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The object of the Navy League in Australia, like its older counterpart, the Navy League in Britain, is to impress all men at its disposal upon the vital importance of Sea Power to the British Commonwealth of Nations. The League also sponsors the Australian Sea Cadet Corps to interest the right type of lad in the Royal Australian Navy—either to start them upon a career or to provide a healthy, pleasurable means of qualifying them to be of service in the Senior Service in the event of emergency.

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

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

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

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Patron: His Excellency The Governor-General

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Western Australian Division:

I. The Navy League of Australia.

PATER

Hon. Secretary: R. Neil Walford, R.A.N.V.R.

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THE NAVY LEAGUE OF AUSTRALIA
IT’S OUR PROBLEM, TOO

“The best fighting machine is useless without men to fight it.”

Vice-Admiral Sir Charles Hughes Hallett, when using those words in a recent issue of the London “Navy,” may well have been epitomising the First Lord of the Admiralty’s Explanatory Statement of this fiscal year’s Naval Estimates. The First Lord, having reviewed a projected expenditure in the coming year of just £400 million, sounded this warning: “The need to recruit and retain regular men is serious enough to meet the demands for expansion. That expansion must, however, rest on a solid base of an efficient, well-trained and well-equipped peace-time Navy. It is, therefore, a disturbing fact that the Royal Australian Navy to-day is seriously embarrassed by a shortage of recruits and a steady loss of trained men who take their time instead of re-engaging.

This dangerous situation demands the earnest attention not only of our Service Chiefs, but of every Australian citizen. We are inclined to forget that Australia is a maritime nation. We are inclined to overlook the significance of the fact that the bulk of our population is spread along the Australian seaboard, and that a seafaring career should be a normal thought in the minds of most of our boys and young men.

We have a potentially abundant source of good sailor-material. We need only cultivate it properly. This, of course, means much more than stimulating the spirit of adventure in our young men and investing the Navy with an attractive glamour. To rely solely on this would be as anachronistic as the press gang.

The Navy must offer sound material advantages which will stand up to the material advantages offered by the civilian employer. Much has been done in this direction. But the simple fact that the Navy is short of men can mean only that not enough has yet been done.

Of course, the Navy will continue to appeal irresistibly to many, but day-to-day problems of modern life may deny the Navy their services. Much as a man may wish to serve, he must consider the future of those dependent on him when making his decision. Let us consider the married man trying to lead a normal family life in Australia when on the move from station to station, possibly each two years or so. No great attraction to the potential recruit in that.

The Navy is trying to meet that disadvantage by building homes for its sailors. It is a praiseworthy policy, which should be pursued vigorously. This does not mean that housing alone is the answer to manpower shortage. The real answer is probably highly complex. In his thoughtful discussion of the Royal Navy’s manpower problem, Vice-Admiral Hughes Hallett says: “In the old days the officer came from the top of the community. The rating, whether he came from the gut, the press-gang, or the depressed areas of the 1930’s, came from the bottom. But they had one thing in common—they were expected to, and surprisingly enough on the whole did, serve the Navy devotedly to the exclusion of home life and personal feelings. "But times have changed and the modern officer and man looks on his engagement with the Navy more as a business contract, and it should be regarded as such. The Navy is a good service, and it wants good men. The type of man it wants is entitled to expect a contract which will give him a fair return for his services and a reasonably happy life. If this is not offered, or if conditions disappoint him, he will either refuse to sign or will break the contract as soon as he is legally entitled to. This is just what is happening now.”

It is a materialistic problem. Men are essential to man machines. Those men, when trained, must be retained. Labour is the one commodity the average individual has to sell. To-day, in Australia, as in most countries, it is a sellers market. The Navy must be prepared to compete in that market.

In time of war, patriotism, love of adventure—call it what you like—will undoubtedly meet the demands for expansion. That expansion must, however, rest on the solid base of an efficient, well-trained and well-equipped peace-time Navy. It is, therefore, a disturbing fact that the Royal Australian Navy to-day is seriously embarrassed by a shortage of recruits and a steady loss of trained men who "take their time" instead of re-engaging.

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BRITAIN'S NEW CARRIER

With her air squadrons embarked, H.M.S. "Ark Royal," Britain's latest aircraft carrier, will be the most formidable unit of the Royal Navy.

The "Ark Royal" is the right aircraft-carrier completed in the U.K. since World War II and is one of the two largest carriers ever commissioned by the Navy. She joins her sister ship H.M.S. "Eagle" in Britain's carrier fleet, which includes the recently commissioned "Captains," "Albion," and "Bulwark."

