution.

SMALL CRAFT

"Challenge to Poseidon." By Erroll Bruce. (Hutchinson)

The author of this interesting collection of sea stories, Commander Erroll Bruce, tells us here of many notable voyages made in small craft, such as the famous journey of Captain Bligh, perhaps the most remarkable feat of navigation ever achieved by a seaman.

One of the other stories deals with Captain Voss, the Canadian, who with two companions set out to sail round the world in a vessel 25 feet long.

In a storm she turned turtle and the experiences of the trio must be read to be believed.

DREAD WATERS

"Scapa Ferry." By Anthony Bridges. (Peter Davies)

It is not in dispute, among sailors, that the Pentland Firth is the worst sea in the world. This is an account of how those dread waters were repeatedly crossed by an almost ludicrously small vessel, sailed by pre-war amateur yachtsmen, delivering gelignite, detonators and kindred fearsome cargo.

— H. B.

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It is imbued with the sea. For the author is not only a sailor of considerable experience but a barrister accustomed to marshalling facts clearly and (perhaps he does not know this himself) a thundering good journalist.

It is very much a sidelight on the war at sea; indeed, the war is very much in the background, for the real war these intrepid yachtsmen fight concerns the fury of the elements.

It is, perhaps, bad reviewing to quote a passage in the story of this 40-ft. sailing boat, but that simply must be done on this occasion: "In succeeding winters at Scrahster, when it blew three full-powered gales from three different points inside two days, or when the wind raged blackly out of the east for 15 days at a stretch, we used to think of that quiet January night we spent between Wick and Duncansby, somewhere off Noss Head — on the edge of eternity."

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Descriptions like that make this book read like a lovely long story from Blackwood's — a book the end of which is most reluctantly reached.

— B. J. H.

FLAG LORE

"Flags of the World," edited by H. Gresham Carr; published by Warne (U.K.)

For more than 60 years Warne's have been publishing their valuable manual of flags, under a succession of erudite editors and with an increasingly improved format: the newest issue under the aegis of Mr. H. G. Carr, who is described on the dust-wrapper as "the leading authority with an international reputation," seems to be the crowning achievement, for it is difficult to visualise a more perfect and beautifully illustrated production.

Its cost, except for flag fans, will probably place it beyond the orbit of the casual reader, but it certainly must be a necessity in every library, and many an office and studio.

We are not told whether the numerous coloured plates and textural drawings are the work of the editor, but whoever drew them deserves warm commendation.

There is a chapter on the flags of the Royal Air Force and other flying organisations, and, to show how absolutely up to date the book is, one might mention that even the house-flags of the airlines are described and illustrated.

The naval reader will perhaps be attracted to the various ensigns of the Commonwealth countries, some of which bear little resemblance to the design of their mother body, the White Ensign of the Royal Navy.

Most noticeable is the flag of South Africa afloat, a hideous and very unsuitable composition, featuring what is known as "tartan green."

As, however, the Union of South Africa has declared its intention soon of becoming a republic, the ensign used by its warships will no longer cause embarrassment and misgiving on the part of United Kingdom observers.

—H.M.

—From the London "Navv"

New Fast Patrol Boat

The launching of H.M.S. Brave Borderer, first of a new class of fast patrol boats, from the yard of Messrs. Vosper Ltd., at Porchester, Hants, was an event of considerable marine importance.

The Brave Borderer is the first vessel to be powered by gas turbine machinery which is basically similar to that developed for aircraft. She is fitted with Bristol Proteus marine engines, the aerial version of which is incorporated in the Bristol Britannia airliners.

Each of the craft's engines develops 3,500 h.p. and runs on diesel fuel. They are about a quarter of the specific weight of the lightest diesel engine of the same power used for the same purpose. The dimensions are also extremely small in relation to power.

The compactness of the engines makes them most suitable when high power is required in small space.

The Marine Proteus may — as in this case — form the sole propulsive machinery of a vessel, or it may be used in combination with a low powered diesel unit for cruising.

The Brave Borderer is designed for offensive operations against warships and merchant shipping in coastal waters. She will be armed either with one 40 mm. Bofors gun and four 21-inch torpedo tubes, or two tubes and a 3.3 (84 mm.)

gun mounted in a stabilized turret. Her normal complement will be three officers and 17 ratings.

NAVAL NEWS

Items from
NEAR and FAR

MALTA DOCKYARD TRANSFER TO PRIVATE FIRM

THE British Government has decided that the Malta Naval Dockyard should be transferred to a private ship-repairing firm. The continued use of the dockyard in this new role would be a major step in the direction of diversifying the Maltese economy.

Such diversity has been a problem occupying the attention of the Governments both

in Britain and in Malta for some considerable time. In the past, the Maltese economy has depended on Services' expenditure; and the British Government has recognised that the long-term changes in United Kingdom defence policy, particularly insofar as these affect the requirements of the Royal Navy in Malta, will necessitate major changes in the traditional pattern of the island's economy.

The dockyard has for generations been the industrial core of Malta, and it is an economic asset which should be used to the full. It would no longer be possible to keep it in being as a naval yard, and it would offer good prospects, if converted, for commercial ship repairing.

Preliminary negotiations have been concluded with Messrs. C. H. Bailey of South Wales and, subject to the completion of a satisfactory agreement, this firm will form a company to take over the dockyard on lease during 1959. The total capital cost involved is about £5½ million. Messrs. Bailey, in association with the Colonial Development Association and Maltese interests, would provide £3 million, and the British Government would make available the balance of £2½ million, partly in the form of debentures and partly as a special grant on which the Government would look for a return as the enterprise grew in prosperity.

ADMIRALTY BOARD ROOM REPAIRED

AFTER using improvised accommodation for more than three years while the Admiralty Board Room was repaired, modernised, and redecorated following a fire which caused severe damage to the floor above in December, 1955,

the Board of Admiralty moved back into their historic quarters for their fortnightly meeting at the end of July. In the Old Block, or Ripley building, at Admiralty, the Board Room maintains unbroken the chain of tradition. The First Lord sits beneath Beechey's portrait of William IV; above the fireplace the pointer of the wind-dial moves as it has done through countless Board meetings; the walnut grandfather clock ticks away the ceaseless river of time whose flow it has marked for more than two centuries; and Nelson, from his painting by Leonardo Guzzardi, looks down "with tired eyes and flushed face as he had done through those nights in August, 1914, when he saw the young Winston Churchill waiting for the news of war."

SALE OF SHIPS TO COMMUNIST BLOC

THE British Board of Trade has relaxed some of the rules regarding the sale of goods to countries of the Sino-Soviet bloc. Ships which may, in general, now be built for or sold second-hand to the bloc are passenger and cargo ships of up to 20 knots, tankers of up to and including 18 knots, and fishing vessels of up to 17 knots. There are certain exceptions covering the installation or retention in ships of equipment which is banned in its own right, and of arrangements for demagnetisation. Warships — whether or not converted to non-military use — certain large icebreakers, and non-magnetic ships, continue to be banned completely. A licence from the Admiralty will be required for the building of ships for the bloc, and the sale of second-hand ships to the bloc

will continue to need the sanction of the Minister of Transport and Civil Aviation.

THE INDIAN NAVY'S NEW SHIP

ANOTHER anti-submarine frigate for the Indian Navy, I.N.S. Kirpan, was launched at the shipyard of Messrs. Alexander Stephen & Sons Ltd., Glasgow, on August 19. She will be the second frigate of her type to be acquired by the Indian Navy. Of 310 ft. extreme length (300 ft. between perpendiculars), she has a beam of 33 ft. She is powered by geared turbines of advanced design. Armament will be three Bofor guns and two three-barrelled anti-submarine mortars, which can fire a pattern of large projectiles. She will be capable of operating in all climatic conditions without discomfort to the officers and men.

THE FIRST "BATTLE" DESTROYER

HM.S. Barlleur, the first Battle class destroyer to be accepted into service and the only one to see service in the Second World War, recently

paid off into reserve at Devonport, England, after an 18-months' commission, in which she steamed 50,000 miles, visiting 20 countries in the Mediterranean, West Indies and Home stations. Since she was first commissioned in 1914 she has steamed 250,000 miles.

WARTIME WRECK RAISED AT MALTA

SIXTEEN years after she was sunk in an air raid in Lazaretto Creek (fortunately without casualties, as her crew had been ordered to take shelter ashore), H. M. Submarine P.36 has been brought to the surface, after her 650-ton hull had been lying on a narrow shelf between 70 and 80 ft. down. A member of the 10th Submarine Flotilla under the command of Lieutenant H. N. Edmonds, R.N., she had carried out several successful patrols before, on the 1st April, 1942, a bomb falling close to her berth holed ballast tanks and hull in many places. Every effort was made to keep her afloat, and wires were passed to the piers of the Lazaretto arches to stop her from heeling over, but these had to be cut when it was seen that the weight

of the submarine would cause the arches to collapse. As Lieutenant Edmonds said at the time, it was bad enough losing one submarine without being sued for destroying an ancient monument as well. Soon after the wires were removed, P.36 rolled over and sank.

QUEEN MOTHER BOARDS ARK ROYAL BY HELICOPTER

TWO and a half years ago the Queen Mother, H.M. Queen Elizabeth, promised to present Ark Royal with a ceremonial sash for the Drum Major of the ship's volunteer band. In July, at Devonport, England, she fulfilled the promise when she flew from London to Exeter Airport, and there transferred to a Fleet Air Arm helicopter, which landed on the Ark Royal's flight deck. Her Majesty afterwards used the ship's Land Rover to inspect the ship's company, assembled on the flight deck. She later placed the ceremonial sash — of dark blue with the Royal Cipher and ship's badge embroidered in gold — about the shoulders of Able Seaman Clive Goble, of Higher Compton, Plymouth, Drum Major of the band, which is a brass combination with some 30 members, officers and ratings. Afterwards she met individual members of the band, attended a reception given by the ship's officers, and lunched with the Commanding Officer, Captain F. H. E. Hopkins, D.S.O., D.S.C., R.N.

MIDGET SUBMARINE FOR SWEDISH NAVY

HM.S. Stickleback, midget submarine, was handed over from the Royal Navy to the Royal Swedish Navy at a ceremony at Portland Dockyard, England, on July 15. She was accepted by Commodore O. Krokstedt, Naval Attaché at the Swedish Embassy in

THE NAVY

AUSTRALIAN COASTAL SHIPPING

Melbourne Steamship Co. Report

ADRESSING the Annual Meeting of the shareholders of the Melbourne Steamship Company in Melbourne on the 4th September, 1958, the Chairman of the Company, Mr. D. York Syme, commented on the difficulties experienced in the coastal shipping field owing to increasing competition in the carriage of general cargo by road and rail, and in the carriage of passengers by the air services. Shareholders are fortunate in that the operations of the Company in other fields have enabled a reasonable profit to be made.

Mr. Syme mentioned also the Company's interest in the projected building of two bulk cargo ships; and the acquisition by the Company of a steel floating dock — an Australian-

NAVAL NEWS

from Page 28

London, from Captain P. J. Cowell, D.S.C. and Bar, Captain of the Fifth Submarine Squadron based at Portsmouth.

DUTCH AIRCRAFT CARRIER IN U.K.

A name familiar to members of the Royal Australian Navy who served in the ABDA Area during the 1939-45 War, is carried by a Dutch aircraft carrier which visited the United Kingdom recently. She is H.M.Neth.S. Karel Doorman, named after Rear-Admiral Doorman, who was in command of the Allied Striking Force which fought vainly against vastly superior Japanese sea and air forces in defence of the Netherlands East Indies. Admiral Doorman was lost when he went down with his flagship, H.M.Neth.S. De Ruyter in the Battle of the Java Sea on the night of the 27th February, 1942.

built dock which was previously a unit of the Royal Australian Navy, and is the only one of its kind in the port of Melbourne. The dimensions of this dock — which is moored at Williamstown abreast of the Company's engineering works — are: length overall, 206 ft. 6 ins.; breadth inside dock walls, 43 ft. 6 ins.; maximum draft available, 16 ft. 0 ins.; dead weight capacity, 1,375 tons. The dock was acquired by the Company in May of this year on a 30-year lease, and is described as materially strengthening the facilities of the Port.

It is of interest that it replaces the old wooden dock which was, 64 years ago, converted from the hull of the barque Habitant which, when berthed at Melbourne, was severely damaged by fire. During its career as a dock, the Habitant accommodated a total of close on 3,000 vessels.

In his address, Mr. D. York Syme said:

"The Directors feel that shareholders will be satisfied

with the Consolidated Profit of £59,654 from the Company's operations for the twelve months ending June 30 last. This is equivalent to a return on shareholders' funds at the rate of 7.2% p.a.

"After making transfers to General Reserve and to Contingencies account and paying the final dividend, the amount carried forward to next year's accounts is £93,647.

"The Directors are keeping well in front of them the question of expansion when a favourable opportunity presents itself. Unfortunately the Company's interests in shipping have of recent years not given a reasonable return on the capital invested, nor is it easy to foresee an improvement owing to the increasing cost of running and maintenance of vessels. Further, despatch has been seriously upset at times by industrial troubles and rain delays.

"Competition from road and rail in the carriage of general

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cargo is becoming more intense. A considerable section of passenger traffic is being attracted by the air services. The tremendous increase in the cost of new ships compared with the prices paid for our original vessels in the 1920's and 1930's presents a further problem.

"However, the diversity of the Company's general operations has enabled a reasonable profit to be achieved. Our trading departments have been kept busy and engineering subsidiaries contributed materially to our revenue.

"Because of the inadequate passenger earnings between mainland ports, we arranged for Duntroon to be diverted to Pacific cruises for about four months during the current winter season. The results, I am glad to say, have shown a decided improvement.

"For many years past the volume of interstate general

cargo has been sufficient to give constant employment to the fleets, but conditions have now changed and the outlook for the next few months is not very promising. It is probable that some Australian-owned cargo vessels may be temporarily laid idle for lack of trade.

"After careful investigation, the Associated Steamship Owners, of which we are one, came to the conclusion that bulk ship carriage presents a relatively stable form of transport, and steps have been taken by the seven Associated Companies to form a new Company with capital sufficient to build two vessels of about 11,000 tons deadweight capacity. Tenders have been called for their construction and close examination will be made of all factors before definitely signing a contract.

"Shareholders will be interested in particulars of our steel floating dock. As a result of negotiations with the Melbourne Harbour Trust, we have secured a lease of this dock for 30 years. This cements our long association with the dry docking of ships up to a moderate size, and I am confident that the dock will enable us to secure a larger share of ship repair work for our Williamstown establishment.

"Mr. G. Sutherland Smith and Mr. K. B. York Syme are the retiring Directors and, being eligible, offer themselves for re-election. It affords me much pleasure, on behalf of the Board, to record our appreciation of the loyal and unlagging service rendered by the members of our staff."

R.A.N. MASSED BANDS HOLD FESTIVALS IN MELBOURNE AND SYDNEY

OPENING with a recital at the Victorian Football League grand final at the Melbourne Cricket Ground on

Saturday afternoon, September 20, massed bands of the Royal Australian Navy held a festival in Melbourne last month and another in Sydney early in this month. Features of both festivals were out-of-door and indoor concerts, broadcast and televised recitals, and spectacular marching displays in full ceremonial uniform.

The bands were provided by Flinders Naval Depot, the East Australian Area (with headquarters in Sydney), and the Australian Fleet. Their full programme in Melbourne included a "Music for the People" recital in Alexandria Gardens; a musical appreciation concert for 5,500 children from State and private Secondary Schools at the Olympic Swimming Pool; and, on Tuesday, September 23, a concert in the Treasury Gardens.

In Sydney, the massed bands made recordings from Monday, September 29, until Friday, October 3, and gave a display at the Naval Ball in the Sydney Town Hall on the Friday night. From Sunday, October 5, until Saturday, October 11, they took part in the Waratah Spring Festival. They played at the opening ceremony on the Sunday afternoon, and gave a televised recital on ATN7 on the following day. On Tuesday night, October 7, they played at the Music Shell in Hyde Park. At lunch-time on Wednesday, October 8, they gave a marching display and recital in Hyde Park.

They gave another recital at the Music Shell on Thursday, October 9, and lunch-time marching display at the shopping centre at North Ryde on Friday, October 10.

Finally, they led the Waratah Spring Festival pageant through Sydney on Saturday, October 11, and on the night of October 11 gave a marching display on the Sydney Show Ground.

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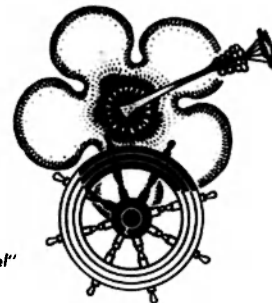


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NUCLEAR POWER

THE voyage of the U.S.S. Nautilus from Pearl Harbour to Portland via the North Pole has been the subject of much well-deserved congratulation: but it has also set off a spate of comment on the potentialities of the cargo-carrying submarine and of the trans-Polar route; and also on the strategic implications of the voyage.

An excellent general summary of both aspects — commercial and strategic — appeared in the "Economist" of 16/8/58. Under the heading "North West Passage" it pointed out that the real lesson of the voyages of the Nautilus and Skate was that the nuclear-powered submarine was "a new breed of ship, differing from its predecessors as much as steam differed from sail." The endurance, range and underwater speed of these vessels would be impossible for the conventional submarine: Nautilus was submerged for 100 hours and covered about 1,830 miles under the ice. Sir Hubert Wilkins had attempted the feat in 1931 but failed because the conventional submarine must breathe. Navigation had also been a difficulty without the further modern development of inertial guidance.

The article continued:—"Nautilus and Skate have, in fact, the type of inertial guidance which is fitted in the Thor missile (and which will no doubt also be fitted in the Polaris missiles that these submarines will be able to fire). The nuclear-powered submarine has thus added the ice cap to the oceans of the world as an area for commercial navigation and naval strategy. The commercial and military applica-

tions of this opening of the North West Passage are worth comparison.

"Crossing via the North Pole shortens the trip from London to Tokio from 11,200 miles to 6,300 miles. But the quantity of bulk cargo which is hauled from the Sino-Japanese seaboard to the European seaboard is limited and does not include mineral oil. The commercial routes through the Panama and Suez canals, long as they are, will still be more economical until the flow of trade radically alters, because so much profitable cargo can be taken on and discharged at intermediate ports. Even the through cargo, like Japanese machinery, would always go by the cheapest route.

"The polar route can therefore only come into its own when the cost of operating nuclear submarines becomes less than that of surface operating ships round the world. This will have to include atomic surface ships, which shipowners assume will prove cheaper at first than atomic submarines. But even the conversion of surface ships to nuclear power is not expected for ten years, and some shipowners think the nuclear marine engine will start becoming economic only when ships now building are due for replacement — in 20 years' time.

"They may be unduly conservative. But shipowners foresee certain problems which will keep the cost of atomic submarines on the high side relative to surface ships with nuclear engines. To achieve the maximum economies of the power unit (not necessary in warships), commercial submarines will have to be large — and therefore of great draught.

This would mean that when approaching shelving coasts they would have to surface, and therefore be capable of standing the stress of heavy weather for a considerable time — and that would add to costs. Moreover, service in such ships, after the pioneering stage was over, would be dull. This already makes it hard to man tankers, so that wage costs would be high relative to the costs of tramp operation. Commander Anderson's feat is not causing shipowners to recast their plans.

The military potential is much greater. But it is important to realise that (a) it is some way off and (b) in the long run it might benefit Russia, with its long Arctic coastline, rather more than the West. The virtues of atomic submarines armed with missiles have been fully discussed by strategists. The Americans are planning a fleet of 33, and if half of them carried missiles (16 apiece) the total broadside would be 250 megaton warheads, deliverable from ships lurking under the ice-cap. But the first Polaris missile is not likely to be operational until 1961, if then: Russia has time to draw level, and in any event the absolute advantage will not last long. The Americans claim to see two permanent advantages of having this weapon in the American armoury: (a) it will finally make impossible any Russian surprise attack which would knock out the western retaliatory deterrent 'on the ground,' since such submarines would be invulnerable; (b) it would lessen American dependence on overseas bases, which might make American relations with many countries much easier. It would reduce western dependence on the Suez and Panama canals.

"These advantages, however, lie a good way ahead. To do all that is required of it, the Nautilus-Polaris weapons system must have a range of at least

SHIPS AND THE STEEL INDUSTRY

Nature has distributed Australia's iron ore throughout the continent and its coking coal on the east coast. Ships — in this case mostly the steel industry's own ships — must bridge the gap.

Via Torres Strait, Yampi Sound is 2,985 nautical miles from the Newcastle Steel Works and 3,085 nautical miles from the Port Kembla Steel Works, about equal to the sea route from New York to Liverpool. Transporting ore from Whyalla to Port Kembla (1,070 nautical miles) and to Newcastle (1,170) also involves long sea voyages.

Most steel is used by industries established in capital cities around Australia's long coastline. Thus, both to bring its raw materials together and distribute its products, the steel industry relies heavily on shipping. Although operating the largest privately-owned Australian fleet of eleven vessels, its cargoes are such that many other ships must be used.

Altogether the industry's cargoes represent a third of Australia's entire interstate sea trade.

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THE NAVY

1,500 miles, and must exist in quantity; by the time that has been achieved, the inter-continental ballistic missile will dominate the strategic situation, while, in the meantime, western coastlines will be highly vulnerable to much shorter-range Russian submarine-mounted missiles. And freedom to move under the ice cap, from Murmansk to Vladivostok, will give Russian submarines even greater manoeuvrability."

The annual report of the Atomic Energy Authority, published at the end of July, contained reference to the present state of research in this country into the application of nuclear energy to merchant ship propulsion. It is clear that the difficulties of adapting the Calder Hall type of reactor, already known to be very considerable, have not been overcome, and work is now proceeding on other systems. "Fairplay" commented on 31/7/58:—"The Report states that the Admiralty committee set up to determine a suitable reactor system for marine propulsion does not think that a scaled-down version of the present Calder Hall type of reactor would be suitable for this purpose, except in very large vessels. They are, however, studying other systems, a gas-cooled heavy water-moderated reactor, a pressurised-water system and an organic-liquid-moderated system. Sir William Cook, member of engineering and production of the Authority, said recently that they did not know whether they would be able to design a ship which was competitive with oil fuel, but they had hopes of being near competitive. This work would go on for the best part of next year, and it would be pretty well 12 months before they knew whether they were capable of designing a reactor for a fairly

large ship which would be competitive with oil fuel. If this work was successful, and if a decision was taken to go ahead, it would be about 1961-65 when the ship was commissioned. The annual report points out that the Authority are collaborating with the various shipping and shipbuilding interests in the study, and are providing facilities for a study by the Admiralty of a design for a nuclear-propelled naval tanker."

A private venture, by Mitchell Engineering, has also been in the news again. It was reported in various papers of 11/8/58 that this group were proceeding with the second phase of their investigations into the design of a submarine tanker, the preliminary work on possible hull form having yielded promising results. The power unit in any such project would be the joint work of Mitchell Engineering and an American firm, American Machine Foundry (Atomics) Inc.

There has also been a comment from Major-General C. A. L. Dunphie, Chairman of Vickers-Armstrongs Ltd. At the launch at Barrow of the 42,000-ton tanker, British Ambassador, reported in the "Journal of Commerce," 18/8/58, General Dunphie said:—"that the time had come for British ship-owners and shipbuilders to co-operate in the study period for the design of a nuclear powered merchant ship to ensure that this country was not left behind. 'In the past we in this country have always led the world in marine development and I hope that before long a British owner and British builder will take the first step to do so once again,' he observed.

"After recalling that his company were spending between £4m. and £5m. on the construction of a large dry

dock on the Tyne that would be capable of taking ships of twice the tonnage of the British Ambassador, Gen. Dunphie said that they were also devoting considerable effort in conjunction with others in various alternative types of nuclear marine propulsion. 'I believe that it will not be too long before someone achieves a break-through in this new marine field and I am sure it will not be the country which starts last. Sometimes I wonder whether we in the shipbuilding industry and you in the ship-owning industry are being quite bold enough at this stage in the development of new sources of power.'

"Gen. Dunphie observed that projects which a few years ago seemed impossible were now only a matter of time and money. He then referred to the recent voyage of the U.S. submarine Nautilus under the Polar ice cap and said that he was sure that we should not take too many steps at once, certainly not in more than one direction at a time, 'but I wonder whether we are not going to the other extreme and marking time. We at Vickers for our part are going ahead with certain schemes despite the rather discouraging conditions'."

Vickers Nuclear Engineering, incidentally, is showing at the Geneva International Atomic Energy Conference a model of a proposed nuclear-propelled 65,000-ton tanker. Other projects sponsored by shipbuilders which have had recent publicity are a Swedish proposal from Gotaverken — a 65,000-tonner with a boiling water reactor — and a Japanese from Mitsubishi. The latter project, a 30,000-ton submarine tanker, is also being presented at the Geneva Conference.

—From the Navy League's "Digest of Current Opinion on Maritime Affairs"

THE NAVY

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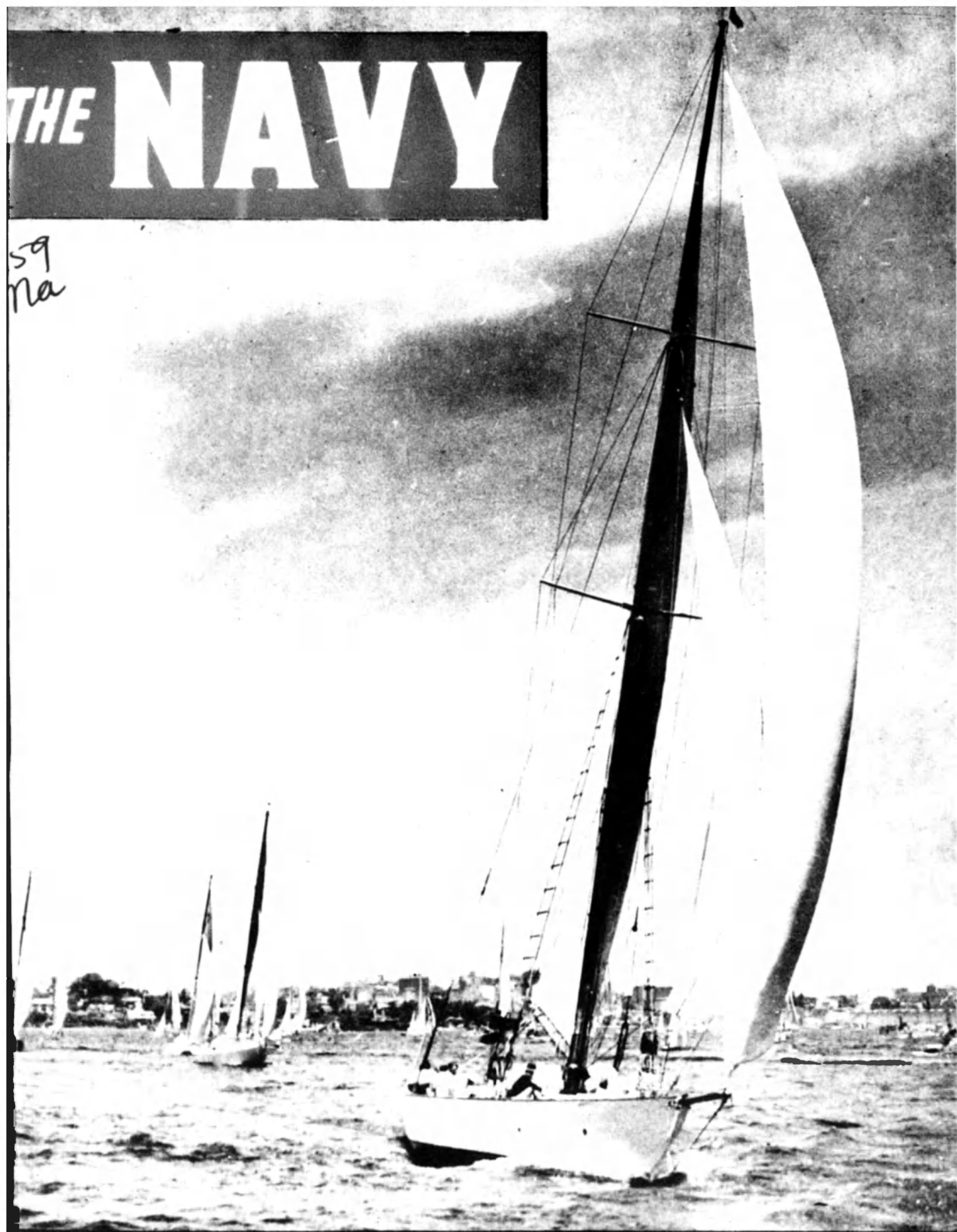
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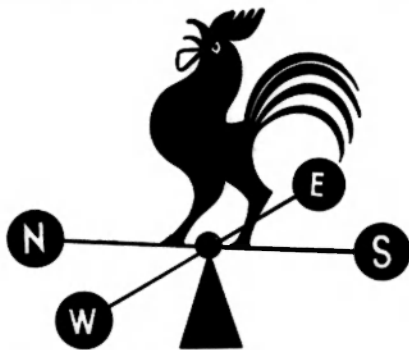
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**EAST INDIES STATION PASSES
"FATHER" OF AUSTRALIA STATION GOES**

"EARLY in September," recorded "Geiger" in "The Navy's" feature, "Finger on the Pulse," "the Royal Navy's East Indies Station slipped, almost unnoticed, into oblivion."

This is of peculiar interest to Australia, for the East Indies Station was the "father" of the Australia Station. Prior to the establishment of the Australia Station as a separate command in March, 1859, Australia, so far as naval defence and administration were concerned, formed a part of the East India and China Station.

The East Indies Station — the abolishment of which followed a decision reached by the Admiralty in February of this year — was established in 1744, with Commodore C. Barnett as Commander-in-Chief. Since then it functioned under an impressive list of some 100 Commanders-in-Chief, including, in the last 20 years, Admirals of the Fleet Lord Fraser of North Cape and Sir Arthur Power; the late Admiral of the Fleet Sir James Somerville; and World War I submarine ace, Admiral Sir Martin Dunbar-Nasmith.

The last officer to strike his flag as Commander-in-Chief, East Indies, was Vice-Admiral H. W. Biggs. He, as commanding officer of the destroyer "Hero" in the Mediterranean Fleet, 1940-41, was closely associated with the R.A.N. "Hero" was one of the destroyers with "Sydney" when the "Bartolomeo Colleoni" was sunk in July, 1940; and in April, 1941, took part in the withdrawal of troops from Greece. She was one of the destroyers with "Perth" at the

withdrawal from Kalamata on 28th April, and Biggs later recalled how, on subsequent nights, picking up stragglers off the beaches there: "The three ships ("Isis," "Hero," "Kimberley") then steamed close to the shore to the south-eastward of the town, hailing the shore to see if there were any stragglers to be picked up. Answering shouts were usually dealt with by a rifle shot in the direction of the shout in order to judge from

**MORE THAN 200 YEARS
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the resulting bad language if the straggler was genuine or an enemy. One Australian was identified by asking him "What Matilda was doing."

The establishment of the Australia Station in 1859 followed representations from here. Correspondence regarding the defence of Sydney Harbour was exchanged between the Governor of New South Wales, Sir W. Denison, and the Home Government, as a result of the Crimea War; and in October, 1858, Sir W. Denison received from the Governor of Tasmania, Sir Henry Young, copy of a despatch which Sir Henry had transmitted to the Secretary for the Colonies (at the request of his responsible advisers) urging "the necessity for making the Australian Colonies an Admiral's station and for maintaining in these seas a Naval squadron equal at least to that maintained there-in by any other power."

Commenting on this despatch in a letter to the Secretary for the Colonies, Sir W. Denison said that his Executive Council were not prepared to urge the necessity for making the Australian Colonies an Admiral's station, "they are, however, of opinion that the Naval force at present stationed in these Colonies, consisting as it does of only two available vessels, is not in any way adequate to the protection either in peace or war, of British and Colonial interests, and they recommend that His Excellency should bring this expression of opinion under the notice of Her Majesty's Government and urge the expediency of strengthening that force."

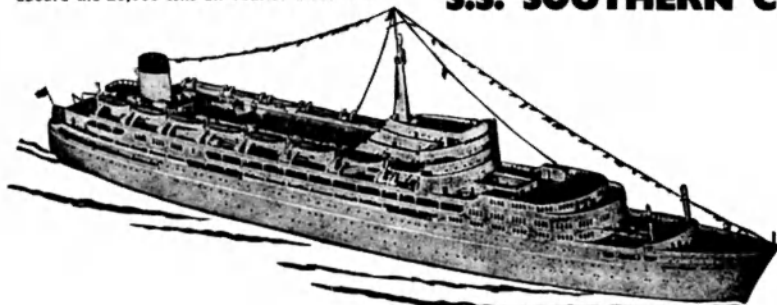
This was brought under the notice of the Lords Commissioners of the Admiralty by the Secretary of State for the Colonies in a letter of 8th February, 1859; and in a reply of the 18th March the Admiralty said that "My Lords deem it probable that the amount of force hitherto maintained in the seas adjacent to those Colonies" (Australian and New Zealand) "will in future require to be larger than at former periods, and two additional ships of war have recently been ordered to proceed from China to join the Senior Officer at present commanding the ships stationed for that service."

The Admiralty went on to state that My Lords had under consideration "the expediency of a complete separation of the Squadron in the Australian Seas from that under the command of a Flag Officer on the East Indian Station, but they

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are of opinion that an officer with the rank of Commodore will be sufficient for all general purposes at present."

A week after this letter, an Admiralty Minute of 25th March, 1859, stated: "Captain Loring of H.M.S. 'Iris' is to hoist a Blue Pendant and to assume the command as Senior Officer of Her Majesty's Ships on the Australian Station independently of the Commander-in-Chief in India. The limits of the Command are to be as they are now defined in the Commander-in-Chief's instructions, viz.: Australian Station, Bounded on the North by the Parallel of 10 Degrees of South Latitude — on the East by the Meridian of 170th Degree of West Longitude — on the South by the Antarctic Circle — and on the West by the Meridian of 75th Degree of East Longitude. Inform Admiral Hope, and send fresh Commission to Commodore Loring."

Three days later, another Admiralty Minute stated: "Captain Loring as Commodore and Senior Officer on the Australian Station is to have £1 a day in addition to his pay." And that same day a third Minute, addressed to the Chief Clerk, stated that: "The Australian Station being now a separate Command under a Commodore, and independent of the East India and China Station, I think the letters to Commodore Loring of the 'Iris,' the Senior Officer in Australia, should be numbered."

In thus moving, the Admiralty anticipated further representations from Australia, for in a letter of 25th April, 1859, the Secretary for the Colonies informed the Admiralty "that the Government of Victoria is now seriously engaged in making arrangements for the protection of the Colony against external assault . . . and request first that a

blockship fully armed and possibly iron plated should be placed at their disposal and secondly that an Admiral's Station be established at the Colony"; and in a letter of the 5th May, 1859, further informed the Admiralty that a Select Committee of the House of Assembly of the Colony of South Australia sought information as to the terms on which Her Majesty's Government would consent to station in South Australian waters a gun boat "with heavy metal and small draught of water and capable alike of defence and attack, one moreover which might be rapidly moved to any threatened point, manned by stout hearts and strong hands."

On 20th June, 1859, an Admiralty Minute stated: "In April, 1858, the Naval forces on the Australian Station consisted of 'Iris,' 26 (Sailing); 'Sappho,' 12 (Sailing); 'Corodelia,' 11 (Screw); 'Bramble' (Tender, Sailing). In June, 1859, it consisted of 'Iris,' 26 (Sailing); 'Pelorus,' 21 (Screw); 'Niger,' 14 (Screw); 'Elk,' 12 (Sailing); 'Corodelia,' 11 (Screw). This force should be increased by substi-

tuting a first-class screw frigate for the 'Iris,' and by adding another small frigate, two or three gun vessels and several 80 h.p. gun boats, as soon as the home defence is sufficiently provided for. The Australian Station should then be commanded by a 1st Class Commodore or by a Rear-Admiral.

"It is necessary not only to provide for the defence of the Colony, but, in the event of war, to give periodical convoys to treasure ships proceeding home either by the Cape of Good Hope or by Cape Horn. Ships sent to convoy Merchant vessels from Australia would have to escort them as far either as Cape Horn or Falkland Islands, or as far as the Isle of France. There they should be met by ships of war from the Cape or South American Stations."

Now, just on 100 years since the Australia Station was born, its parent Station, the East Indies, is abolished. Responsibilities in the ocean areas of the old command are now divided between the Far East and South Atlantic and South America Stations (and, of course, so far as the original (Turn to page 9)

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THE NAVY

POLAR SUBMARINE VISITS BRITAIN

WHEN the U.S.S. "Nautilus" reached England fresh from her historic voyage under the North Pole, and berthed in the naval base at Portland, Dorset, her company must have felt at home, for Portland, Maine, is a well-known U.S. naval base. And, incidentally, "Nautilus" was, in visiting Portland, England, adding another link to the stout historic chain linking that country and the United States. Portland, Maine, was first settled by the English in 1632, under the name of Fal-mouth, from that other West Country seaport of Cornwall. It was the birthplace of Long-fellow.

Naturally, "Nautilus" and her people received a warm welcome from Portland, England; and there Lieutenant-Commander A. R. C. Rowe, D.S.C., R.N., Deputy Secretary of the Navy League, was able to board her and have a personal interview with her Commanding Officer, Commander W. R. Anderson, U.S.N. The fruits of that interview are here reproduced from "The Navy."

I asked Commander Anderson (wrote Lieutenant-Commander Rowe) how the ship's company were selected for posting to "Nautilus" and he said that officers and men of

the U.S. Submarine Service were all volunteers and had to reach a certain standard of technical training, together with a very high record of personal conduct, before they were accepted into that service. After selection to the "conventional" Submarine Service they were then able to volunteer for service in nuclear powered submarines and, if accepted, were given a year's intensive course on various aspects of life and work in these new ships. The training of the officers is such that all duties are interchange-

powered submarines the ship's company very much prefer being below the surface, since the ship is completely stable when at a reasonable depth and there is no physical discomfort. The only restriction to smoking in these submarines is in the Battery Tank. The "Nautilus" is equipped with high temperature burners which convert carbon monoxide into carbon dioxide, which is then disposed of by chemical scrubbing. Commander Anderson added that in a nuclear war, probably the safest place in the

"JULES VERNE" VESSEL LINKS OLD AND NEW WORLD PORTLANDS

able. Sixty per cent. of the enlisted men were married and all the officers were married — this disposed of a supposition that only bachelors were accepted for service in these ships. I then asked whether it would be true to say that the crews of the nuclear powered submarines were, in fact, the pick of the United States Navy and he said that this was probably the case.

The next question was whether Commander Anderson considered this particular trip of a perilous nature and he said that none of the officers or men had any particular feeling of danger whilst operating on this voyage, but it should be borne in mind that "Nautilus" was operating in an almost completely new environment, and unknown factors might have arisen which would, in fact, have made the trip somewhat hazardous.

On the question of general living conditions on board, the Captain said that they were excellent and brought out a further point. In all nuclear

world would be in a nuclear submarine at its battle station.

Commander Anderson stressed that there was no particular psychological training for men who would be required to operate below the surface for long periods.

I then asked why the particular route which "Nautilus" took was selected, and the Captain said that this was the first crossing and after all relevant factors had been taken into account the route chosen was considered the fastest and safest.

The Captain then revealed that in June of this year he was given permission by the Chief of Naval Operations to undertake the trans-polar crossing should he consider such an undertaking would meet with success. It was well understood that it might be necessary to defer this trip until a later date, as conditions of ice and current, which would affect the voyage, were problematical and there was very little detailed information available on the route to be taken. The decision to undertake the voyage was left en-

EAST INDIES STATION PASSES — from page 7

East Indies Station is concerned, the Australia Station), while the Red Sea, Persian Gulf, Arabian Sea and a small portion of the north-western part of the Indian Ocean — all of which formerly were part of the East Indies Station — are now controlled by a Commodore Arabian Seas and Persian Gulf.

tirely to Commander Anderson's discretion.

Some time after the voyage had begun, "Nautilus" was in the Chukchi Sea off Alaska in fairly shallow water and experience showed that ice in some areas was already more formidable than was expected. Commander Anderson had gone to his state-room at 10 p.m. when the officer of the watch (who was also an engineer officer) called him to the conning position. Immediately outside the Captain's state-room are fixed two indicators — one showing the depth of water below the ship and the other the depth of water above the ship.