The Ark Royal reflects a great deal of Britain's recent naval research and development. She incorporates a new type of arresting gear, a deck-edge lift in addition to central lifts, the mirror dock-landing, and hangars with improved ventilation, and a special aircraft refreshment centre.

The Admiralty says these innovations in carrier technique will enable her to fly off and land on the heaviest and fastest types of aircraft envisaged in naval warfare and to operate them more rapidly and with greater safety than any previously completed carrier.

The ship is 896ft. in length (27m. between perpendiculars) and has an extreme breadth of the waterline of 112ft. 9in. She displaces 56,000 tons (completed with the 23,000 tons of H.M.S. Illustrious). Her peace time complement is 110 officers and 1,223 ratings. When her six aircraft are embarked there will be an addition of about 350 officers and between 450 and 460 ratings.

During construction, modifications were made to her design, these included a 51 degree angled deck. The optimum angle is 83 degrees, but the Admiralty said incorporation of this angle would have necessitated "more extensive modifications."

Steam catapults appear in the Ark Royal for the first time. These catapults, according to the Admiralty, will fulfill all the foreseeable requirements for aircraft launching. The new make of arresting gear with which the ship is fitted is a more robust type than formerly and the angled deck has permitted the number of wires on to which aircraft are hoisted to be reduced to six, a reduction of more than 50 per cent. Crash barriers will be used only in the rare event of an aircraft losing its hook. Before the angled deck was introduced they had to be in position throughout landing periods to protect aircraft parked forward.

The Ark Royal has the first deck-edge lift to be installed in a carrier of the Royal Navy. This lift is situated amidships on the port side and serves the upper hangar. There are two lifts on the centre line. This will contribute in a major way to the flexibility of flight deck work and will speed up flying operations.

Improved ventilation in the hangars and the lowered danger arising from the use of kerosene for jet aircraft will greatly facilitate aircraft maintenance work. When aviation spirit was in use in the old-style hangars it was necessary to hold up maintenance throughout the hangar when there was any danger of sparks igniting the fumes. In the Ark Royal's hangars only a small section near an aircraft being fuelled will be treated as a "fuel danger" section.

Mirror dock-landing aids are on both port and starboard sides of the new carrier. These aids are important with the introduction of aircraft of high approach speeds.

The Ark Royal's armament consists of 16 4.5-inch guns and 47 smaller guns. In constructing the hull, electrical work was done on the widest possible scale to provide the lightest and strongest structure possible.

Messes, Camell Laird are responsible for the main machinery, which consists of a four-shaft arrangement of geared turbines of a type which will give the ship a high speed and ensure mobility. Fuel is stored in several groups of tanks dispersed throughout the ship to reduce the risk of fire. Magazines for all types of airborne weapons will be in other protected parts of the ship.

Large dining halls are supplied from galleys containing up-to-date machinery and electric cooking equipment. Mess decks are furnished with settees and tubular steel tables and chairs. The distilling capacity of the ship is 350 tons a day.

A great deal of attention has been devoted to the photographic needs of the Ark Royal. Photography is playing an increasingly important part in naval warfare, both operationally and for training purposes. Its scope extends from the reproduction of charts and documents to the photography of large areas of territory from the air. It is used for the recording of all deck landings, of radar traces and instruments, and in association with or even as an integral part of modern weapons. The many uses of photography demand a well-equipped photographic section which must nevertheless be compressed into the smallest compass in a ship, where space is at a premium.

The Ark Royal's photographic section is considerably smaller than a laboratory ashore, but it is capable of dealing with a large volume of demand. It is fitted with equipment specially designed to save space and weight and to operate under adverse conditions. A universal processing machine, occupying only 12 x 12 feet of
deck space, can develop and dry all widths of film in the Summer sun, and can develop and dry
many labour-saving devices. In the
breakers, is used for the distribu-
tion of electrical power. Control
of the supply and distribution sys-
tems is effected from a large main
switchboard, and, in an emer-
gency, from four smaller switch-
banks controlling a quarter of the
ship.
Continuity of supply for the vital services of the ship is en-
sured as far as possible by the
duplex system of supply through automatic and hand-operated
changeover switches. Rapid re-
covery after failure of both
duplex supplies may be carried out by means of
an emergency supply system.
More than 1000 motors are in-
stalled. They range in size from
170 h.p. machines driving the
forward catapults down to frac-
tional h.p. motors for such varied services as ice-cream making,
workshop tools, oil purification
and air conditioning. This num-
ber includes nearly 600 for driv-
ing the ventilation fans, which
must maintain an adequate supply
of fresh air throughout the ship.
The galleys, bakery, and laun-
dry are all-electric and contain
propriate units of the system.
For example, the armament broad-
cast unit by gunfire personnel
and the radio broadcast unit by
radio personnel, and in these conditions only warn-
ing signals from the main system can be fed through echo-com-
mands on to the unit system. Approximately 600 loudspeakers are installed.