From these indicators it was clear immediately that the "Nautilus" was steering for a sharply rising sea bed and a downward tilting pressure ridge of ice. "Nautilus" was proceeding at medium speed.



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Commander Anderson immediately took his ship nearer to the sea bed, reduced speed and altered course to port. At one stage of the turn there was only 10ft. of water above the ship and 20ft. below.

Warning of further ice ahead was given by the sonar screen. It was not possible to maintain a visible look out as the only thing to be seen was grey-black sea. It was understating the case when Commander Anderson said "the situation was a little too close for comfort."

POLAR CURRENTS MIGHT HAVE PRODUCED AN "INTERESTING SITUATION"

It was perfectly clear from talking to Commander Anderson that the ship's company remained completely confident during this incident and part of this feeling must be ascribed to the Captain's policy of keeping his officers and men advised at all times of the various aspects of every operation. After a somewhat testing time, said Commander Anderson, the voyage was deferred until August and the "Nautilus" returned to Pearl Harbour for exercises.

As a result of the experience and knowledge gained on this first voyage a considerably greater practical understanding of ice conditions in the polar area was obtained, and before the trip in August aircraft reconnaissance had provided further valuable information. It is interesting to note that the "Nautilus" took the same route whilst on her second and successful trip and did not meet conditions such as those in June.

I then asked whether any particular navigational difficulties had been experienced. I told the Captain I realised that the inertial navigation system

had been used and he said that the performance of equipment by far exceeded his most ambitious expectations.

In answer to further questions, Commander Anderson said that had the submarine's navigational equipment failed it would have been feasible for the "Nautilus" to have been lost underneath the ice. He said there was a chance that had torpedoes blown a hole in the ice it might have been possible to surface, but that this method of surfacing through

ice was as yet completely untried.

Had the "Nautilus" been unable to surface, been lost or broken down under the ice whilst near Alaska, then they might have got in a circular current and have drifted clear of the ice fields. If this had happened in the more northerly ice regions, however, then the drift would have brought the ship out near Greenland or possibly Russia and the situation might well have proved interesting!

Answering a question concerning the future of nuclear submarines, Commander Anderson, a man who is obviously dedicated to the submarine service, said that although he was naturally biased, he was certain that nuclear submarines were of vital importance at a time when the navies of the world were going through a revolutionary period. Aircraft carriers, guided weapons, cruisers and destroyers still had a great part to play — of this he was convinced — particularly in limited wars and the peacetime business of the fleet.

FICTION

THE worst boredom isn't being at sea for months on end; it's being stuck up the same old creek day in, day out, with the same old faces (except for those natives on Leave and Ration Allowance who appear

Farechester Creek in a waste of mud flats as a Signals School. Before being paid off to this duty she did one Commission on the East Indies Station where she showed herself so unstable she became in

mess tables end to end, down a course edged with Bluebell metal polish, over two jumps of rolled-up oilcloth and across the grand hazard, "Becher's Brook" — a strip of wood across a roasting pan half-full of water. The fever was on the mess-decks, and reckless bets were placed on long odds. None seemed more reckless

NOTHING LIKE A BIT OF LOVE

briefly before midday and disappear shortly after) until any sort of diversion is seized to cheer the dreary hours of Watch Aboard between the First Dog Watch and Pipe Down.

Such was life aboard H.M.S. "Impudence," an old sail-and-steam wooden battleship long since roofed over with corrugated iron and moored far up

turn Port Guardship and then Accommodation Ship before being towed home.

She brought home a fine complement of cockroaches, not the friendly little black-beetles that go by that name in this country, but the big brown "Bombay Charlies" that grow wings and blunder round in the dark during their mating

than the owner of the sole individual entry, an old three-badge A.B. who was taking bets on his fat, slow old cockroach that had done badly in the heats. He had a notice chalked up by his little cuddy near the Cold Store — "Cash only. No tots." The wags who saw this said he would be paying off his losses when he

By Michael Denis Prendergast
(from "The Navy")

POLAR SUBMARINE VISITS BRITAIN — from page 10

I reminded Commander Anderson that at The Navy League ceremony in Trafalgar Square last year, Admiral of the Fleet, Lord Mountbatten, the First Sea Lord, had said that "the nuclear propelled submarine would introduce a far-reaching revolution in the whole of naval warfare itself" and asked him if he would agree with this statement. "There can be no question of the truth of this statement whatsoever," was his reply.

Commander Anderson said that he, in common with his officers and men, felt very proud and gratified by the tremendous welcome which had been given to them all at the historic naval base of Portland. We in Britain take this opportunity to congratulate the "Nautilus" and her gallant company.

season. "Impudence" was kind to them; cool in summer and warm in winter, her oak sides gave them the crannies they needed to breed for generations whilst successive fumigations weeded out the weaker brethren, till in the 1930's a fine vigorous strain was thriving.

The ingenuity born of boredom saw in them a source of fun and profit, and Cockroach Racing was invented. Each Mess had its "stable" and a knock-out championship was started. Individual starters were allowed, but at a fee few cared to pay — one week's tots to the Clerk of the Course.

The eliminating canters were run off, and soon the final drew near, a gruelling test of training and stamina over two

went out to pension.

Stripey took no notice of what they said, but kept a close watch on all they did. Not unaware of various forms of "nobbling" (such as the blob of rum and jam that could be dropped into the "stable" in the owner's absence) he took his entry with him wherever he went; as Tanky, he took it with him into the Cold Store and ashore each day in the Beef Boat. ("Beef Boat" was a euphemism — its real purpose was to take the gash bins of waste ashore for pig food). The other favourites led pampered lives in zinc gauge boxes, fed on the strictest diets of rationed morsels. Such a contrast couldn't escape notice, and Stripey made a very heavy book.

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At long last the great inter-Mess final of the "Impudence Stakes" was ready to start. On the lower for'ard mess-deck hardly a soul more could press into the space between the bulkheads and the mess stools that held the course free for the Race Stewards, who kept the Bluebell fresh and saw that the hazards and finish were in place and in order. At the head of the table sat the Clerk of the Course and Judge in the person of the Chief Cook. Stripey's entry fee had been paid in one lump — or drop, if you prefer — and it had evidently been heavily punished a short while before, if Cookie's purple face and aromatic breath were anything to go by.

Cookie bellowed out the runners' names, and the colours painted on their backs.

"Four Mesa: 'Custard Lugs,' one yellow spot."

"Seven Mess: 'Tiddly Kid,' two white stripes."

"Mis-kellaneous Mess: 'Donkey's Breath,' two red spots."

"Nineteen Mess: 'Gay Caballero,' green circle."

"P.O.'s Mess: 'Dose o' Salts,' blue zigzag."

"'Individual h'entry: 'Little Dick,' A.B. Cayley, black square."

"All ready, then? Up to the start!"

The Leading Hands of the Messes brought their entries and put them into the little wooden starting boxes in the order called.

"'Ere, wait a minute; where's Cayley? Where's Stripey?"

"'E's scarpered wiv the money," said a voice.

"Ho no, I ain't," said another from the hatchway and Stripey descended with all the dignity his years and fourteen stone demanded.

"C'mon, Stripey, 'urry up," wheezed Cookie, as Stripey carefully hung up his coat opposite the finish, and took out the grubby match box that contained his entry. He shook out "Little Dick" and placed him at the start.

"Right! Stand by!"

Cookie's finger crooked into the loop of elastic that held the starting boxes down; as he pulled he brought his other

hand down on the table with a bang like a shot. The boxes whipped over the cockroaches' heads and fell to the deck. Startled by the bang the cockroaches ran down the course.

"They're off!"

The crowd pressed forward, cheering their favourites, and jostled for a better view. "Custard Lugs" and "Gay Caballero" were well out in front, zigzagging wildly between the lines of Bluebell, but making good progress towards the first jump. "Tiddly Kid" and "Donkey's Breath" were on their backs, having collided in the first mad rush. The owners moved to right them, but Cookie's roar stopped them short.

"No 'elp allowed to runners. Let 'em be."

"Dose o' Salts" was fascinated by the pair on their backs, and made short rushes, punctuated by stops to look back at them. By now "Custard Lugs" was essaying the slippery oilcloth of the first jump with "Gay Caballero" seeking an easy way round the end. "Tiddly Kid" was on his feet again, having hooked a foot in "Donkey's Breath," whose owners complained bitterly of unfairness to an unheeding Cookie. "Custard Lugs" was over the jump but poor "Gay Caballero" fell off the end into the Bluebell and rushed off course to clean up, only to be disqualified. "Tiddly Kid" was making ground fast on "Dose o' Salts," whose efforts to clear the jump were frustrated by a desire to climb it at an angle. "Donkey's Breath" had given up, and was sleeping peacefully far in the rear, still capsized.

"Custard Lugs" was over the second jump and heading for Becher's Brook. His owners and backers were already adding up their winnings in anticipation, when the whole race changed.

All this time "Little Dick" had sat at the start, except for a short excursion to see "Donkey's Breath," from which he had returned. At the other end stood Stripey, watching from the finish. His hand moved behind him, plucking and twitching at his coat as if the suspense was too much to bear. The coat fell open, and "Little Dick" sat up, alert. His antennae twiddled this way and that, then with incredible speed he set off down the course, hardly seeming to touch it in his headlong dash. He overtook "Tiddly Kid" and "Dose o' Salts" at the second jump and set out after "Custard Lugs" who was teetering unhappily along the wooden strip above the water. The hush of surprise followed by the roar of consternation unnerved him, and he fell in with a tiny plop.

"Little Dick" still came on, and boldly struck out across the bridge. His wobble in the middle brought the cheering to a shriek, hut he was over, and ran faster than ever for the finishing line. He did not stop there, hut ploughed on through the Bluebell and off the end of the table. The crowd was delirious with excitement and surged forward, Stripey amongst them pleading for care, but he was seemingly too late. The victor was half-squashed and expired a minute later. Stripey's blame was laid all round impartially on stewards and punters alike, but he nevertheless started collecting his wagers as Cookie declared the late "Little Dick" the winner.

His rivals were incredulous, and demanded to know how such speed could be obtained without doping of some sort, but Stripey was not to be shaken. "It's all done by love," was his unvarying answer, and his hearers went

away shaking their heads, sadly confused.

Next night in Farechester, the cosy firelight in the back parlour of The Little Rose shone on the faces of two men taking their ease, well content with their world. One took his glass, and let the firelight flicker in the rich garnet colour of his old strong ale.

"'Ere's to 'Little Dick,'" he said, and took a long, slow draught.

"Ar," said the other, and did likewise.

After a pause he added, "Y'know, Stripes, I still don't understand 'ow you did it. 'E was stone cold at the start, an' all of a sudden 'e's at the finish. Real queer it was, but I couldn't disqualify yer, wot

with a fortnight's tots an' ten per cent. of yer winnin's."

Stripey looked quizzically at the Chief Cook.

"Yer won't tell nobody?"

"Not fer me pension I wouldn't."

"I 'ad a female cockroach inside me coat, see, all nice and warm in a little bit o' gauze. I kept 'em both in the Cold Store, an' brought 'em out for longer periods each day to kid 'em on it was breedin' time, see; so all I 'ad to do was clip 'is wings a bit so's 'e couf'dn' fly proper an' 'ad to run a bit as well — mus' stick to the rules, y'know — an' 'e jus' ran straight for 'er."

He mourned "Little Dick" in another sup of ale, and sighed.

"There's nothin' like a bit of love for 'elpin' things on."

A STANDING SALT FOR A SAILING SALT

Bulwark's New Trophy

Shortly before she sailed for the West Indies with the Home Fleet, H.M.S. Bulwark received a notable addition to her trophies.

At an informal City luncheon, Mr. Charles Trustram, Chairman of the British Insurance Association, presented Captain P. D. Gick, the Commanding Officer of the aircraft carrier, with a standing salt, or ceremonial salt cellar.

This new Bulwark trophy commemorates the part played by the ship and her company in the Suez operations of 1956 and strengthens the link between the Insurance Association and the Bulwark, as the Association's adopted ship.

The salt weighs 28½ ounces and is 10½ inches high. Its cover is supported by three heraldic sea hawks signifying the three Squadrons of Sea Hawks which took part in the Suez operation. An appropriate inscription commemorates the occasion.

Standing salts have long been presented as gifts to symbolize the friendship of the giver. They date from mediaeval times when at banquets they were always placed at the head of a table raised on a dais. During banquets they were passed down to lower tables. Diners were seated above and below the salt according to their status: in other words, according or not to whether a man was "worth his salt."

R.A.N. SHIPS COMPLETE VAST SURVEY IN NORTHERN WATERS

A vast hydrographic survey task, in which four ships of the Royal Australian Navy steamed a total of 33,552 miles, was this year completed in a little more than 10 weeks in the Sahul Bank area between Darwin and Timor.

The area covered by the survey comprises 11,300 square miles, in which there are large numbers of treacherous shoals and coral outcrops, and the survey was the most extensive ever undertaken by the R.A.N. in peace time. The Australian Naval Board made a signal to the four ships expressing satisfaction at its completion.

The four ships were the frigates Swan and Warrego, and the ocean minesweepers Fremantle and Cootamundra. The senior officer of the force was Commander B. H. Loxton, R.A.N., captain of the Swan. The officer in charge of the surveying operations was Commander J. H. S. Osborn, R.A.N., captain of the Warrego.

During the survey, which occupied 1,900 working hours, the ships laid 165 surveying beacons and plotted 11,600 miles of soundings. As a result, several shorter and safer routes than were available between Darwin and such places as Singapore, Djakarta, Bangkok, Hong Kong, Tokyo, Kure, Manila and other South East Asian and Far Eastern ports would be provided for shipping, which had increased tremendously in the area since the end of the Second World War.

The method used in bringing the operation to a successful conclusion so speedily was similar to one used in surveying the waters on previously uncharted coasts of New Guinea and other islands in the

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the pounding, crashing, every-which-way oscillations of an army tank are a sore trial to its working parts and to the lubricants without which it could not function. Golden

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TRANSATLANTIC views on THE "FLAG OF CONVENIENCE" QUESTION

"ENVY, Hatred and Malice" — a pamphlet which has recently come my way—attributes all these characteristics, or most of them, to European shipowners in general, and in greater degree to the Norwegians and the British. Under the title "Flags of Necessity" it puts the case for the American tramp owners (dry cargo or tanker) and oil companies who, unable to operate their ships on an economic basis under American regulations, have chosen to put them under one or more of the Pan-honlib flags. In one of the articles contained in the pamphlet, Mr. Vander Clute, of the Gulf Oil Corporation, makes the point that: "If, as has been stated in some quarters, all ships American-owned should be placed under the U.S. flag, I regret to say that the number of tankers that would be available to the Govern-

by "Bluenose" from "The Navy"

ment would diminish exceedingly because U.S. flag vessels cannot be operated in competition with foreign flag vessels, which operate anywhere from 30-50 per cent. cheaper than U.S. flag ships."

Mr. Vander Clute puts the case, primarily on defence grounds, for an American Merchant Marine a great deal

trophe of a general war should be forced upon us by the necessity of retaliation against surprise attack, the Merchant Marine, after the initial period of devastating nuclear exchange, would play a most vital role."

(Incidentally, this looks suspiciously like the doctrine of broken-backed war, now dis-

"The Merchant Marine might well be the one source of strength of the Free World which would pluck victory from chaos."

(M. Vander Clute)

R.A.N. SURVEY — from opposite page

Pacific in the war against Japan. Instead of one ship traversing a line and taking observations from beacons, the four ships swept through the survey abreast on a front of several miles, operating their asdic and other equipment. Then, on given signals at frequent intervals, they made individual observations which were passed to the officer-in-charge, by whom they were co-ordinated.

All the data obtained will in due course be incorporated in charts prepared by the R.A.N. Hydrographic Service.

larger than can economically be operated under the United States flag. He does not exclude, however, the grounds of economic advantage, particularly in the earning of foreign exchange. He recalls the immense losses by submarine in the two World Wars and reminds that, in the event of a third war of similar scale, the West cannot reasonably hope for time to make good deficiencies: ships must be there at the beginning. He prays in aid the views of General Twining, the Chairman of the U.S. Joint Chiefs of Staff, that: "It seems incredible to me that anyone could argue seriously or with justification that new concepts of warfare obviate the necessity of further fostering a merchant navy. . . . If the catas-

credited by our own Minister of Defence!)

Mr. Vander Clute also quotes with great effect some words of Admiral Gallery, U.S.N.: "The backbone of sea power is not the battleship or aircraft carrier, but the lowly, peaceful merchant ship. Sink those merchant ships and our powerful battle fleets would never be able to leave harbour. The airliners which zoom across the Atlantic would be grounded were it not for the plodding tankers which they pass en route." This statement is backed up by some figures "taken from a recent publication of the Office of Chief of Naval Operations. It showed that deploying 10,000 tons of cargo by air 8,000 miles required four trips each by 122

super-aircraft and five average tankers of fuel."

The legitimate and inescapable conclusion of Mr. Vauder Clute's argument is that the American owned and controlled fleets under the Panhonorib flags—there are approximately 6,000,000 tons of tankers alone—are essential to American security and also to the security of the free world. They could not be operated under the United States flag except on subsidy terms, at the expense of which the United States taxpayer would certainly jib; and, as is pointed out in an article from the "Tanker Times" quoted in the pamphlet, there would probably be difficulty in manning them. Operated as they are, they form an insurance immediately available in the event of war; and they earn something for the American taxpayer in the meantime in that

any remitted profits immediately become liable to American taxation.

So far, so good. The position of the American owner has always been recognised, as have the advantages which the West in general may draw from the existence of a pool of tonnage under flags which, in the event of hostilities, might well remain non-belligerent, though available—in some cases, at a price—to the West. But Mr. Vander Clute, and the other, anonymous, authors of the articles in this pamphlet, spoil an excellent case by the accusation that European shipowners, the British and Norwegians in particular, are anxious to get these ships off the seas for selfish reasons—"so they may have the field to themselves."

In effect the writers of this pamphlet have put not only the American but also the British case for a strong merchant fleet. Basically, the grounds are the same—security and earnings of foreign exchange. Their complaints are also the same—Government restriction and the burden of taxation. The American owner has found a way out through the tax-free flags; and British owners certainly look with envy at the freedom which their Panhonorib brethren enjoy. They realise, however, that no owner in his senses will voluntarily come into a strait-jacket: what they ask is equivalent freedom for themselves. There has been some relaxation of restriction in the past few months, and the investment allowance provides some taxation relief in certain cases. But two major points remain untouched: the balancing charge on the sale of older tonnage, and in an age of inflation the question of depreciation on historic instead of on replacement cost.

There are incidentally two misconceptions which make the position of the British owner appear better than it is. The investment allowance does not, in fact, provide virtually complete relief from taxation; an owner can only claim the allowance if he has earned equivalent taxable profit. Both Cunard and Furness Withy have this year been unable to claim investment allowances; while to the small owner they are of relatively little value at any time. Again, the balancing charge on the sale of older tonnage has the same effect as the American Capital Gains Tax, a fact which is apparently overlooked by the authors of this pamphlet.

But the major weakness of the pamphlet is that it burkes the real problem raised by any cushion of tonnage kept in operation for security reasons. The world can absorb it when trade is good, but tends to be over-tonnaged in times of recession. This is manifest in the 8,000,000 tons of assorted shipping laid up in various ports of the world this summer, the result of the recession of the last few months. It may be that one effect of this will be to clear out some of the financially weaker ownerships under all flags; certainly Panhonorib have laid up fairly heavily, and it has been suggested that they may prove less able to meet hard times than their older competitors. They may, however, be able to live on their fat in the shape of unremitted profits. A good many British owners, however, have no fat. They do not grudge it to their competitors; but, being only human, they would like the opportunity to put on a few pounds themselves.

CHARTING THE SEVEN SEAS FOR THE WORLD

It looks as if the British Admiralty's establishment at Taunton, Somersetshire, England, which prints charts and navigational books for mariners using the world's oceans, will have another record year.

The big red-brick building at Taunton is officially known as the Hydrographic Supplies Establishment of the Admiralty. It is the most comprehensive production unit of its kind on earth. Within its walls is printed a wide variety of beautiful detailed charts which are used by the Royal Navy and other navies, merchant shipping, fishing vessels, yachtsmen—in a phrase, by the great international brotherhood of seamen.

Last year the Taunton Establishment broke its previous records by producing and printing 2,092,909 charts. Of these, 1,404,450 were sold in many countries for £368,980, the rest being issued to the Royal Navy and to United Kingdom Government departments. It sold 182,943 navigational books, for use in conjunction with the charts, for nearly £87,000, most of the sales being made through 150 agents in and outside Britain.

Charts for The Netherlands and Japan

Here are two reasons why 1956 may be a year of record sales. The first is that a large order is now being executed for the Netherlands Government. During a recent visit to the Taunton works I was told that this, the biggest current order, is linked with the development of Rotterdam as one of the world's major ports.

Another large order has been received from Japan. Presumably the charts are needed to equip her big and expanding merchant fleet. This is a repeat order, the first being received about a year ago. The charts are to supplement those supplied from the newer department of the Japanese Hydrographer, whose "coverage" is more limited and largely confined to Asian waters.

The Taunton Establishment is part of the Admiralty's organisation which has produced up-to-the-minute charts and navigational books officially ever since 1759. To-day there are more than 3,000 different Admiralty charts covering the seven seas. Waters still to be thoroughly charted include certain coastal areas of Greenland, and areas off Chile.

Elaborate Planning

Most of the charts are printed in black, except for such "sea-marks" as navigational lights and radio beacons, which are in dark red. During the past 12 years about 800 charts have been given a blue overprint to indicate shallow coastal waters. In addition, about 170 have so far been prepared for mariners using the modern "Decca" system of navigation. These post-war amendments will be extended to more charts each succeeding year.

Some aspects of the British Admiralty's contribution to Safety Afloat

by Nowell Hall

Naval Correspondent of the London "Daily Telegraph"

Elaborate plans are made to ensure that every chart incorporates the very latest information. Last year, for instance, more than 6,300 small corrections, and nearly 100 large corrections were made to chart plates. Some of the smaller ones were hand-stamped by staffs of highly-skilled craftsmen with the aid of powerful magnifying glasses.

New Publications

During 1957, 108 new charts were published, and there were 207 new editions of charts and diagrams for special purposes. The Establishment also printed well over 3,000 Admiralty Notices to Mariners, warning of hazards encountered at sea—even down to a buoy being slightly off station.

The growing numbers of charts printed and their sales throughout the world, is shown by the following figures:

	Printed	Sold	Receipts
1953	1,740,634	1,065,105	£250,117
1954	1,847,434	1,056,744	£255,343
1955	2,274,043	1,199,575	£293,634
1956	2,040,689	1,262,701	£321,798
1957	2,092,909	1,404,450	£368,980

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must
be
Good*

NAVY LEAGUE REPORTS

NEW SOUTH WALES DIVISION

The Committee's Report for the Year Ended 30th June, 1958

It is with pleasure that I present the Committee's Report for the year ended 30th June, 1958. This report covers a curtailed period of nine months only, as we have now adopted the 30th June to be the end of our financial year, in lieu of the 30th September as previously. Our object in making this change is to enable the Report and Audited Accounts of this Division to be available to the Federal Council at its annual meeting, which is convened about the end of September each year to coincide with the Annual Sea Cadet Council Meeting.

MEMBERSHIP: Our membership has remained static during the year.

FINANCE: The FINANCIAL STATEMENTS record a gain for the nine months, amounting to £511, compared with £279 for the previous twelve months. Excess expenditure over income during the September quarter, however, would have made the figures for the full year almost identical.

Loans to Units increased by £150, making the total of our Loan Account to all Units

CHARTING THE SEVEN SEAS — from page 17

During my two hours' tour of the photographic, copper-engraving, lithographic-printing and other departments of this complex organisation I was impressed by the high standard of accuracy and workmanship.

In one department a craftsman was preparing a new chart of Hampton Roads, Virginia, in the United States of America, which was the anchorage for ships attending the International Naval Review associated with last year's celebrations for the 350th anniversary of the founding of the first English settlement there. The chart was one-third completed. But in that small area the craftsman had inscribed on the copper plate soundings requiring 3,000 tiny numbers.

Fluctuations in the demand for Admiralty charts sometimes indicate the trend of world events. During the 1956 Suez crisis, for example, when more ships were switched to the route round the Cape, more than 250,000 charts were printed and handled at Taunton in one month.

£818. The Loans are interest free, and, provided that the money has been expended on improvements to their Depots or training facilities for their Cadets, the Units are normally subsidised on a £ for £ basis on presentation of their accounts. Without the support of our Members we would be unable to provide this assistance and we thank you all for making this possible.

As stated in the last Annual Report, the magnificent sum of £650 was raised by the Ladies' Auxiliary before and at the 1957 Navy League Ball, one of Sydney's brighter functions. Mrs. Harrington, the then President, presented a cheque for this amount to the Committee. We have pleasure in informing you that Mrs. D. H. Harries, despite an unfortunate illness, has kindly consented to be President of the Ladies' Auxiliary this year. Their sterling efforts culminated in the Navy League Ball held at "Princes" on Tuesday, 28th October.

We are indeed most grateful that our Movement has such an energetic and devoted band of workers, who give us such practical and cheerful encouragement.

Both the League and the Sea Cadet Units suffered a loss of income this year — that normally obtained from the sale of programmes at the Dockyard Commemoration of Trafalgar Day, which was not held in 1958.

SEA CADETS: There are now 317 active Sea Cadets in the N.S.W. Division of the Corps, which is an increase of 80 cadets (or 34 per cent.) during the year.

The strength of the Units is as follows:

Cadets	
T.S. "Sydney" — Snapper Island ..	43
T.S. "Australia" — Waverton	43
T.S. "Warrego" — Woolwich	16
T.S. "Condamine" — Manly	36
T.S. "Sirius" — St. George	43
T.S. "Albatross" — Wollongong ...	45
T.S. "Tobruk" — Newcastle	45
T.S. "Shropshire" — Canterbury ...	46

Total Cadets 317

In addition, a number of Units have enrolled Juniors (10-14 years of age), who regularly attend training and we are anxious for the Federal Council to accord recognition to these young lads and approve a simple type of uniform to be worn by them.

With the recent completion of additions to the T.S. "Warrego," building at Woolwich, the number of Cadets joining that Unit is now increasing rapidly.

The projected Australia Wide Camp, which it was hoped to hold at Balmoral Naval Depot in January next, has had to be deferred due to the unavailability of that establishment. The resultant disappointment, however, has been alleviated somewhat by the receipt of two international invitations. These have been received by the Federal Council from both Canada and New Zealand to send a representative party of Australian Sea Cadets to these countries during 1959 and 1960, respectively.

The Federal Council has asked us to pursue actively every avenue to raise money to enable our N.S.W. Units to be suitably represented at these wonderful opportunities to advertise our country and in particular our Sea Cadet potential. We would be grateful for any suggestions to this end from the Fellow of our League.

During the year we welcomed 25 Canadian Sea Cadets, who arrived in H.M.C.S. "Ontario," and they were suitably entertained by our Units during their week's stay in Sydney. From the letters of appreciation received, it was obvious that they thoroughly enjoyed themselves. More recently, a party of four Indian Sea Cadets briefly visited Australia at the invitation of the Commonwealth Government, and they were shown the sights on two separate days by Cadets from our Units.

On the training side our Division has been most active and all Units have sent Cadets to attend Training Camps in H.M.A. Ships and Establishments. The fortunate ones have had trips to sea in destroyers and smaller vessels, whilst one lucky party spent a day in a submarine, including diving exercises.

The Annual Church Parade was held at Garden Island and on this occasion the Inspecting Officer presented the Cadets Forces Medal to two Sea Cadet Officers — Sea Cadet Commander L. Forsythe, the Commanding Officer of T.S. "Sydney," and Sea Cadet Lieut. Commander D. J. Mort, Divisional Administrative Officer.

Sea Cadet Guards were paraded on a number of occasions, notably on the Commemoration

of Trafalgar Day in Martin Place, when our President placed a wreath on the Cenotaph. The Corps also provided an armed detachment for the Australia Day March through the streets of Sydney.

Sporting activities have been well maintained, and the Annual Swimming Carnival and Regatta, to mention two, were well organised and successful. Rifle shooting has been encouraged, and has become most popular, and several Units have their own miniature ranges. For the first time we competed in the .22 International Small Bore Rifle Competition and our Divisional team was placed tenth from a large entry from a number of countries.

We were particularly honoured that our Divisional Senior Officer was asked to provide a party of Sea Cadets to attend the official cars at Manly wharf during the visit of H.M. the Queen Mother in February last. They acquitted themselves in a most praiseworthy manner and brought great credit to the Corps.

During the year the Sea Cadet Committee has, by invitation, attended the monthly meetings of Unit Commanders. Whilst retaining its separate identity, this arrangement, which removes the necessity to hold regular monthly meetings itself, permits the Committee to maintain much closer liaison and expedites administrative action with the League.

OTHER MATTERS: It is with deep regret that we report the death of Sea Cadet Lieut. L. Seymour, Commanding Officer of T.S. "Shropshire" during the year. We hope, at a later date, with the co-operation of the Local Committee, to arrange a memorial to his memory.

Rear-Admiral H. J. Buchanan, C.B.E., D.S.O., R.A.N. (ret'd), was invited to join the Committee, and has accepted. We welcome him as an active member of our team.

IN CONCLUSION: We thank all our Fellows and Associates for their continued support and interest in the work which we are doing for this country and that worthwhile Youth Movement, the Australian Sea Cadet Corps.

We hope also that they are satisfied with the results which have been achieved, although much, regrettably very much, more remains to be done.

For the Committee of
The Navy League of Australia,
New South Wales Division,

H. A. SHOWERS, President.

Date: 29th September, 1958.

NAVY LEAGUE—QUEENSLAND DIVISION

ANNUAL GENERAL MEETING

THE Annual General Meeting of the Division was held in July this year and once again Cdr. N. Pixley was re-elected President with almost the same Executive. One worthy addition as Assistant Secretary is Mr. Phil Coles, a Chartered Accountant, who is fast becoming a tower of strength.

T/S GAYUNDAH

This Unit is at full strength with 5 officers, 9 instructors and 120 cadets and easily maintains its record of being the strongest Sea Cadet Unit in Australia.

In early June the Director of Naval Reserves (Capt. G. D. Tancred, D.S.C., R.A.N.) expressed his complete satisfac-

tion with this Unit and all the other Units in Queensland.

T/S MAGNUS

Excellent progress continues to be made by this Unit, which now has 60 cadets. Great disappointment was felt just prior to the school holidays when it was learnt that the annual "camp" on board "MIL-DURA" would have to be cancelled. However, the Commanding Officer made arrangements for the boys to have "day-camps" on board. This required cut lunches being prepared by mother and at the time of going to press no serious complaint has been received from parents. It is sincerely hoped that this "day-camp" will be unnecessary next year. Thanks are due to these mothers and also to the Army

who provided the necessary water transport.

T/S BUNDABEE

This Unit continues to make steady progress and held a three-day camp at Barga over the Queen's Birthday week-end.

Cadets took part in the Anzac Day march and mounted a guard in honour of His Excellency the Governor of Queensland at the Bundaberg Show.

T/S ENDEAVOUR

I paid a visit to Cairns recently and was very pleased with everything and everyone I saw. Bert Yearsley has now been appointed Commanding Officer and Jack Atkinson as Chief Petty Officer. These two now have full authority to deal with all aspects of the Unit's administration and I am sure they will do a very good job.

Now that cadet's uniforms have been received it is expected that the 31 at present on strength will soon grow to the maximum of 60.

—G.O.N.

The U.S. Navy has made such good progress with the 1,500-mile Polaris missile that it plans to treble the production of Polaris-firing submarines.

The Navy Secretary, Mr. Thomas Gates, gave this news in evidence to a House of Representatives appropriations sub-committee.

He described progress with the Polaris as amazing.

He said that the Navy planned to ask Congress "within the very near future" for emergency funds to build nine Polaris-firing submarines instead of the three previously planned.

FOR THE SEA CADETS

— ONE OF THEM "SPINS A DIT"

WHETHER Vikings still sail the blue seas, is questionable, but they do certainly navigate the calm waters of Moreton Bay when Sea Cadets of T.S. "Magnus" of the Church of England Grammar School, Brisbane, are on Annual Continuous Training.

On Saturday morning, August 9th at 0845, five officers and fifty-five cadets boarded two Navy boats and an army work-boat at Kangaroo Point and at Hamilton, and proceeded in line ahead to Dunwich, on Stradbroke Island. While travelling down the familiar Brisbane River—and, to some cadets from the country, the not so familiar parts of the bay—the signallers and plenty of helpers were busily engaged in keeping communications between the flagship—the army work-boat—and the remainder of the flotilla. Whether the C.O. is a good conversationalist or likes to give signallers plenty of practice is something the signallers could not work out, but there certainly seemed to be a lot of wardroom chat going down on the signalling pads. Every cadet also took a trick at the wheel, and judging from the course steered the unit now has some good coxswains—and a few who are not quite so good.

Stradbroke Island was now rapidly approaching, and so was the time for dinner, if starved looks are any indication. The boats were secured at Dunwich Jetty and all went ashore to the first taste, for most cadets, of Navy scrum—bully beef and tomatoes. They

were somewhat dubious about having three more meals like this, when they weighed anchor for Peel Island, lying about two miles away.

The convoy hove to and anchored about two hundred yards from the shore. Then began the task of transporting sixty men, stores, equipment, and personal gear, for what looked like one hundred and

cook the supper, and to stake one's claim on a fishing spot—and all not without mishap. No. 1 painstakingly supervised the construction of a trench in the ground, and the collection and arranging and re-arranging of fire-wood therein. Then a large metal sheet was carefully cleaned of all foreign matter, laid with extreme care, to keep it free from

OPERATION "GREAT FUN"

by Sea Cadet P. BLACKBAND, T.S. "Magnus"

sixty men. Three dinghies and a canoe were used for the operation in which there were, strangely enough, no casualties. At one stage the C.O. was biting his nails when the 1st Lieutenant went ashore. No. 1 was perched forward on top of a lot of gear vainly telling the oarsmen how not to row in circles. So engrossed was he in his theory of rowing, that he almost failed to realize that he was upsetting the trim of the boat. He was promptly reminded of the situation by two young cadets in the stern benches who were a little optimistic about having a swim. I wonder whether the C.O. was worried about his No. 1 or the boat. Some cadets could well have taken a lesson from Sub Lieutenant Kleinschmidt, who was really at home with his boats. The way he managed to bring the boats ashore with such practised ease is nobody's business.

The light of the last rays of the sun was now being used to find a camping place for the night, to get some wood, to

sand, on the fire to heat up for cooking. Darkness had now closed in, so scamping feet around the fire could not see where they were knocking sand. As a result, instead of sauced steaks, one probably found one had a sauced and sanded steak. However they were still most delicious, and rather morale boosting.

All except the enthusiastic fishermen joined in at the round of singing and yarns at the camp-fire after supper. The singing was quite up to the standard of bush concerts until certain members of a distinguished choir exercised their voices, and thus managed to clear the beach. Thus ended the camp-fire, but certainly not the night's entertainment.

Various parties developed along the beach, each with its own small camp fire. Singing and feasting seemed to be the order of the night. An occasional fish that was caught, supplemented the personal supplies of food that were brought ashore; talk about a night!

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Daybreak was "wakee wakee"! It appeared more like "sleepee sleepee" to No. 1 who was up most of the night guarding his little "chickens" and making sure they did not get into any mischief. Breakfast was quickly prepared, and then began the ferrying of equipment and belongings back to the boats. The efficiency of this operation was a credit to any Cadet unit. In the time that the officers took to make an inspection of the beach and near hinterland for any uncovered refuse or lost articles, all the boats had been loaded and were ready to weigh anchor.

At 1000 the three boats were making a comfortable nine knots through the water to St. Helena Island, where they stopped for dinner. Permission

to land was obtained from the owners of the island, and then sixty cadets were again ferried ashore in very quick time. Some cadets had time after eating their meal to walk to the various ruins from the convict days of St. Helena. Many weathered stone structures are still standing to-day, with their atmosphere of the romantic past.

It was almost with tears that the party left St. Helena Island, for they were now on the last stage of the return journey. Many memories of the happy incidents and of the prevailing high spirits of the boys will remain for at least another twelve months, when it is hoped another such bivouac will be such a great success.

INDIAN CADETS REMEMBER

FROM INDIA THEY TAKE A RETROSPECTIVE VOYAGE TO SYDNEY

25/1 Chandra Chatterji, Lt.
Calcutta, 25. INDIA
September 12, 1958

This is a copy of a letter received by Commander Forsythe, T.S. Sydney, Snapper Island, from Senior Under Officer Tapan Mitra, leader of the Indian Sea Cadets, who were here recently.

Dear Sir,

I hope you have not forgotten our visits to Snapper Island, to us they will remain unforgettably happy memories. I think the finest dinner we had in Australia was the night by the water with steaks spluttering away in the open hearth.

Your depot was one of the few places where we could relax completely and enjoy ourselves to the greatest extent, as I told you, coming back to Snapper Island was like coming home. So in this letter,

I, in my capacity as the leader of the group, thank you for your magnificent and beautiful hospitality.

We are happy to have visited you and to have the chance of meeting the excellent group of boys who go to make up your depot, give them our thanks and best wishes.

Please remember us to Petty Officer Wallace, I particularly remember Barry Wormsley and "Knobby" Clarke, please convey our greetings to them and, if possible, ask them to write to us.

I end with another salvo of thanks, for your utter friendliness.

I remain, Sir, Yours faithfully,

TAPAN MITRA
Senior Under Officer

LEARNING TO SAIL

"Sailing Primer." By W. D. Park. (G. Bell & Sons Ltd., London, 10s. 6d.)

In this very nearly excellent book the author, who runs the sailing courses for the Central Council of Physical Recreation, describes the first six lessons of a family who have just bought a boat. In the first lesson they make sail for the first time, and at the end of the sixth their teacher considers them safe to cruise unassisted in estuary waters. As one would expect from so experienced an instructor, the sequence of lessons, their content, and the reasons given for each manoeuvre or action are admirable; and the chapters on the theory of sailing, on hulls, construction and knots are adequate without being either over simplified or complicated.

But, except possibly in Nautical Schools and Naval Training Establishments, sailing is not normally a subject taught to the unwilling. It seems, therefore, a bit unnecessary to try to sugar the pill of straightforward instruction with a thin little story about how the bibulous captain helped the author to buy "Whimsy" and then taught him and his children to sail.

The story is, however, merely a thread to tie the lessons together and novices and sailing instructors, particularly the latter, who are not put off by "Whimsy" and the captain can learn a lot.

Incidentally, there is a howler in the first lesson. No doubt the author allowed it to appear to avoid complicating the lesson; but it could have been eliminated quite simply. It might amuse sailing instructors to work out how!

J. J. S. Y.

THE SUBMARINE TO-DAY — from "The Navy"

MODERN installations for replenishing oxygen and eliminating carbon dioxide and hydrogen make it possible for the crew of a submarine to remain totally submerged for several days. But unless she is able to sit on the bottom, a submerged vessel must continue moving and it is thus her batteries which fix the limit to the speeds and endurance under water of the conventional submarine. Despite the improvements achieved by the Germans towards the end of the war, the submarine propelled by electric motors has remained a relatively cumbersome and slow-moving craft.

All this has now been changed by nuclear propulsion. The underwater vessel has become as fast and as readily manoeuvrable as a surface ship, with a speed of 25 knots or more for as long as desired, and is able to dive down to depths of 1,000 feet. Indeed, to a nation such as Britain — dependent for her very existence on the safety of the sea routes — the nuclear-powered submarine presents a menace far more serious than the H-bomb which is never likely to be used. We shall only succeed in dealing with her if we take the fullest advantage of measures which science has now placed at our disposal for detecting and destroying underwater craft — measures which can be used most effectively in a vessel with an equally good performance submerged.