A MESSAGE FROM THE ENGINEER-IN-CHIEF . . .
The Engineer-in-Chief of the British Fleet, Vice-Admiral Sir Frank Trowbridge Mason, K.C.B., who visited Australia recently, has sent this message to the Navy League of Australia:
"It gives me great pleasure to be asked by the Federal
President to send a message to the Navy League of America.
I doubt if there was ever a greater need of education in naval
matters than to-day when the menace of the air is
in the forefront of everyone's mind. The Navy League, there-
fore, carries a big responsibility in instructing the public on
the continued need for sea power.
"The aeroplane not only enables us to see what goes on
over the horizon; it adds enormously to the range and striking
power of the Fleet.
"It is true that the aircraft-carrier herself needs protection
from air and submarine attack, but as soon as she is
well endowed. Without her, the war cannot be carried to the
enemy in the vast expanses of the oceans with their own
peculiar problems of navigation, so different from those over
the land.
"Modern naval operations must, therefore, be a combina-
tion of air and sea. The Royal Australian Navy, which is
already equipped for this role, is an essential part of the shield
which we have to build to protect our way of life."

THE NAVY Promotions Announced

The Minister for the Navy, Mr. J. Francis, on June 30
announced the following promotions, effective from July:

R.A.N.
Commander to Captain: Clive
McMullen (acting capt.), Melbourne.

Lieutenant Commander to Com-
mander: Robert Cecil Savage, of
Chatwood (N.S.W.); Neil Ewer
McDonald, of Bermagui (N.S.W.);
Brian Stewart Murray, Mosman
(N.S.W.).

Lieutenant (E) to Command-
er (E): John Allen Claring
Neutral Bay (N.S.W.).

Surgeon Commander (D) to
Surgeon Captain (D): Dudley
Ormond Southby (acting captain),
Oliver's Hill (Vic.).

R.A.N.R.
Lieutenant to Lieutenant Com-
mander: Leslie Campbell O'Donnell,
North Richmond (N.S.W.); Alex-
andra Hay, of South Melbourne
(Vic.); Ronald Chipp, Pengiue,
Oliver's Hill (N.S.W.).

Lieutenant Commander (E) to
Commander (E): Maxwell William
McLean, of Rosslyn Park (W.A.).

Surgeon Commander to
Surgeon Captain: Graeme
Geddes, of Melbourne.

Lieutenant (S) to Com-
mander (S): Angora Green,
Adelaide (S.A.); Leslie Arthur
Graeme Braidwood (acting capt.),
Dundas Southby (Vic.).

Surgeon Commander (S) to
Surgeon Captain: Graeme
Geddes, of Melbourne.

Commander Osborne is Liberal
member for Evans (N.S.W.) in
the House of Representatives.

He became an officer of the
R.A.N.R. in February, 1939, and
was D.S.C. and Bar in World War II.

Admiral Gladstone
Vice-Admiral G. V. Gladstone,
Commander, Allied Naval Forces
in the N.A.T.O. appointment of
Commander, Allied Naval Forces,
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What's Our Strength In Jets?

By M. J. Hardy

The Supermarine Type 323 jet fighter, piloted by Supermarine's Chief Test Pilot, Mr. J. Lithgow, recently made its first flight at Boscombe Down. Thus, approximately four years after the U.S. Navy's first production swept wing jet fighter, the Grumman F7U Cutlass entered service, Britain's Fleet Air Arm still possesses no single squadrons of fighters in this class.

In the swept-wing, 600 m.p.h. plus category, the U.S. Navy has the Chance Vought F7U-1 and A1D-1 Corsairs, F6F-5 Hellcat, McDonnell F4H-1 Demon and North American FJ Fury, all of which are ready in squadron service, or about to be delivered to units. The Fury, moreover, has been developed from the well-known F4U Corsair, is capable of competing with Russia's Mig-15 on equal terms, and U.S. Navy units will be receiving still more aerodynamically advanced fighters, such as the delta wing Douglas F4D-1 Skyray and later on production versions of Convair's XF2Y-1 Sea Dart, water-based delta wing fighter.