The principles of nuclear power are in many ways simple; but the problem of producing a power plant for the propulsion of ships, which is compact, light in weight and not too costly, requires a

great deal of investigation and research. While Britain concentrated on developing nuclear plants for the generation of electricity, the United States started 10 years ago to investigate the most suitable type of plant for warships. After trying out sodium and

the consideration of weight which had much to do with the decision to adopt this type of reactor. Be that as it may, the Americans have now sufficient knowledge and experience of ship reactors and of the auxiliary machinery required to operate them, to

**A MENACE FAR MORE SERIOUS THAN
THE "H" BOMB**

by "Periscope"

other coolants, she finally decided on a pressurized water moderated and cooled reactor, reinforced with enriched uranium. At the present time there are six variations of this type of reactor, either built or under construction.

Since water absorbs less radio-activity than any of the other known coolants, a water-cooled reactor requires less shielding and no doubt it was

go ahead with the construction of a nuclear-powered surface ship and submarine fleet. From the British point of view the important thing is that they are now able to construct ship reactors small enough to be installed in submarines no larger than about 2,000 tons — not much larger than the conventional overseas submarine of the last war. It is thus greatly to be hoped that



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CALTEX PRODUCTS ALWAYS ON HAND

Britain's decision to purchase from an American firm a complete nuclear submarine propulsion unit indicates the importance the Admiralty attach to building a flotilla of nuclear-powered submarines as soon as our finances permit.

The United States has already 19 of these nuclear-powered submarines, built, building or authorized. They include one equipped with the 1,000 mile "Regulus" guided flying bomb; seven "high-speed attack" submarines of the 2,700-ton "Skipjack" class with a hull shaped like a whale; and five very large submarines, four of which are of 5,600 tons displacement and are to be armed with 16 1,500-mile "Polaris" ballistic rockets for launching while submerged. The fifth — the "Triton" — designed as a radar-picket vessel to accompany high-speed carrier Task

Forces, has a displacement of 5,900 tons and two atomic reactors. Most of the remainder are overseas patrol submarines of the "Skate" type, a 2,190-ton version of the much larger and more costly 3,200-ton prototype "Nautilus."

Britain urgently requires submarines even smaller than the "Skate" with a hull similar to the "Skipjack" class which, in conjunction with nuclear power, will give them a submerged speed of between 30 and 40 knots. It is a submarine of this size and type which will provide one of the most effective means of locating and destroying the large ballistic launching submarine.

Naval experts and other enthusiasts, who realise the great increase of offensive and defensive capability given to the submarine by nuclear power, urge that Britain

should also build rocket launching submarines. There could certainly be no safer nor more effective deterrent. But the estimated cost of these large United States submarines is between £30 million and £35 million as compared with £16 million for the "Skate." And though these costs might well be reduced by at least a third if the vessels were British built, Britain for many years yet will not be able to afford £20 million for a submarine whose sole purpose is to fire a ballistic rocket.

What of the submarines of the Soviet Navy? There are indications that Russia has slowed down on submarine construction. But this, it may be assumed, is pour mieux sauter. Russia does not hesitate to inform the world that she is quite prepared, if necessary, for nuclear war. She has also let it be known that she has an inter-continental rocket, though there is no evidence that its range is anything like 5,000 miles. But she is second to none in her nuclear capability and no nation is better able to guard military secrets which are of real importance. We would be wise to assume that she too has realized the greatly increased value given to the submarine by nuclear power and is not far behind the United States in the construction of large ballistic rocket-firing submarines.

In this connection it may well be that the recent voyages of the "Nautilus" and "Skate" have more strategic significance for Russia than for either the United States or Britain. If intending to launch ballistic rockets from submarines submerged, neither Britain nor the United States requires to send her vessels to the North Pole to do so. Though these North Polar voyages have none the less

NAUTICAL AFFAIRS

NAVAL AND MERCANTILE NOTES AND NEWS FROM ALL COMPASS POINTS

H.M.S. VANGUARD

IN reply to a question in the House of Commons the Parliamentary Secretary to the Admiralty, Mr. Allan, stated that the obligations to NATO which had required the "Vanguard" to be kept in a high state of readiness in the Operational Reserve had ended. The cost of keeping "Vanguard" in this Reserve was

THE SUBMARINE TODAY — from opposite page

proved that British and American submarines would in future be able to penetrate under the Arctic ice-cap north of Russia and bombard Leningrad and Moscow, and other industrial cities in Northern Russia.

On the other hand, the Russians have for long based their hopes on an eastward route from the Barents Sea to the Pacific Coast of America and no doubt their nuclear-powered ice-breaker is being constructed with this object in view. But instead of a voyage of 10,000 miles — whether through or under the Arctic ice-cap from West to East — their submarines will now be able to reach the Behring Straits five or six days sooner via the North Pole.

This means 10 days longer on the patrol area and fewer submarines in "the pipe line." It also means that the industrial areas on the Pacific Coast of the United States and Canada are now much more quickly and readily accessible to bombardment by Russia's nuclear-powered, rocket-launching submarines.

recently estimated to a Select Committee at £310,000 for the current year, of which £150,000 was the cost of category crew. She would now be brought to a lower state of reserve, with a considerable saving of manpower and money. She would continue to be used as a Training Accommodation and Reserve Fleet Headquarters Ship until satisfactory alternative arrangements were made. But in view of the policy of maintaining a reduced number of ships in a high state of readiness in reserve it would seem that "Vanguard's" days may now be numbered.

ROYAL MALAYAN NAVY

In July, the Royal Malayan Navy was transferred to the Federation of Malaya for the creation of a Navy as one of the armed Forces of the Federation. Shortly before the transfer, the Senior Officer of the Royal Malayan Navy sent a message to the Commander-in-Chief, Far East Fleet, in which he spoke of the deep gratitude for help and advice received from the Royal Navy, and expressed a hope for a future in which co-operation with the Far East Fleet would be a salient feature. The Admiralty, in a message of congratulations to the new Navy, said that the Board and the Royal Navy looked forward to future co-operation within the family of the Commonwealth of Navies, and were confident that mutual benefit would be lasting.

COMMONWEALTH NAVAL EXERCISES

There was a Commonwealth Navies family gathering when ships of the Indian, Pakistan, and Ceylon Navies were joined by units of the Royal Navy in Trincomalee recently for the annual Commonwealth naval exercises in the Indian Ocean. India contributed two cruisers, three destroyers, three frigates, one support ship and four Sealant aircraft; Pakistan, two destroyers and two Bristol freight aircraft; Ceylon, harbour support craft and aircraft of the Royal Ceylon Air Force; while R.N. participation included two cruisers, one aircraft carrier, three destroyers two submarines, one frigate, three support ships, and four naval air squadrons.

INDIAN NAVY'S NEW FRIGATE

Another new frigate for the Indian Navy, the "Kirpan", was launched recently at the yard of Alexander Stephen & Sons Ltd., at Glasgow. An anti-submarine vessel, she is the second of her type for the Indian Navy. Her accommodation has been designed to enable her to operate in all climatic conditions without discomfort to officers and men. Her anti-submarine weapons will fire a pattern of large projectiles with great accuracy.

THE SUEZ CANAL

The Suez Canal became available for ships up to 35 ft. draught from the beginning of September — which was the

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position when the Canal was first nationalised by Egypt. Shipowners will now suffer the imposition of a surcharge to pay for the clearance of the Canal after the blocking in 1956. The British Government has offered to refund the amount of the surcharge to British owners, subject to other Governments making a similar gesture. As "Geiger" remarks in "The Navy": "No doubt some governments may make the gesture, but it is not easy to see Liberia and the rest of the Convenient Fraternity following suit".

TANKERS

In the six months to the end of June last, the world's tanker tonnage increased in the total by 3,355,000 tons deadweight. Liberia now has the largest tanker fleet with 10,625,233 tons deadweight; Britain comes next with 9,214,977 tons; then Norway with 8,466,273; and then the United States with 6,175,050 tons. Some of the Liberian increase of about 1,500,000 tons in the six months is due to transfers from the British flag, but the majority is composed of new launchings. The British total has declined slightly, partly owing to transfers of flag, partly to scrapping of older tonnage, and partly to the small numbers of new vessels launched for British registration.

ARGENTINA — AND BRITISH CARRIER

It is reported — says "The Navy" — that the Argentine Chamber of Deputies has declared support for the proposed purchase of the British angle deck aircraft carrier "Warrior." The purchase price is variously stated to be between £1,000,000 and £2,000,000. At either cost it would be a great bargain.

It is estimated that to build a medium sized aircraft carrier in Britain today would cost upwards of £35,000,000, according to aircraft capacity. In the United States, to design and build an aircraft carrier, not of the largest size, to Argentinian requirements, would cost at the present time nearer 200,000,000 dollars.

CANADA TO TURKEY

The Royal Canadian Navy recently transferred to the Turkish Navy 14 ships which, manned by nearly 1,000 Turkish sailors, sailed from Sydney, Nova Scotia, for their new bases in Turkey after being turned over to their new owners under N.A.T.O.'s Mutual Aid Programme. The ships are 10 "Bangor" class fleet minesweepers, which, launched in 1940-42, are of a full load displacement of 900 tons and a speed of 16½ knots, with triple expansion engines and Admiralty type boilers. The other four ships are coastal minesweepers of the "Bay" class, built in 1954. They have a full load displacement of 412 tons, and a speed of 16 knots obtained from modern diesel engines. These ships have given good results in service.

U.S.N. "DISCARDS SHIPS WITH RELUCTANCE"

"Geiger", in "The Navy", quotes an American colleague as writing to him and saying, regarding the discarding of some 85 ships by the Royal Navy: "Our history has been very different from yours in matters of this sort. We have never had anyone like Fisher, who in the midst of peace, discarded 150 ships. Our admirals on the contrary have discarded ships only with reluctance. Most of the Spanish War gunboats were around for business in 1917; the last of the armoured cruisers did not

leave the Fleet until 1931; most of the four-pipe destroyers were still on hand for World War II, as well as plenty of outmoded submarines. For that matter, my "Jane" for 1910 shows the Civil War "Hartford" and "Lancaster" still on the active list!"

(At the same time, it must be remembered that the policy of "discarding only with reluctance" has paid dividends in the past. The Admiralty — and Britain generally — were very happy to get the 50 four-pipers which the U.S. Navy made available in 1940. And Admiral of the Fleet, Lord Chatfield, writing in his book, "It might Happen Again", records: "Another problem I had to settle as Controller was that of our older destroyers. We had a large number of them, those named the 'V' and 'W' classes. We could neither afford to keep them in commission, nor allow them to rot in the basins in reserve, with inadequate personnel to maintain the guns and torpedoes, or the machinery. So Vice-Admiral H. W. Parker, the Director of Naval Equipment, who is also Deputy Controller, worked out for me a plan, for laying up these vessels, which would be so invaluable in war, in what we called 'cold storage'. Rosyth dockyard, now out of commission, was selected to be their principal home, and there we sent most of them to lie in the large unused basins. Almost everything movable was removed and stored in the vacant sheds in the dockyard, where a specially selected party of officers and men could look after them cheaply and efficiently. The ships themselves, i.e., their hulls and main and auxiliary engines, were placed in charge of reserve crews, accommodated in a specially provided

depot ship. By this plan, this valuable mass of destroyers were kept in good order, at three months' notice for sea, commissioning to take their place from time to time, in the active fleet, ready in the event of war, for anti-submarine work. The scheme proved all I had hoped, and these ancient warriors were ready for action when the bell rang in 1939, to the great credit of Admiral Parker".)

NEW R.N. SURVEY VESSEL

The fourth "Echo" has recently joined the Royal Navy — first of a new class of in-shore survey craft. She is equipped with two echosounding machines to assist her to carry out exacting work in shoal water; and she has also asdics for wreck location, and radar, in addition to many surveying instruments. With a length of 106 ft. and beam of 22 ft., her tonnage is 160. Her predecessors of that name in hydrography were three in number, the first being an early paddle steamer commanded by a Lieutenant Bullock from 1827 to 1829. She discovered what was named the "Bullock Channel" while surveying the river Thames and its approaches. That Channel is known by present-day navigators of the Thames estuary as the South Edinburgh Channel.

21-YEAR COMMISSION

The coastal minesweeper H.M.S. "Plover" has completed her 20th year of existence, and is thus one of the ships to attain today's rare distinction of "coming of age". And she has been in commission ever since she started. In her lifetime she has steamed nearly 150,000 miles; and was one of the first ships

to be actively engaged in World War II — as six hours after the war started she began laying the first minefield southward of Bass Rock. Later in the war she received from the Admiralty the message: "Their Lordships have observed with satisfaction that H.M.S. "Plover" has now laid over 10,000 mines since the outbreak of war, and that the work of the ships has been marked throughout by its persistence, accuracy and freedom from breakdown."

(Note: In view of the fact that it is rare for a ship to "come of age" these days, it is interesting to recall that, at Trafalgar, "Victory" was 40 years old — and was still regarded as the finest ship in the British Fleet.)

"MANNERS MAKETH MAN"

"Only a man of good manners and a strong sense of humour", says "Geiger" in "The Navy", "could have wine and dined some of his captives and then disposed of them neatly by presenting them with a ship's whaler within

their own territorial waters and leaving them to row back to port". The man to whom "Geiger" referred is Commodore Barry Anderson, R.N., who, in command of the Navy's Fishery protection ships in Icelandic waters during the recent dispute over territorial limits, had a delicate and difficult task. He showed, says "Geiger", that "with nothing more damaging than a powerful jet of water and the muscular strength of the men under his command he was more than a match for the Icelandic patrols which sought to enforce a 12 miles territorial waters limit which had not received international approval".

SPEEDY SHIP CONSTRUCTION

The first fruits of a big modernisation programme carried out at their Tyneside yard at Wallsend, Northumberland, enabled Swan Hunter and Wigham Richardson to launch recently the 32,500 ton deadweight tanker "Varicella" after she had been only seven months on the

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THE FLEET AIR ARM

THE last twelve months have seen the emergence in fact and policy of the shape of the Fleet Air Arm for the next seven or eight years. In view of the probability that no new carriers will be laid down and no more manned aircraft will be built it looks as though that shape will actually last the Fleet Air Arm to the end of its days, i.e. the length of life of its existing carriers.

Greatest disappointment (or as many would say, disaster) of the year was undoubtedly

NAUTICAL AFFAIRS — from page 27

stocks. The builders went in for prefabrication on a large scale—the kind of thing which the Japanese and Germans were able to do when they brought their building yards back into commission after the war, when so much of the old was destroyed by Allied bombing. "Varicella" is the latest ship for Shell Tankers.

INDONESIAN FRIGATES

The Ansaldo Yard, Leghorn, Italy, has recently completed two very handsome frigates of the light destroyer type for the Indonesian Navy. They are the "Iman Bondjol" and "Surapati". With a displacement of 1,150 tons standard and 1,300 tons full load, an overall length of 320ft., a beam of 36 ft. and a draught of 8 ft., they are armed with four 4 in. guns, six 30 mm. anti-aircraft guns, six 20 mm. A.A. guns, three 21 in. torpedo tubes, two squid type depth charge mortars, and four depth charge throwers.

the cancellation of the Saunders-Roe supersonic, high altitude mixed power plant fighter, the S.R.53. This would have been the ideal aircraft for defence of the Fleet against the Mach 1 high-

it has an extremely good rate of climb (two Rolls-Royce Avons). It does not, however, carry air-to-air guided weapons and relies entirely on four 30 millimetre Aden guns (100 rounds per second) to destroy

THIS YEAR 1958 IS THE 21st ANNIVERSARY OF THE F.A.A.'s RETURN TO ADMIRALTY CONTROL

(by "L'Aigon" in "The Navy")

flying bomber. Its rate of climb was phenomenal (70,000 ft. in 2½ minutes) which meant that it could have been launched from the carrier to intercept an enemy aircraft as against the conventional fighter which has to be airborne on patrol all the time if it is to make an interception. The great disadvantage of the latter technique is, of course, the need for the patrolling fighter to refuel—either in flight or, worse still, by landing back on the carrier.

Be that as it may, the S.R.53 is out and the Sea Vixen and the Scimitar are in. Let us have a look at the Scimitar, since the first squadron has already formed and is due to embark in "Victorious" in the autumn. The Supermarine Scimitar succeeds the Sea Hawk as the Fleet's day intercepter with a secondary role as the interim strike aircraft until the N.A.39 comes into service. Although not supersonic straight and level

enemy aircraft; this means that, as a Mach 1 fighter (in a shallow dive) it will have to be positioned very accurately by the ship's direction team to intercept a bomber travelling at the same speed. It has, however, proved itself to be an excellent aircraft during the intensive trials carried out at Ford earlier this year which augurs well for the operational squadrons. In the strike role it will carry an atomic weapon and probably deliver it at low level—a new technique developed to avoid detection by the enemy's radar (the weapon is then "tossed" from the aircraft in a sudden climb, which enables the pilot to clear the target area before the explosion occurs). As a footnote to these remarks on the Scimitar it may be remembered that a production aircraft broke the London-Malta record in July.

The de Havilland Sea Vixen trials flight is due to form up at Yeovilton in the autumn.

The primary role of the Vixen will be as an all-weather fighter. In that capacity it will carry four Firestreak air-to-air homing guided weapons or 96 2in. air-to-air rockets. Although, like the Scimitar, only supersonic in a shallow dive, the Vixen carries very effective radar which should give it all the necessary information for a successful interception (added to which will be the powerful 984 radar of the carrier itself—already installed in "Victorious"). In the ground attack role the Vixen can carry conventional bombs and rockets as well as a nuclear weapon. Reports so far from de Havillands encourage the belief that the Vixen will be a first class Naval aircraft. Both the Scimitar and the Sea Vixen have successfully completed intensive deck-landing trials.

Highlight of the year has obviously been the first flight of the Blackburn N.A.39 (which, incidentally, flew on the target date set for it three years before by the Ministry of Supply). This aircraft is claimed to be in advance of anything of its kind in the world. This is no doubt true because the N.A.39 has been designed specifically to operate at low level, a complete break-away from the previous concepts of high altitude bombing. This design looks like the only answer, for however high a bomber goes it still remains vulnerable to the high altitude fighter and the ground-to-air guided weapon. Whereas the bomber flying in on the deck at just under Mach 1 cannot be picked up at vital range by radar is extremely difficult to intercept with fighters and, at the moment, is practically impossible to hit with ground-to-air-guided weapons. The N.A.39 is also expected to deliver its nuclear weapon by means of the "toss-bombing"

technique mentioned above. At the moment of writing the Treasury are believed to be fighting one of their suicidal actions against placing a substantial order for this aircraft. It is hoped that such lunacy will not prevail—Britain cannot afford to scuttle her Navy at this vital time in her history.

The most elaborate change-over has occurred in the anti-submarine world during the last year. Based on experience gained by the original Whirlwind A/S squadron the Gannet squadrons have been converting on to helicopters. It had been obvious for some time that the future of A/S lay with the versatile rotary wing aircraft: their ability to operate sonar buoy equipment, their ease of manoeuvre and their smaller cost than the Gannet.

Another helicopter development has been the design of a helicopter commando carrier, the ideal weapon for coping with limited wars particularly in out of the way places where there are no friendly bases for operating aircraft or troops. H.M.S. "Bulwark" has been mentioned as the first commando carrier and it is understood that extensive trials are being carried out to devise the tactics for operating Royal Marines in Whirlwind helicopters. This is a brilliant and long overdue scheme and it is hoped that none of the characteristic cheese-paring at the Treasury will wreck the concept as it takes shape. One event this year demonstrated the amazing usefulness of the ordinary ship's flight helicopters when four of them transferred the whole of a squadron's stores and personal baggage from one carrier to another at sea in under an hour: this is thought to be a unique manoeuvre.

So much for the future aircraft pattern. In the meantime the Sea Hawks, Sea Venoms and Gannets have kept up full flying programmes afloat and ashore (although it is understood that the Sea Venoms have experienced some trouble on night launches). The Wyvern has at last been withdrawn from service. The aircraft was an interesting experiment in the turbo-prop field but it took too long to develop and never really lived up to its original expectations.

Most notable event among the carriers was the commissioning of H.M.S. "Victorious" in January. Virtually rebuilt on the hull of the old "Victorious", she incorporates all the latest devices: fully angled deck, steam catapults, mirror landing aids, Mk. 13 arrester gear, Type 984 radar and many advances in domestic accom-

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FLEET AIR ARM — from page 29

modation. Already she has completed her sea trials and has carried out initial aircraft trials preparatory to embarking her air group in the autumn. Everything points to "Victorious" being a formidable addition to the Fleet.