By contrast, regarding provision of such fighters for Fleet Air Arm units the rule seems to be 'as soon as tomorrow and yesterday, but never today'! Yesterday's 'tomorrow', the de Havilland Sea Venom, became, on December 3, 1945, the first jet aircraft to land on and take off from an aircraft carrier's deck. Extensive tests with this machine had been made, especially by No. 702 Squadron, the Navy's Jet Evaluation Unit which flew Sea Vampire P.20s, corresponding closely to the R.A.F.'s Vamp P.5.

Some Sea Vampires went into service with the 17th Carrier Air Group, but when war in Korea started they were replaced by Sea Fury and Firecrest, which were considered more suitable for operational service in that area.

Meanwhile, development of naval jet fighters had been neglected in immediate post-war years, apart from those Sea Venom trials, although deck landing trials had been made with a Meteor F.3 fitted with a Sea Mosquito-type arrestor hook under a strengthened rear fuselage, and Denst 5 Gas turbines of greater thrust; also prototypes of the Hawker P.1052 and Supermarine Type 310 were both fitted with arrester hooks and made deck landing trials.

Development of the Attacker, Sea Hawk and Sea Venom from prototypes to operational status proceeded surely, although slowly. But just now there has been a change in that the U.S. Navy's first operational jet fighter squadron was formed. Thus, approximately four years after that of the R.A.F., in 1954, it was not until 1951 that the Royal Navy's first operational jet fighter squadron was formed, as a result of the development of the Supermarine Attacker, five of Sea Hawks and Sea Huskies, plus two F.20s, corresponding closely to the well-known F.4H-1 Demon and F.4F-4 Wildcat, both of which are of the 'jam to the tune' type, and a Sea Mosquito-type arrestor hook under a strengthened rear fuselage, and Denst 5 Gas turbines of greater thrust; also prototypes of the Hawker P.1052 and Supermarine Type 310 were both fitted with arrester hooks and made deck landing trials.

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NEWS OF THE WORLD'S NAVIES

First of new class patrol boats
H.M. fast patrol boat Dark Aggressor, the first of a new class powered by Napier Deltic diesel engines, was accepted by the Royal Navy on June 3 from Messrs Saunders Roe at their Beaumaris (Anglesey) yard. 

Boats of this class are of composite construction, aluminium alloy is used for the framing and for the deck. The hull is planked with two diagonal mahogany skins. The craft are 71 ft. 4 in. in extreme length and they have a beam of 19 ft. The maximum draught is 6 ft. 1 in. and the fully loaded weight is 64 tons. The hull of the boat is of hard chine form which has been developed to give good seagoing qualities combined with high maximum and cruising speeds.

The boats are constructed so that they can be armed either as gunboats or as torpedo boats, for a dual role.

Admiralty enters elephant trade

"Wild elephants having entered the Queenborough was said."

"Elephants would have to be composed of the total number of the old and new forces combined, in order to produce a capable fleet, it would appear that about 12 elephants are concerned. Approval is requested to accept above offer."

"They can be armed either as gunboats or as torpedoes, for a dual role.

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"They can be armed either as gunboats or as torpedoes, for a dual role.
He Overdid the Nelson Touch...

By G. V.

IN THE YEARS following the first world war, a driller of submarine chasers was stationed at Portland with a view to evolving a standardised form of tactics for attacking submarines, based on the experience gained during that war and to developing Asdic instruments of detection then in their infancy.

Exercises at sea were normally carried out against a submarine from Monday to Thursday inclusive, Friday mornings being devoted to an analysis of the week's exercises, followed in the afternoon by a joint meeting between the submariners and their hunters at which appreciations by both sides were compared, lessons noted and further exercises planned.

Various classes of submarines acted as targets, many different forms of evasive action being adopted. For example, the commanding officer of a chaser would go out in the hunted submarine in order to demonstrate to the other side of the hill. In this way steady, if unspectacular, progress was made: but from the nature of things there could be no finality to the problem. The greater the progress made by the hunting craft, the cleverer became the evasive tactics adopted by the submarines and vice versa.

How, however, one fine day everything was thrown into the melting pot when information was received that in the near future an M-class submarine, mounting 2 12-in. guns, would be sent to Portland for exercises with the submarine chasers. Here was a pretty large sized cat to let loose in the dovecot! Apparently it was not the submarine chasers that had to do was to encourage the attack instead of trying to evade it. and then surface at a range when she could be certain of blowing her attackers out of the water with her 12-in. gun. long before there was a hope of the chasers getting within depth charge attacking range.

On the Friday before MI was due to return Portland, the usual joint conference was not take place. Instead, the commanding officers of the chasers sat in conference by themselves to discuss ways and means.

“What would Nelson do?”

Undoubtedly apply his well-known maxim, “You can never lay your ship too close to the enemy,” and the suggestion that our best hope of success lay in the application of this maxim was unanimously endorsed.

In other words, the tactics of the chasers (who carried out their search in units of three) would be to approach the target with the minimum of caution and the minimum of speed until the submarine was well and truly inside the triangle. Then—and not till then—was the depth charge attack to be commenced. And if this forced the submarine to the surface, she was to be rammed before any occasion arose to bring a monstrous weapon into action.

By the time this bold plan had been worked out in detail, one began to wonder what steps Nelson would have taken to ensure that he was in the first chaser to ram the submarine on surfacing. but it was generally agreed that the plan as outlined embodied sufficient of the Nelson touch.

Monday morning broke clear and calm. The submarine left harbour some time in advance of the chasers in order to give ample time to submerge in the target area chosen for the day (in this case West Bay) before the chasers could run out the area in question. The three chasers followed in due course.

For some time the hunt proceeded along normal lines, with perhaps rather more false echos than usual, until at the end of a couple of hours one of the chasers reported a “certainty.” It was confirmed by one of her consorts. The hunt was on! In accordance with the pre-arranged plan of attack, a silent approach was the salient factor. and all efforts were bent to get our quarry in the very centre of the triangle before trying to depth charge her. The submarine was observed to be working out well. The submarine was maintaining a steady course for long periods at a time and pro cured cover from the horizon by which factors pointed to the fact that she was still ignorant of being tracked; and barring accidents.

BIG NAVY EXERCISE

The signal was then given for the submarine to surfacing. Shortly afterwards there was a horrible noise of rending plates, followed by the engine room of the senior officer's chaser that a submarine's periscope had come up through the water at the bottom and that water was entering through the hole. I went down to the engine room to verify this peculiar happening and saw that it was only about 9 ins. periscope, but long bent over that any effort to withdraw it would inevitably lead in considerably enlarging the hole.

A hurried consultation with the submarine took place.

“Stay on the surface and withdraw my periscope.”

“Please not until we have got our collision mat in position ready to our quarry, and Navy. How do you propose to withdraw it?”

“By steaming into deep water and submerging,” and this was the method eventually adopted of course, turn her to reckoning, who was towing whom during the passage to deep water was anyone's guess.

After the collision the submarine was satisfied as regards the depth of water under her, the chasers shifted the collision mat as close as possible to the spot where the periscope had penetrated and as the submarine submerged (considerably enlarging the hole in the chaser) the mat was quickly positioned so as to catch the entire hole, after which course was dropped to return to Portland Harbou.

In the meantime the dockyard was informed of the facts and requested to make arrangements to deal with the cripples on arrival.

Certainly Nelson himself could not have placed his ship nearer the enemy; but by the time the necessary repairs had been rendered the opportunity had disappeared, and the last of the two H.M. ships cleared up, some of us were left wondering whether it was possible on occasions to show too much zeal for this particular maxim of Nelson!

—from the London 'Navy.'
Shipping Recovery by Germany and Japan

By “Bluenose” (in London)

SOML ten years ago a realist looked up from one of many articles discussing the division of the “cake” of German and Japanese pre-war cargoes among the shipping of the Allied countries. “I wonder,” he said thoughtfully, “I wonder how much this would be worth to Germany or Japan? Taking it like that.”

How right that realist was. Most of those forecasts assumed that both Germany and Japan would never recover from the shipping routes—a manifest absurdity to anyone who knew either country. So today they are both active again, Japan with some 3,000,000 tons and an avowed target of 4,000,000 tons by 1958, Germany with 2,000,000 tons.

The German recovery has taken place largely within the last four years. It was not until 1951 that the Control Commission restrictions on size and speed of ocean-going ships were removed and it became feasible for German owners to re-enter the liner trades. Her shipping consists of many companies, including the Hamburg-America, North German Lloyd, Hansa Line and German African Lines, are back in the shipping conferences; and by January of this year a German correspondent could write in the Shipping World: “German liners are now calling again at all important seaports in the world.”