"Ark Royal" completed her second commission which included a visit to the United States and a considerable amount of cross-operations of aircraft with the U.S.S. "Forrestal" and "Saratoga". The operations proved most successful and it was interesting to see that although the Americans who possessed the more advanced aircraft it was the British who were faster at launching from the catapults (thanks to yet another device of British design — the self-centring rollers on the catapult, a device which the



THE AMERICAN VIEWPOINT

"American Contributions to the Strategy of World War II." By Samuel Eliot Morison. (Oxford University Press, 12s. 6d.)

After "The Turn of the Tide" and other authoritative books giving the British views on Allied strategy in the Second World War, it is of major interest to read the American viewpoint from an equally authoritative source. The substance of this little book by the distinguished American historian — Samuel Eliot Morison — was given in two lectures by him at Oxford University in May, 1957, and

the publishers are to be congratulated in reproducing them in book form.

The author discusses objectively and impartially the often widely differing views of the British and United States military leaders on the major strategy to be followed in both the European and Pacific theatres of war. Few people realize how fundamental these differences sometimes were, particularly in the early stages when the U.S. Chiefs-of-Staff wanted to establish a bridgehead in France in 1942 followed by a full-scale invasion in 1943.

The British Chiefs-of-Staff, on the other hand, favoured a

Americans are thought to be adopting. H.M.S. "Ark Royal" was relieved in the Mediterranean by H.M.S. "Eagle" just in time for the latter to take part in the Jordan air lift of troops; although little publicity seems to have been given to the fact it was aircraft from "Eagle" who escorted the R.A.F. troopship aircraft flying into Jordan — yet another example of the irreplaceable need for carriers. H.M.S. "Bulwark" has recently completed a voyage round the world, including the Caribbean and the Far East in her route. During the crisis she ferried troops to Agaba whilst her sister ship H.M.S. "Albion" has been ferrying troops in the Mediterranean. H.M.S. "Centaur" is still undergoing extensive modernisation whilst "Warrior" took part in the megaton tests off Christmas Island.

Among general features of the last year has been the training of German Naval aircrew at Culdrose and Lossiemouth, trials of flight-refuelling equipment, trials of the Fairey Ultra-Light Helicopter operating from a platform on the stern of a destroyer, the development of a new mirror landing aid and the possibility of the use of helicopters in mine counter-measures. In all, a very full year, not forgetting the memorable fact that 1958 is the 21st anniversary of the Inskip Award when the Fleet Air Arm returned to the control of the Admiralty. And to celebrate this historic occasion a Fleet Air Arm Reunion is being held in the Albert Hall on 1st December. A very illustrious coming-of-age party!

THE NAVY November, 1958

policy of closing and tightening the ring around Germany with a succession of "tip and run" raids on Hitler's "Festung Europa" — particularly in the Mediterranean area — until the Reich was so weakened that invasion would be a "walk-over." It was indeed mainly due to the friendship between Roosevelt and Churchill that the compromise plan of "Torch" — the invasion of North Africa — was finally agreed to for the autumn of 1942.

None the less, as the author emphasizes, in spite of all the arguments and disagreements, the Alliance between Britain and the United States, forged in the fire of necessity, was the most successful Grand Alliance in history. And, he adds, "Woe! Woe! to those who would try to break it."

This is a book which every officer in the Fighting Services should read and keep for reference.

G. P. T.

MEDITERRANEAN WAR

"The War in the Mediterranean, 1803-1810." By Piers Mackesy. (Longmans, Green & Co., 45s.)

Two volumes have recently been published which throw a new light on the British effort at sea against Napoleon after Trafalgar. One of them is the correspondence of Collingwood, produced by the Navy Records Society, the other is the subject of this review.

Mr. Mackesy has been long engaged on this deep study of the Mediterranean war from the temporary Peace of Amiens to the breakdown of the Franco-Russian alliance which followed the Tilsit Treaty. It is a war which, in most histories, stops at the Battle of Trafalgar so far as the war at sea is concerned, and in the land campaign concentrates on the "Continental" strategy of

direct opposition to Napoleon. Mr. Mackesy, however, knows better than this and in his book brings out the importance of the Mediterranean in the full strategic picture of this concluding struggle against Napoleon. He is also a true historian in that he realizes, and relates, the interdependence and unity of the diplomatic, political, naval and military decisions which, in their alliance, alone presents the full and true picture of any theatre of war. And what emerges from his study is a balanced history of this little-known campaign, much of it a defensive campaign, most of it a campaign in which the ubiquity of British sea power played the dominating part.

It is a long book, but the clarity of Mr. Mackesy's writing and his complete mastery of his sources makes it a thrilling one to read. It is, moreover, one of those rare historical books which really goes to the sources of information and follows the source through to the resultant action. This is not a book to be missed.

P. K. K.

HITLER'S BATTLECRUISER
"Battleship Scharnhorst." By Albert Vulliez and Jacques Mordal. (Hutchinson, 25s.)

The story of the "Scharnhorst" has been told more than once, and this new version comes from France. So far as can be judged it is an accurate recital of the triumphs and misadventures of this fine ship, told in a lively and extremely readable manner.

Yet behind it all there lies a sadness, even though the ship herself was an enemy. It is always sad to read of the misuse of a ship, whatever the colours of the flag she flies, and the "Scharnhorst" is no exception. Stripped of all its frills, this is a story of a ship that missed her chances. In company with the "Gneisenau" she ran from the cruiser "Newcastle" shortly after the outbreak of war, and a few months later she ran, again in company with the "Gneisenau," from the "Renown." Both would have been at her mercy had she stood and fought. Later still she ran from the "Ramillies," which was protecting an Atlantic convoy,

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and repeated the process a few days later when she intercepted a convoy off the African coast. Purely in the naval sense, this makes sorry reading.

Nevertheless, her story is dramatic in the extreme and the joint authors make the most of it. The result is a book packed with excitement; though below the surface of her story there still lies the feeling of frustration that so fine a ship was permitted to achieve so little.

K. P.

SLAVES OF TODAY

"Katorga — An Aspect of Modern Slavery." By Bernhard Roeder. (Heinemann, 21s.)

For five years the author of this book was condemned to slavery in the Russian forced labour camps. He writes quietly of his horrible experiences in this informative and important study. Born in Germany, he studied law in two universities there and at Cambridge. Needless to say what he found in Russia was that the concentration camp in a political dictatorship

cannot be compared with prison in a democratic society. An example of what one may expect in Russia is that of a Spaniard who was granted asylum there after the Civil War in his country. He kissed what he called the sacred soil of Russia. That did not prevent his subsequent arrest and sentence to many years imprisonment, while the former leader of these Spanish refugees, La Pasionara, was leading a life of luxury in Moscow as a reward for having sold his compatriots. It is therefore not surprising that today this man wishes he had never set foot on that "sacred" soil. Our author concludes in hopeful vein, saying that when Soviet radicalism is faced with a strong and united front its game is up. When that will occur, however, we are not told.

II. B.

THE MEN OF LITTLE SHIPS

"A Prayer for The Ship." By Douglas Reeman. (Jarrolds, 13s. 6d.)

The author of this yarn saw service in destroyers in the last

war and now lives with his wife in a small motor yacht. In effect this simple unvarnished tale is a tribute to the men of the Little Ships who, often unheralded, endured not a few dangers and more than a few discomforts in the cause of routine work.

The hero of the tale, Clive Royce, is an average civilian who finds himself in command of a little ship as she darts out to tease the enemy in his own waters. Inevitably he does not always see eye-to-eye with his superiors, his equals, and his subordinates. Thus he fights an inner as well as an outer battle.

His ship, at all events, is engaged in a series of running fights with superior enemy forces. Sometimes he succeeds and sometimes he almost fails.

J. H. B. P.

A GREAT GERMAN COMMANDER

"Lost Victories." By Field Marshal Erich von Manstein. (Methuen, 50s.)

But for bad weather in the "phoney period" of World War II, France would probably not have surrendered in June, 1940. The author of this informative hook — Field Marshal von Manstein — tells us that Hitler, immediately after the conquest of Poland, assumed in fact, if not in name, the duties of Chief-of-the-General Staff and Commander-in-Chief of the Army.

He promptly ordered the Army to commence an offensive on 12th November through Holland and Northern Belgium to destroy the Allied forces there and reach the Channel coast. But bad weather again and again caused a postponement.

Meanwhile von Manstein — then a junior General, Chief-of-Staff to von Ranstedt's Army Group — had been



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urging the Army Command to adopt an alternative plan. He foresaw that were they defeated in Belgium, the Allies would be able to fall back and form a defensive line behind the lower Somme. He suggested instead a surprise attack through the Ardennes. This would cut off all the Allied forces north of the Somme and would be accompanied by attacks from their rear by strong motorised forces.

The General Staff were not prepared to oppose Hitler, and von Manstein was quietly removed to command a newly formed Army Corps. Hitler, however, subsequently heard of the plan and adopted it with results we all know. The greater part of the book deals with this great General's battles on the Eastern front, which provide valuable instruction and information for the student of war. But the Field Marshal writes objectively and in simple language and the layman will find his narrative most interesting and enjoyable to read.

G. P. T.

A VERY VARIED LIFE

"Sea Prelude." By Geoffrey Rawson. (Blackwood, 18s.)

Lieutenant-Commander Geoffrey Rawson still remembers the ingredients of a meal placed before him at Gow's Chop House in Cheapside when, at the age of nine, he was having his nerves quietened before being taken to the Hertfordshire prep. school of the famous institution in Newgate Street, the blue-coat school which has since his time migrated to Horsham. "I was reduced to tears," says the author of this interesting book, on beholding himself arrayed in the quaint Tudor costume with the yellow stockings that we know so well. He was to wear many other costumes in the course of an enviable life, which took him from H.M.S. "Worcester" to voyages in the "Inversnaid," a sailing ship with little about her that was beautiful except her name. Quite understandably the captain would not permit any of his crew to go ashore in a foreign port, as they would scarcely have returned to the ship. Rawson was fortunate in having relatives in Monte-

video; there and in Australia he tells us of happy days. By the way, his descriptions are of such excellence that one is not surprised that this book has the imprint of Blackwood. H. B.

U-BOAT, R.N.

"H.M. U-Boat." By John D. Drummond. (W. H. Allen, 18s.)

The capture of "U.570" and her subsequent employment in the Royal Navy as H.M.S. "Graph" is one of the well-known facts of the war. In this book Mr. Drummond attempts to tell a fuller story of the episode. From the large volume of extraneous matter included it is to be assumed that Mr. Drummond found the relevant material insufficient to fill his book.

The author claims that he has had access to both British and German official records. One is forced to wonder whether this is the case, for the most elementary search of either would have revealed to him the fact that the "Graph" did not sink a U-boat in the Bay of Biscay, or anywhere else for that matter. The subsequent scene between Hitler and Doenitz at which this mythical loss is discussed is, presumably, entirely fictional.

The book abounds in errors, both large and small. To take but one example, it will be a surprise to most naval readers to learn that Admiral Stephenson is known as "Monkey" throughout the Service. He has been known as "Puggy" for as long as this reviewer can remember, and that is a great many years. If this were the only mistake of its kind, it would not matter greatly, but it is typical of far too many.

L. C. T.

(The foregoing reviews are from "The Navy." The prices quoted are the English published prices).

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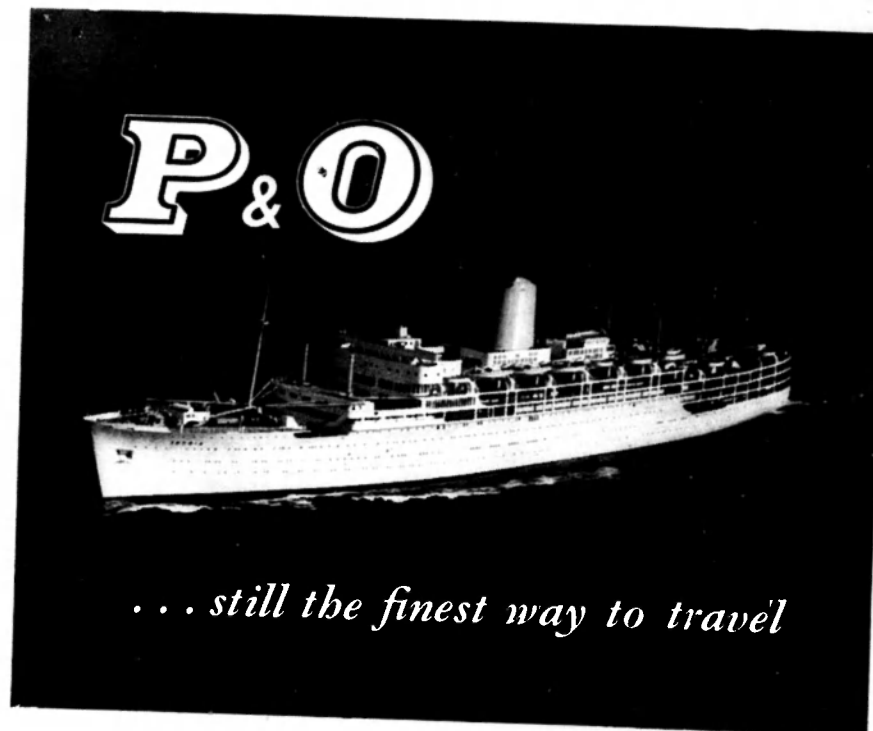
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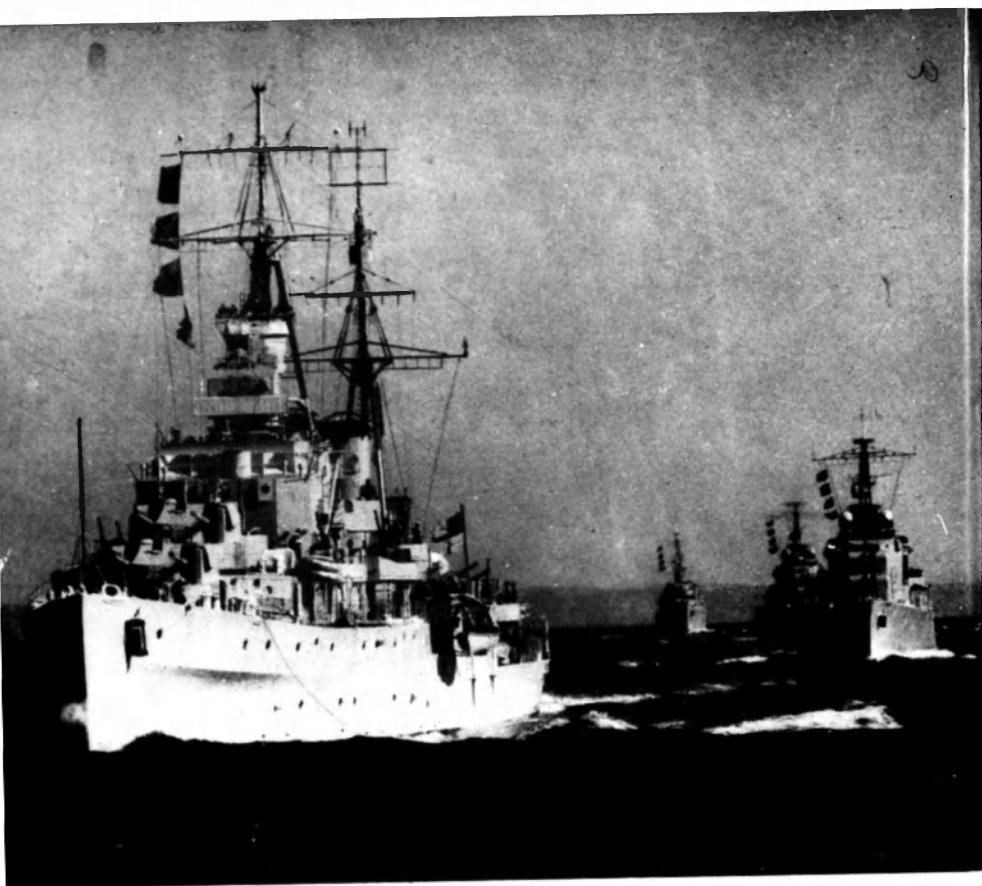
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SEA COMMUNICATION VITAL

FORMER SECOND NAVAL MEMBER OF AUSTRALIAN COMMONWEALTH NAVAL BOARD EMPHASISES THIS IN TRENCHANT ADDRESS TO THE GRAND COUNCIL OF THE NAVY LEAGUE

THE address given by Rear-Admiral George Pirie Thomson, C.B., C.B.E., at the Grand Council of the Navy League on 6/10/58 was widely reported in the press, and was also the subject of considerable editorial comment. We note here the main points of Admiral Thomson's argument, preparatory to a summary of the comments on his address.

Admiral Thomson foresaw that our greatest danger was probably a major war fought with conventional weapons, since the "deterrent" policy had reached a position of stalemate. Russia would try to dominate the uncommitted countries by subversion and by economic assistance: she would maintain her huge fleet as an insurance in case her policy landed her in major hostilities; and she would continue, by her threat of readiness for nuclear war, to force the West to spend increasingly on weapons that would never be used.

Government policy was to cut our overall spending on defence; to concentrate on measures to prevent war (i.e., the deterrent) rather than means to wage it; and to halve the size of our Armed Forces. It involved us in a great measure of dependence on the United States and on collaboration within N.A.T.O. Admiral Thomson felt, however, that, if we wanted to preserve our Welfare State, we must be prepared to pay for defending it and not rely on others whose forces might not be available in an emergency.

If we were to prevent a local war from spreading, we must be prepared to defend the seas where we had vital interests. Our existing anti-submarine and minesweeper programme must not be under-estimated, but it was not adequate to deal with 400 or 500 submarines. To deal with the nuclear-powered submarine we needed also smaller and faster nuclear-powered submarines as hunter-killers. Again, even for a limited war we were very short of carriers and cruisers and needed to build in these categories ships capable of carrying and launching guided or ballistic missiles. Rocket sites must be seaborne to provide

safe and effective medium-range retaliatory power.

Admiral Thomson's address, together with the Navy League Annual Report, received wide publicity in both the London and the provincial press. Moreover, it was the subject of more editorial comment than is usually accorded to a naval speech; and the approving tone is a clear indication of the growing disquiet over the implications of the last Defence White Paper. Critical comment on this matter has been summarised in numerous

Rear-Admiral Thomson was Second Naval Member of the Australian Commonwealth Naval Board from March, 1937, to May, 1939. In that last-mentioned year he retired after 37 years service, and with the outbreak of war was appointed Press Censor at the British Ministry of Information. From that experience was born his amusing book, "Blue Pencil Admiral", which was reviewed in these pages in the issue of May, 1948.

For many years now, Admiral Thomson has written, "Lookout at Westminster" in "The Navy".

recent issues of this "Digest"; and it is perhaps of interest to add that questions in similar vein are put with increasing frequency to Navy League speakers as they travel about the country.

Writing of Admiral Thomson's speech, the "Yorkshire Post", 7/10/58, took up the question of sea-borne rocket sites.

"The suggestion by Rear-Admiral George P. Thomson that rocket sites must be sea-borne if they are to provide safe and effective medium-range retaliatory power deserves serious consideration. Rear-Admiral Thomson . . . is widely known as an officer of the soundest and most experienced judgment. Not only are his views on the broad aspects of strategy worthy of deep respect, but he is the last man to speak out on this subject without being sure of his ground.

"His arguments against land-based rocket sites are simple and telling. As he points out, the Thor rocket has not the range to reach industrial areas of Eastern Russia, but obviously if such medium-range rockets were carried in ships their chances of hitting areas which are at present out of range would be greatly increased. These mobile rocket sites would allow for the launching of ballistic rockets or guided missiles from places much nearer the objective and the effectiveness of such weapons would probably be doubled.

"Rear-Admiral Thomson also questions the safety of land-based sites. He believes that 'the position of rocket sites in a democratic country will inevitably become known and, whether above or below ground, a rocket site would not survive a well-placed H-missile in a surprise attack'. This is an extremely important point. It is quite clear that, in time, rocket bases in this country would become vulnerable targets for the enemy. This is where sea-based rocket sites would have an enormous advantage. Rear-Admiral Thomson has suggested that Britain should start now to build new carriers and cruisers 'with part of their flight deck and part of their accommodation and armament ear-marked for the storage and launching of guided missiles or ballistic rockets, neither of which has any recoil'. It seems also that submarines would be ideally suited for carrying such missiles. They are difficult to detect and difficult to destroy."

Russia's Largest Fleet

The "Nottingham Guardian-Journal" on the same date, in a leader headed "A Dose of Realism", referred to: "an air of anxiety at the meeting in London yesterday of the Grand Council of the Navy League. Too great an emphasis had, it was contended, been placed on the possibility of a major nuclear war, and not enough on that of a major conventional war, with the result that the Royal Navy was, in terms of quantitative strength, now dangerously weak." The leader summarised Admiral Thomson's argument for an adequate fleet and his appraisal of Russian strength, and concluded: "What is the purpose of this great array? Russia does not, as we do, depend for many of the necessities of life upon the unimpeded passage of sea-borne traffic. No, she has, as Admiral Thomson sees it, built her large fleet 'in case her subversive policy should involve her in hostilities. But she is not going to start an H-bomb war, and she is quite confident that no Western government would deliberately start one either'. There is a ring of truth about this appraisal of the

situation. It is, we repeat, one well deserving of serious consideration."

Moving North, the "Northern Echo", of Darlington, 7/10/58, reported the speech extensively and also wrote in a leader headed "Sea Power" that the menace of nuclear war had so far monopolised discussion of defence that the nation had only a sketchy idea of the nature and size of our defences. Admiral Thomson had focussed attention on an important point in questioning whether our defence policy took into account that our greatest danger lay, not in nuclear war, but in another world war fought without the H-bomb.

This is Britain's Concern

The article continued: "If that should come about, it is vitally important to know how we should fare. The point of the inquiry lies in the fact that quite apart from its nuclear weapons, Russia has a vast supply of what are termed conventional weapons. It has built a huge navy of over 400 ocean-going submarines, 37 modern powerful cruisers, 150 destroyers and 4,000 naval aircraft.

"Britain has more reason to satisfy itself about the possibilities which these facts suggest than have the land-based Continental countries, who have their own worries in the form of unnumbered masses of armed Communist soldiers.

"The run-down of the British Navy has been swift and has been carried through so far with surprisingly little protest. Twenty years ago the British and Commonwealth Navy boasted of 20 battleships, three battle cruisers, 11 aircraft carriers, 60 cruisers, 180 destroyers and 61 submarines, built or building. Ten years ago the active Fleet consisted of two battleships, five carriers, 15 cruisers, 30 destroyers and 30 submarines.

"According to Admiral Thomson, we have to-day an active Fleet of only four carriers and three cruisers, an anti-submarine force of 32 destroyers, 44 new fast frigates and 250 new minesweepers, which were provided before the days of the H-bomb.

"No one now can pretend to claim that Britain rules the waves. That is one of the most striking evidences of the changing pattern of warfare and of our place in the scheme of world defence. The fact that we can no longer take pride of place among the navies of the world is one consequence of the East-West division of forces, and the need of the West to combine in order to match the vast forces of all kinds which are directly controlled by Soviet Russia.

"If, as seems likely, the Western Powers have all the necessary strength to deter the Soviet from embarking on a nuclear war, Britain has a particular concern about the possibility of a situation occurring in which the vast naval strength now available to Russia could be used against this country.

"While accepting the need to economise, it was unfortunate that the official Opposition decided not to consult with the Government on defence policy. No clear statement has yet been made of the reasons which led the Government to allocate so much of its defence expenditure to the nuclear side of its plan. This aspect of what is referred to as the employment of conventional weapons is one which deserves much more attention than Parliament has yet given to it."

"Conundrums of Defence"

From Scotland editorial comment in the "Glasgow Herald", on 7/10/58, linked Admiral Thomson's speech with a symposium, "The Soviet Navy", edited by Commander Saunders. Under the heading "Conundrums of Defence" the leader began: "Not long after Parliament resumes there is bound to be a critical debate on defence. Although Mr. Sandys will proceed with his usual determination to continue carrying out his policy in detail, virtually every item is still the subject of criticism, informed or otherwise, and of determined representations by people genuinely and loyally interested in the future of the Services. Such criticism, such representations, are indeed valuable, but more to the point would be a reasoned examination of the conclusions on which the Government base their present policy. There is actually only one basis. This is the supposition that a major war can only be a nuclear war, and that a nuclear war must be so destructive, if there is general use of the H-bomb, that no one will dare start one. That may well be a supposition which history will turn into a certainty, but there is one deduction from it that is very open to question, the deduction that, with the dividing line so firmly drawn between the free and the Communist world, a minor war must become a major one. Therefore, so runs the argument, a minor war also is virtually impossible."

Wars could, the article continued, be localised, though this was becoming steadily more difficult. There was further the danger, pointed out by Admiral Thomson, that, if the deterrent were to put major war out of the question, there is: "... the grave possibility

that there could well be a major war without the H-bomb ever being used by either side. In other words, the Third World War might be fought with conventional weapons and is, therefore, the likelier to happen. For such a possibility are we really prepared with a Government policy which assumes that, because of the 'deterrent' we can with safety economise on conventional weapons?"

Re-examine Policy Basis

The leader concluded: "We are reminded that Russia, despite her possession of the 'deterrent' and her persistence in developing ways of using it, is at present engaged in reforming, extending, and greatly strengthening her conventional armaments. The extraordinary increase in size and efficiency of the Russian navy is the subject of a most valuable symposium, 'The Soviet Navy', edited by Commander Saunders. So far that navy appears to be designed in the main to carry on an old fashioned war at sea—submarines and fast cruisers raiding the trade lanes, flank protection for a land force, and readiness for amphibious operations. It is asked what the Royal Navy could do against such a superiority in the event of a major war not becoming a world war, and the answer is, clearly, very little. Fifty German submarines did immense damage against our patent superiority in the last war. What could 400 Russian ones not do against an equally patent inferiority? The Government answer would be that our alliances are absolutely sure and so turn inferiority into at least equality and almost certainly into superiority. But any alliance is sure only so long as the situation which established it remains constant. Any radical alteration therein and the bases of our present policy, actual and hypothetical, are gravely shaken. Hence the necessity of a re-examination of the suppositions, political and military, on which our present policy is based."

It is natural that Portsmouth, one of the old homes of the Navy, should comment on the possible future, and on the implications for the town and dockyard. The "Portsmouth Evening News" wrote on 7/10/58: "The Navy League is one platform where it may be expected with the greatest confidence that the maintenance of the Senior Service for defence will be urged. In recent years this platform has been used to good effect to point shortcomings in the constitution of the Royal Navy, and yesterday's annual meeting was no exception."

It summarised Admiral Thomson's argu-

ment and proposals and concluded: "Admiral Thomson's address will at least cause fresh interest to be taken in the Navy. For centuries the Senior Service has been Britain's 'sure shield', and the role has not yet passed from the Royal Navy despite the advent of modern science. As Admiral Thomson and others have pointed out, missile sites to be effective must be sea-borne. It is upon statements such as these that Portsmouth people, whose economy is based upon the Navy and the Dockyard, cling for hope for the future."

Unprepared to Meet Russia

Finally, the "New Chronicle", on 7/10/58, wrote in a leader: "As Mr. Duncan Sandys sits down to do his homework on next year's Defence White Paper, Rear-Admiral Thomson gives him a shrewd reminder of naval thinking. The argument is that the next war, if it comes, will not necessarily be a nuclear one. Admiral Thomson feels that we have made insufficient preparations to meet the vast Russian build-up of conventional naval forces, particularly their fleet of ocean-going submarines, which he puts at 400 and others put considerably higher. . . . This speech is clearly of more importance than one just made to the Navy League. Obviously there are many calls on the money allocated for defence needs. But assuming the Navy has had its day is something that this island nation can only do at its peril."

Two turn-over articles in "The Times" of 15/10/58 and 16/10/58 by the Defence Correspondent also argued that the world had reached a stage of thermo-nuclear stalemate, largely due to the arrival of the nuclear submarine, which exposed the United States, the main holder of the deterrent, to direct attack by long-range missiles. The justification for maintaining an independent British deterrent thus became entirely a military one. This deterrent force should therefore be kept to a minimum, and every possible means used to ensure that it could not be knocked out by surprise attack. In this connection the Correspondent referred to the missile-firing, nuclear-powered submarine, virtually undetectable. He summarised the priorities for British defence policy in the new conditions as, first, preparations for the cold war; second, for limited war "which the deterrent can no longer be relied upon to deter, because of the nuclear submarine"; and, third, preparations for global war.

Against this it should be mentioned that Sir

George Thomson, Master of Corpus Christi College, Cambridge, was reported in the "Manchester Guardian" of 18/10/58 as saying to a meeting arranged by the Association of Atomic Scientists that: "Whatever agreements might be arrived at now, if a war came, nuclear weapons would 'certainly be made and almost certainly be used'."

It is further of interest that Air Chief Marshal Sir Philip Joubert, in an article in "John Bull" of 8/10/58, put forward views somewhat similar to those of Rear-Admiral Thomson. Air Chief Marshal Joubert wrote of the importance of the polar crossing by U.S.S. "Nautilus" and the lessons to be drawn from it, in particular the advantage which it offered to Russia. Not only did it promise a "covered way" between Murmansk and Vladivostok for peaceful trade—an advantage which would not accrue to Russia alone; it also offered a possible route for the transport of troops, and for the deployment of rocket-firing submarines for coastal bombardment of Britain and the United States.

Of what use, the Air Chief Marshal continued, would be surface ships, armies and aircraft? The carrier task force he foresaw limited to an attempt to cope with submarines in narrow waters; and he recalled that last war experience had shown that submarines were virtually immune to air attack except when forced to the surface. Defence against the modern submarine, with little need to surface, might best come from another patrolling submarine, backed by a line of "forts" of Mulberry type; and by counter-attack by missiles fired from ships, aircraft and land sites on the enemy's bases. For this, "the major part of the navy must in future be underwater, the balance would be missile ships and patrol vessels."

Conventional Forces Vital

Field Marshal Montgomery also believes that we have arrived at a stage of nuclear stalemate. He put forward in his Annual Lecture to the Royal United Services Institution on 24/10/58 a very similar opinion to that expressed in "The Times" articles a week earlier. In particular, Lord Montgomery was clear that the first priority for the N.A.T.O. nations must be the provision and upkeep of efficient conventional forces: "If any N.A.T.O. nation expanded its own nuclear programme too much, at the expense of national forces, it would be playing into the hands of Russia. Defence would become so costly that it would

not be able to provide a first-rate contribution of conventional forces." ("The Times", 25/10/58.)

His detailed views on defence policy for the next ten years were summarised in the "Sunday Times" of 19/10/58, where he wrote that some new thinking was necessary, and it must be global thinking. It was the great lesson of history that the enemy confined to a land strategy was in the end defeated. Lord Montgomery recalled that the Second World War had been fundamentally a struggle for the control of the major oceans and seas; that was to say, for the control of sea communications. Until we had secured that control it had not been possible to proceed with our plans to win

the war.

In the event of a war between the Russian-dominated Communist block and the Free World, Lord Montgomery believed that we must concentrate on confining Russia to a land strategy and securing for ourselves the free use of the sea and air. In the present day of missiles with ranges up to 5,000 miles and nuclear war-heads, all defensive problems, and the problems of the nuclear offensive, must be viewed globally. The geographical limits of N.A.T.O., in Lord Montgomery's opinion, were too narrow; the risk in Europe was small, but the risk outside the N.A.T.O. area was tremendous.

(From "The Navy League Digest of Current Opinion on Maritime Affairs").

INDIAN OCEAN DRAMA

ROYAL NAVY RESCUES BURNING TANKERS

WHILE exercising in the Gulf of Oman, at the entrance to the Persian Gulf, on September 13th, H.M. Ships Bulwark and Loch Killisport intercepted distress signals indicating that the Liberian tanker Melika and the French tanker Fernand Gelabert had collided some 150 miles to the southward, and that both ships were ablaze and abandoned.

The Bulwark recovered her aircraft, except for one Skyraider, and proceeded at best speed towards the collision area, telling Loch Killisport to follow. The Skyraider went off to locate the stricken vessels. Puma and St. Brides Bay, who were in the area, were ordered to proceed to the scene of the collision.

When the Skyraider reached the scene one tanker, down by the bow and burning fiercely forward, was in sight. Dense smoke made identification from the air impossible. The Swedish tankers Ceres and Sira and the British tankers Anglican Diligence and Border Hunter were picking up sur-

vivors. There was no sign of the second tanker.

Those tankers which had injured survivors on board were asked to close the Bulwark, who was steaming towards them, so that helicopters could fly medical aid as soon as practicable. When the ships were in range, doctors from the Bulwark were flown ahead by helicopter. About an hour later, the Bulwark joined company with the rescue tankers and the ships steamed southwards while helicopters of 845 Squadron transferred the injured to the Bulwark. Two other helicopters transferred the Bulwark's Commander and a small fire-fighting team to the stricken tanker which was now about 12 miles away from the Bulwark and had been identified by a relief Skyraider as the Fernand Gelabert.

Reports from the rescue ships and the survivors indicated that after the collision Melika had, although abandoned, continued to steam southwards at speed. About an hour later she was located

by a searching Skyraider and reported on fire and listing, some 25 miles from the scene of the collision. Having embarked the injured, the Bulwark steamed south passing close to Melika, who was on fire amidships. A party of four was put on board to fight the fire.

Bulwark then steamed towards Masira to fly off a Skyraider and three helicopters with injured survivors to the R.A.F. Station at Masira for onward flight to Bahrain and hospital.

On her return to the Melika, H.M.S. Bulwark found the Puma standing by. Some of the Puma's ship's company had managed to get on board the after end of Melika but they could not join with the Bulwark's party because fire amidships "cut" the ship in two. The only communication between the parties was by radio — Bulwark's Commander reporting from the Fernand Gelabert that all fires

(Concluded on page 10)

A "MINER" BECOMES A MAJOR

H.M.S. "PLOVER" 21 YEARS OLD

By R. V. B. Blackman in "Sea Cadet"

ONE of Her Majesty's Ships commanded by a former boy seaman. A warship in which all official documents addressed to the Engineer Officer are dealt with by a senior rating. A naval vessel to which a signal was recently sent in the form of a poem. A ship which lays metal eggs. A vessel which received the key of the door on coming of age. Which ships? All one ship: H.M.S. Plover, a coastal mine-layer.

An anniversary unusual in the history of the Royal Naval was marked with all due ceremony a few days ago when the Plover had been continuously in commission for twenty-one years. Provided for in the 1935 building programme, she was built by the famous shipbuilders, Messrs. Wm. Denny Bros. Ltd., Dumbarton, at the Leven Shipyard on the Clyde. She was laid down on October 7, 1936 and launched by Lady Wake-Walker on June 8, 1937, being commissioned on September 24, 1937 as a ship of the Vernon Flotilla.

Immediately before the Second World War she was at Rosyth for the Reserve Fleet exercises. At 1700 on September 3, 1939, six hours after the declaration of war, she began laying the first minefield southward of Bass Rock. On September 6 she arrived at Dover, and was employed in the Dover Strait for two months.

Throughout the war she was employed laying minefields all round the coast of the United Kingdom from Hartland Point north almost to the East Coast barrier (the latter stretching

roughly from Scotland to the River Thames). Further afield she carried out "lays" off Narvik and the coasts of Holland, Belgium and France, some of these latter being to

FOR THE SEA CADETS

cover our forces engaged in the Normandy landings in 1944, from both U-boat and E-Boat attacks.

Among the most highly prized messages received by H.M.S. Plover during this period, was a letter from the Admiralty which, after stating that the manner in which six

recent operations had been completed, in the bad weather conditions then prevailing, reflected credit on all concerned, continued:

"Their Lordships have also observed with satisfaction that H.M.S. Plover has now laid over 10,000 mines since the outbreak of war, and that the work of the ship has been marked throughout by its persistence, accuracy and freedom from breakdown."

Since the war the ship has kept up a varied round of national and N.A.T.O. exercises. For example, 200 practice mines were laid during 1957, and courtesy visits were paid to ports in Scandinavia and Flanders. Since commissioning Plover has steamed nearly 150,000 miles.

INDIAN OCEAN DRAMA—From Page 3

were cut out and that St. Brides Bay and Loch Killisport were standing by her.

Ablaze amidships, her gunwale awash and seas forming geysers through the mid-deck hatches, Melika made an impressive sight as Bulwark prepared to pass a tow. In the moderate swell both ships were rolling considerably, making boat work difficult. On one occasion a seaboard was caught under the Bulwark's counter, injuring two of the boat's crew, and on another the Melika's bows holed the Bulwark above the water line. The tow was at last secured, but progress was slow as Melika yawed widely. After only two hours the tow parted.

Meanwhile H.M.S. St. Brides

Bay had managed to get Fernand Gelabert in tow by the stern and was making for the shelter of Ras al Hadd. Progress was painfully slow and towing extremely difficult. After only a few hours this tow parted. Bad weather temporarily prevented another tow being passed, but a party of engineers were flown on board the Fernand Gelabert by helicopter from the Bulwark, who had arrived to lend a hand.

Eventually tows were successfully passed to both the tankers. Loch Killisport took the Fernand Gelabert slowly to Karachi, while Bulwark towed Melika to Muscat with H.M.S. Puma secured to the stern of Melika to make steering possible.

The celebrations in honour of her "coming of age" were held on board on September 12. A gold-painted key nine feet long and festooned with garlands hung from the rigging of the minelayer on her 21st birthday at Portsmouth. On the quarter-deck pride of place was given to a 20-lb. cake, made in three-tiered American style, by an ex-leading cook, formerly of H.M.S. Plover, who is now a cake decorator. The cake had 18 decorated panels with motifs of the Plover's crest, mines, etc. and, of course, a 21st key.

In the Captain's cabin was a sheaf of signals and congratulatory messages from warship and from naval personnel who had served in the veteran minelayer. Among them was one from the Commanding Officer of the Royal Navy's Underwater Counter-measures and Weapons Establishment with which Plover has worked in close liaison for many years. It read:

"Progressing on lethargic legs.
The Plover lays her metal eggs
This she's done for many years.
And with success—or so one hears.
She's also done our Ucw trials
From Orford Ness to Scilly Isles,
Now one and twenty years have run
We all sincerely say, 'Well done.'"

The celebrations included a commemoration service conducted by the Chaplain of the Dockyard, the Rev. W. H. S. Chapman, R.N., a cocktail party for Service officers and Dockyard officials, and an "at home" on board for past and present members of the ship's company. In the evening a dance was held at the Royal Sailors Home Club for the Ship's Company. At the dance the iced cake was illuminated and cut by the wife of the Commanding Officer, Lieut.-Commander Charles F. Thorpe, R.N.

beer in handy cans

FOSTER'S LAGER
VICTORIA BITTER



It was a proud day for Commander Thorpe, who started his naval career as a boy at H.M.S. Ganges, the Boys' Training Establishment at Shotley. In 1939 he was serving in Plover as a petty officer on mining trials from H.M.S. Vernon. Later in the war, in the rank of commissioned gunner, he was again appointed to Plover as torpedo officer, and recently he returned to her in command.

In his cabin he welcomed nine of the ship's ten previous commanding officers (one, Lieut.-Commander R. H. White, died in 1949). They were: Commander A. W. C. Nicholson, Retd., Captain R. H. Johnson, Retd. (who commanded the ship during the war), Commander C. J. Bennett, Retd., and Lieut.-Commanders P. W. Williams, Retd., P. R. Fletcher, R.N., M. P. Chapman, R.N., T. B. Aston, R.N., H. H. Hawkins, R.N., and J. C. Wemyss, R.N.

During her 21 years' continuous service and 150,000 miles of steaming Plover has never had an engineer officer of commissioned rank. The engine-room department has

always been in the charge of a Chief Engine-Room Artificer, the present "Chief" being C.E.R.A. W. Poultney.

The Plover, Pennant No. N.26, has a displacement of 805 tons standard and 1,020 tons full load with an overall length of 195½ feet, a beam of 37½ feet and a draught of 8 feet 2 inches. Her main propelling machinery comprises triple expansion steam reciprocating engines of 1,400 indicated horse-power equal to a designed maximum speed of 14.75 knots.

Plover is the eleventh warship to bear the name. The first two ships were prizes captured in 1652 and 1657 and renamed Plover, while the fifth was originally part of the famous East India Company, being purchased by the Admiralty in 1842.

The early Plovers were all relatively small, fast, well-armed vessels and their history is one of hard fighting against privateers and pirates. Outstanding success was achieved by the first ship to be built and named Plover for, in five months in 1809, three famous

French Privateers, the Aurore, Hirondeille and Saratin all struck their flags after fierce engagements and were captured.

Not to be outdone by her forebears, the present Plover was, within minutes of the Second World War, 1939-45, being declared, engaged on the first of her 165 sorties against the enemy. In her remarkable career Plover laid well over 15,000 mines in offensive and defensive minefields. Under cover of darkness, several sorties were made to within a few miles of German-occupied Channel ports and mines laid in coastal traffic sea-lanes caused heavy losses to the Germans and, even more important, dislocated coastal traffic and thus increased the strain on the German minesweepers.

It is interesting to note that the ship's motto is noli me tangere (Don't touch me). Throughout the war Plover

was never hit and suffered no casualties.

Now under much easier physical conditions, the ship is employed on experimental duties, testing new types of mines and equipment by which Britain intends to maintain the lead in underwater warfare.

When I was invited on board Plover by her Captain he told me that his ship was no mere local "in-and-outer". The ship visited Gibraltar early this year, also France, Belgium, Holland and Norway. She is off to Londonberry next month and Harwich at the end of October.

Visitors to the ship were pleased to see her fully loaded with mines and realised that she is still working as hard as ever after 21 years.

From my brief visit I could see that Plover was a proud ship and a happy ship. She probably always has been, for

"Old Ploverites" from as far back as 1937 wrote to the ship asking to attend the re-union. And so many officers have either served in the ship or have been closely associated with her and were thus entitled to join in the celebrations that the only way they could all be accommodated was to invite them in parties or occasions spread over the actual day or previously.

Senior officers who attended the official party included the Admiral Superintendent of Portsmouth Dockyard, Rear-Admiral J. H. Unwin; the captain of the H.M.S. Vernon, Captain E. A. Blundell, R.N.; the Queen's Harbour Master, Captain R. H. Maurice; the Captain (D) Portsmouth Squadron, Captain M. P. Pollock; and the Captain H.M. Underwater Counter-measures and Weapons Establishment, Captain White, and dockyard representatives.

THE BRITISH MERCHANT SERVICE

THERE has been condemnation of flags of convenience from Trade Union quarters during the last few months. On 11/9/58 the "Journal of Commerce," in company with several other papers, reported a proposal by the International Transport Workers' Federation, meeting in Antwerp, for a general "blockage" of cheap flag ships where no collective agreements on wages or conditions were in force. A spokesman for the Federation said afterwards that the boycott would take many forms, including refusal to load or unload a ship, denial of a pilot, and similar actions. He claimed that owners of such ships forced their crews to work in bad conditions at low pay, and took advantage of the back-

"FLAGS OF CONVENIENCE" ARE MORE THAN AN INCONVENIENCE TO BRITAIN'S LIFELINE

ward social services of the countries of registry. A statement at the end of the meeting referred to the drafting of instructions to the affiliated dockers' and seafarers' unions, and to the decision of certain ship repairing unions to support a determined effort "to combat the growing menace to the genuine maritime countries."

The "Journal of Commerce" commented in a leading article on the same day, under the heading "Boycott is not the Answer." British shipowners, said the leader, were unlikely to sympathise with what amounted to a plan deliber-

ately to disrupt the services they provided. They might possibly benefit if flags-of-convenience ships were subjected to long delays, but the manner of the boycott was too close to discrimination to be accepted as anything but discrimination against a particular section of the shipping industry.

The leader concluded: "It must be pointed out, also, that the Federation is on uncertain ground in saying that crews in these ships 'work under bad conditions and low pay.' The Federation is an organisation closely connected with the subject and must be given credit for knowing what it is talking

about, but, at the same time, it cannot be denied that many 'cheap flag' ships are as well equipped as those in the British Merchant Navy, with accommodation which is equally as good and with rates of pay in excess of those laid down by the National Maritime Board. It has been advocated in Parliament that we should be 'awkward' when 'cheap flag' ships come into British ports if standards are not being adhered to, but what action can be taken when, as many do, the ships conform to the highest standards demanded by Lloyd's Register of Shipping or the American Bureau of Shipping? Boycott by I.T.F.-affiliated unions may solve the unions' problems, but in the long run it will be only action at Government level which will achieve a complete solution and it is to the Government, and not to such bodies as the I.T.F., that British shipowners must look for assistance."

The matter was also raised at the Trades Union Congress meeting at Bournemouth early in September, when it was discussed by the Chairman, Mr. T. Yates, of the National Union of Seamen, in his presidential address. The "Shipbuilding and Shipping Record," 11/9/58, summarised the relevant part of his speech as follows: "Today the position of the British merchant fleet was being threatened by the rapid growth, to 15 million tons, in the fleets operated under flags of convenience. That was a development which threatened the livelihood of all those who sailed in British ships and indeed in the ships of other traditional countries as well. It threatened the economic well-being of those countries and particularly of our islands."

"Imagine for a moment what our position would be if this continued growth were to drive British shipping off the seas," Mr. Yates continued.

'Where then would be our lifeline? What would replace the handsome contribution of British shipping to invisible exports? What would become of our seafaring tradition as exemplified by the men who sail in British ships to-day?'

"Up till now the officers and crews of ships which fly flags of convenience have been largely drawn from those who have received their training in seafaring countries. If the flags of convenience countries of to-day become the maritime powers of to-morrow, where will those who want to go to sea be able to get their training? Can you imagine it being given in sea schools or nautical colleges in Panama or Liberia, Honduras or Costa Rica?'

"This is a very serious problem. British seafarers and shipowners are on common ground in recognising it as such and I doubt whether any other industry evokes such a sympathetic interest in Parliament, irrespective of party. Sympathy, however, is not enough. It is critically urgent that the Government and all those concerned with shipping should find, nationally or internationally, some means to halt this erosion of an industry vital to this country and put British shipping into a position of competing on terms of parity. Let me add that there is no more time to lose."

Later in the meeting a resolution was put forward by Mr. Hill, General Secretary of the Boilermakers' Society, whose proposal was based on the possible threat to the United Kingdom shipbuilding industry. The resolution would have pledged Congress to do everything possible to force all shipowners to apply international maritime law, and "Fairplay," 11/9/58, commented that the threat to this country's merchant marine from flags of convenience fleets was very real.



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and that drastic measures would be required if ship-owners were to be put in a position to meet it. However, the comment continued: "The action suggested by Mr. E. Hill, the Boilermakers' Society secretary, in a resolution at the Trades Union Congress in Bournemouth last week, though drastic, can by no means be regarded as a satisfactory way of dealing with the problem. He is seeking to ban the building and repairing of all convenience-flag ships. The resolution was supported by Mr. D. Tennant, secretary of the Merchant Navy and Air Line Officers' Association, who suggested that the resolution could be remitted to the T.U.C. general council. Mr. T. Yates (general secretary of the National Union of Seamen), the chairman, said that the general council was prepared to agree to this course and examine the resolution when it was remitted. It will be recalled that a similar proposal has been put forward by the British section of the International Metalworkers' Federation ("Fairplay," "Shipbuilding Notes," 14th August). However, discriminatory prac-

tices are as dangerous as they are unpalatable.

"Mr. Hill told the trades union delegates at Bournemouth that, of the 15,000,000 tons of flags-of-convenience shipping, about 53 per cent. was under Greek ownership and 40 per cent. under American ownership, but that the bulk of it had been financed by American banks or insurance companies. He also said that in the foreseeable future about 25 per cent. of the world's shipping would be under flags of convenience. He criticised the Americans on the grounds that 278,000 tons of shipping was being built in America to fly convenience flags and the building cost was being subsidised to the extent of 45 per cent. Mr. Hill mentioned the case of a shipowner who recently failed to raise £4,000,000 in London to build a tanker, but raised the money in America and would probably put the ship under a foreign flag; he added that if this were not remedied the Americans would control the whole of world tanker tonnage. Mr. Hill's concern is, of course, that the maritime unions will suffer and that, ultimately,

shipyard workers will suffer because British shipowners will not be able to afford to buy new tonnage. It is to be hoped that, no matter how keen they might be to protect British shipping and shipbuilding, for whatever purpose, the T.U.C. general council will look closely at all the aspects and possible consequences of such action as that proposed when they examine the resolution."

The "Daily Telegraph" also commented in a short leader on Mr. Yates' address: "Mr. Yates, the sailor President of the T.U.C., devoted much of a mainly sensible address yesterday to a topic on which he will receive universal applause. British shipping is in competition with that flying 'flags of convenience' . . . The most deleterious consequence is that British firms cannot set aside out of undistributed profits enough to keep their fleets modernised. What this means, in a time of increasing competition and of a falling off in shipbuilding orders, needs no elaboration.

"The problem is thus squarely on the plate of the Chancellor of the Exchequer. Much as we must all dislike discrimination in the taxation of different industries, there seems no other way of securing justice — and, perhaps, even survival — for this most British of industries. International agreements on this point can only be wishful thinking. Boycotts of 'flags of convenience' are self-damaging. The only solution seems to be to make British registration as financially convenient as registration elsewhere."

The problem was also referred to in the report of Furness Withy & Co., discussed in a leading article in the "Shipping World" of 10/9/58. This concluded: "But if a protracted spell in the trade doldrums causes British shipowners con-

THE NAVY

NAUTICAL AFFAIRS

NAVAL AND MERCANTILE NOTES AND NEWS FROM ALL COMPASS POINTS

NAVY TRIES TO HICKEN ARMY

THE Australian historian the late Chester Wilmot, in his description of the Normandy landing at Omaha Beach in the early morning of the 6th June, 1944, in his book "The Struggle for Europe" tells how: "Soon after 3 a.m., Naval Force 'O' (Rear-Admiral J. L. Hall, Jr., U.S.N.) began lowering the assault-craft from their 'mother-ships' into a rough and unfriendly sea twelve miles off shore. Several craft were swamped within a few minutes of touching the water; others

were kept afloat only by strenuous baling by troops who used their steel helmets as buckets. None but the most hardened stomachs were unmoved by the pitching and tossing, and men became weak from sickness long before they began the run-in. The men approached the shore under the gravest disadvantages. As one report says: 'Men who had been chilled by their wetting, cramped by immobility in the small and fully-loaded craft and weakened by sea-sickness

were not in the best conditions for strenuous action on landing."

Recognition of this still-existent problem of sea-sickness in amphibious landing operations led the Army to co-operate with the Navy in experiments recently carried out at Gosport, Hants, England, by the Medical Research Council. Two officers and 90 other ranks from the Army's Southern and Eastern Command spent an hour every other day tossing up and down

THE BRITISH MERCHANT SERVICE

(Concluded from Opposite Page)

cern, the more deeply rooted problems are infinitely more perplexing. Chief among these is the extraordinary growth of fleets registered under flags of non-maritime 'Panhonlib' nations, and the other important and insidious menaces which continue to flourish and remain unchecked in various forms of discrimination. As Sir Ernest observes, the British Government, and in particular the Ministry of Transport, are well aware of the facts, much having been done in recent months to remove a variety of domestic restrictions which owed their existence to wartime conditions. But a knowledge of the facts is not enough. It is all very well to acknowledge the importance of British shipping to the welfare of the State and the national economy, and to remove domestic restrictions; but this is insufficient to counteract the discrimination, freedom from taxation, subsidisation and other benefits which are en-

joyed by shipping with which British owners are obliged to compete. If Furness Withy and all the other British shipping companies, large and small, which constitute the British Merchant Navy are to continue contributing to the national wealth, then, in the absence of effective counter-measures agreed between the traditional maritime countries,

the British Government must protect the national interest by relieving British shipping of its present handicap — which means it should drastically cut taxation. British shipowners thrive on competition; but they can only do so if able to meet their competitors on an equal footing. Handicapped as now, as a certainty they are only fighting a losing battle."

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in rubber rafts while the Navy tried to make them seasick. The trials took place in September and October in an 890 ft. long, 18 ft. deep tank, in which the rafts were subjected for 60 minutes to waves two feet high. The six rafts were moored diagonally to an artificial current to give them a corkscrew motion, and the soldiers were transferred from one raft to another to give variety of movement.

Before they embarked in the rafts the soldiers had to eat a standard meal of meat, vegetables and "fairly substantial sweet." They were then given one of the six different kinds of seasickness pills. The object of the experiments was to decide which of the six tablets was the most successful.

FIRST SEA LORD'S AMERICAN VISIT

During October the First Sea Lord, Admiral of the Fleet the Earl Mountbatten of Burma, visited Canada and the United States to meet the Chief of the Canadian Naval Staff and the Chief of Naval Operations, United States Navy. Their talks were confined to exchanges of views on naval matters of mutual interest. It was the first visit of the First Sea Lord to Canada and the U.S.A. since October three years ago.

H.M.S. LEOPARD — TWO CENTURIES OF HISTORY

The first H.M.S. "Leopard," a 40-gun frigate, was built in 1734. The present "Leopard," an anti-aircraft frigate, was commissioned on September 30, 1958, having been launched at Portsmouth in May, 1955. In contrast to the "hard-lying" conditions found in her predecessors, the new frigate has self-contained messes, each with its own heater controls, for her ship's company, which numbers some

200 officers and men. Fittings include reading lights at bunks, light controls at billets for slinging hammocks, power points for electric razors, stainless steel fittings and diffused strip lighting in bathrooms, and tiled, all-electric galley. When the ship's company marched on board at Portsmouth on the 30th September, before falling in to hear the Commanding Officer — Commander R. G. Gaunt, D.S.C., R.N. — read the Commissioning Warrant, they made their way to their small messes for their first "tot" and hot meal in the new ship.

LONDON MARINES IN STRENUOUS EXERCISE

During September, 250 officers and men of the Royal Marine Forces' Volunteer Reserve (City of London) left their civilian jobs to take part in a novel annual training period of great interest to the Royal Marines and Amphibious Warfare Headquarters. They carried out training specially designed to prove their short notice operational efficiency. Assault and raiding craft crews and Commandos trained under war conditions, and briefings, rehearsals and joint schemes culminated in Exercise "Mickey Finn." Joint planning was completed in London by the raiding squadron and Commando staffs in their normal volunteer training time.

The force sailed from Plymouth on the morning of September 15, and landed near Dawlish, on the Devonshire coast. Exceptional problems of navigation and technique for the landing craft crews were included in the exercise, which was also a severe test of the endurance, fieldcraft and tactical skill of the Commandos. They had to move, undetected, over at least 50 miles of rough country, existing entirely on what they

could carry. The "enemy" force was provided by the Regular Army. Highlight of the exercise centred on the rescue of a "political prisoner" from enemy-held territory during a secret move under heavy guard. The identity of the prisoner was kept as secret as the rescue details. He was flown out after rescue by a helicopter of the Fleet Air Arm. Average age of the volunteers was 25, and they came from many trades and professions in the London area.

H.M.S. "ULYSSES" ACTS UP TO NAME

Ulysses, the Roman-named hero of Homer's "Odyssey," was 20 years on his epic voyages, on which he saw so many wonders and had such adventures. The anti-submarine frigate H.M.S. "Ulysses" was only seven-and-a-half months on her voyage which she completed with her arrival at Devonport, England, in September, but during that period she saw more of the "wonders in the deep" than did her namesake. She steamed over 38,000 miles, crossed the Equator six times, visited nine Crown Colonies, two Commonwealth countries, the Panama Canal Zone and Jordan, and was the first ship of her type to pass through the Panama Canal and go round the world.

She took up duties at Christmas Island (Pacific Ocean) in April, and a nuclear device was set off at the end of her period of duty there. From Christmas Island she sailed for Singapore, stopping at Tarawa, in the Gilbert Islands, where the native population performed their traditional dances at a "Batare" given in her honour. After three weeks in Singapore she sailed with the Far East Fleet for joint exercises with the Indian and Pakistan navies off

Ceylon, and visited Trincomalee and Colombo before sailing for Mombasa, where the population turned out in force to greet her and H.M.S. "Bulwark," and officers and ratings had a monster programme of sightseeing.

MIDGET SUBMARINE CROSSES ATLANTIC

The midget submarine "Sprat", which had been on loan from the Admiralty to the United States Navy since June of this year, returned to Portsmouth in September — but she did not cross the Atlantic under her own power, but as a "passenger" in U.S.S. "Antares." She had been to America to exercise harbour defences for the U.S. Navy. Her operational and passage crew, consisting of Lieutenant T. J. Anderson, R.N. (in command), two other officers and six ratings, received warm hospitality while in the United States. During her time in America, H.M.S. "Sprat" was manned entirely by Royal Navy personnel.

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"All young men of respectable character, good countenance and robust health, who do not exceed 25 years of age, and are full five feet six inches high (shoes off), can enjoy a 'glass of grog,' etc., or are fond of a jovial life, have now an opportunity of enlisting in that gallant corps, the Royal Marines, where they may have the good fortune to visit foreign parts, gain glorious honour, and return to their friends with pockets well lined with gold."

That was what was "told to the Marines" — or to prospective Marines — in a recruiting

poster in 1805. For eight days in September, several hundred "Royals" of 1958 vintage demonstrated their 20th century life at the Corps' first comprehensive exhibition at Southsea, Hampshire. The exhibition was opened by the Lord Mayor of Portsmouth, Cr. A. L. Blake, who is himself an ex-"Royal." Helicopters of the Royal Navy landed Commandos in full battle order,

and other Royal Marines formed a "riotous mob," which was dispersed to allow a vehicle recovery team to get to work. Motor cycle rough riders played a courageous game of chase up a 12 ft. high bank, and, just to show their variety, more than 20 stands showing static exhibits depicting other aspects of Royal Marine activities were on show in a 600 ft. long marquee.

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REVIEWS

A MEMORABLE ACTION

"The Jervis Bay." By George Pollock. (William Kimber, 21s.)

Mr. Pollock has written an unusual book. With exhaustive care he has collected memorable phrases actually uttered by those concerned, together with descriptive accounts of actual incidents by those who witnessed them.

The welding together of isolated remarks and happenings into one connected narrative is no mean achievement, and the result in this case is the production of an enthralling account of a most memorable action.

The author's sympathy, peeping through here and there, leads him to point to the political folly which resulted in those men being sent to sea in unsuitable ships, to sacrifice themselves, however willingly, in the cause of freedom. The fact that the

efforts of the crew of H.M.S. "Jervis Bay" were crowned by success was their reward even though the majority did not live to know the result. It is to be hoped that the readers of this book will be many and that the gentle moral drawn by Mr. Pollock is not so gentle that it will be ignored.

D. S. E. T.

SEA VADE-MECUM

"The Sea Story." By Frank Knight. (Macmillan, 21s.)

Captain Knight, Extra Master Mariner, has produced a most valuable reference book and guide to the vast lore of fact and fiction about the sea and its sailors. It takes in history, travel, discovery and technical matters including naval architecture and seamanship. Its pattern is unusual: a short introductory essay to each subject is followed by a comprehensive bibliography for further read-

ing on that subject. In this way a pointer to some 600 references is given, and not the least valuable section is that which shows how to use a Public Reference Library efficiently.

Captain Frank Knight in the war became well known to pupil navigators in Bomber and Coastal Commands, R.A.F., but he is fundamentally a sailor who writes pungently and crisply of the element that was his first love in whose service in the Merchant Navy he obtained his Extra Master's certificate when only 24.

B. J. H.

FROM COURT MARTIAL TO GLORY

"The Kid." By Philip McCutchan. (Harrap, 12s. 6d.)

This sea story was dramatized by the B.B.C. under the title "Flash Point." It is certainly exciting enough. The Kid himself is Sub-Lieutenant David de Vere, whose gun-turret became the scene of an accident from which he too hastily absented himself. Court martial followed, on a charge of cowardice.

The Kid is acquitted on that charge but is found guilty of deserting his post. He is reprimanded and loses seniority. He would certainly have been dismissed from the Service had not some distressing events in his early life been shown to exert sinister influence over his actions.

Happily, the black mark does not wreck his career. He is posted to another ship where — conveniently enough — he finds himself in charge while the ship blazes alongside an ammunition dump. It would be unfair to reveal the ways in which The Kid wins through to glory.

B. P.

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