These German services have developed cautiously. The lines are putting some remarkably fine vessels on the market, but their expansion is slow. In many cases two lines are collaborating in a joint service, as that run between North Continental ports and the Far East by the Hamburg-America Line and the North German Lloyd. Germany’s tanker tonnage has also increased somewhat. New tankers are being introduced, including the “Sydney Morning Herald” photo.

If Germany’s expansion has been comparatively slow, Japan has followed a different path. It was the policy of America, as the principal occupying power, to get Japanese industry on its feet again as quickly as possible. Released from restrictions earlier than was Germany, Japan has rushed enthusiastically into the rebuilding of her merchant fleet; and, unlike Germany, she concentrated on the liner trades.

This again is a reversal of the pre-war position, when tramps formed a high proportion of Japanese shipping. Today fast, new cargo liners under the Japanese flag are operating on routes between Japan and various South American countries; the United States (both East and West Coasts and also American Gulf ports); India and the Persian Gulf; Malaya and Indonesia; Australia and the United Kingdom and Continent.

Some of the companies concerned belonged before the war to the freight conferences covering the various trades. They have now applied for readmission and have generally been granted it, though normally on a basis of fewer sailings than in 1939.

Certainly, however, with no pre-war rights, have been refused admission to the conferences and have been operating as outsiders, accepting cargo at less than conference rates. As a result, new lines have developed in a number of trades, notably that between Japan and the United States: Japan/Malaya, where freighters on raw rubber have been forced to a very low level; Japan/U.K./Continental; and Japan/Persian Gulf. In the last named trade the war has recently been settled by the admission of the outsider to the conference, but in other cases the trouble continues, and Japanese lines which already belong to the conferences are opposesing their interloping competitors. Japanese rebuilding has been financed to an even greater extent than German by loans, the majority from the Japan Export-Import Bank and the Long-Term Credit Bank. Only about 10 per cent came from private banks. There has also been Government aid in the form of low interest loans. In addition, there have been both open and concealed subsidies designed to keep down the cost of shipbuilding.

Under this scheme a contract to build a ship was linked to a licence enabling the builder to import a quantity of a commodity (usually sugar) which could be sold at a favourable price to offset a potential loss on the shipbuilding contract. This system has also been discontinued, but other schemes are at present under discussion whereby shipbuilders may be helped to reduce prices. Some of these will operate to assist owners from overseas only, but others will, if accepted, benefit Japanese owners as well.

This assistance with the finance of shipping recovery links the whole operation to the Government plan of industrial recovery for Japan. Each year the tonnage to be built is set out as a target by the Government; and the aim is acknowledged to be 4,000,000 tons by 1958. This will give Japan a merchant fleet roughly equivalent to her 1934-35 tonnage, though smaller by 3,000,000 tons than in 1939.
1939. By the latter year, however, she had already begun to build up her fleet in preparation for a probable war.

Her present intention is to carry at least half her own trade: and there are indications that she may be anxious to secure certain American "and" shipments also. Whether or not she succeeds in that ambition, she has produced a distinctly serious attitude to the question of what we could only consider an "inevitable reduction in the number of sea-going appointments for executive officers of the rank of commander and above," and by the increase in requirements for officers of these ranks in staff and administrative appointments.

"It has become no longer possible to provide all executive captains and commanders with sufficient sea-going experience to ensure that they have been selected for higher operational appointments have the full measure of up-to-date experience in command at sea essential to the efficiency of the Fleet," the statement added.

"There will be no similar division of the Flag List, but it will automatically become divided in course of time as officers of the seniority which are being split are promoted to Rear-Admiral and onwards."

The Admiralty's statement emphasised that officers appointed to the General List would be regarded as fully eligible for promotion both to captain and to Flag rank, although Flag appointments being operational responsibilities will necessarily be filled by promotion from the Post List. It added that it was not possible to give officers specific guarantees of the value of appointments, but both lists would certainly make their contribution to Flag rank.

The captains and commanders affected have been informed of the list to which they have been allocated. The number of officers appointed to the Post List is designed to allow most captains to receive two appointments in command afte that when they succeeded in that ambition, and would promote them to second-in-command, or as Commander (Air) afte.

**SHIPPING RECOVERY**

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Heroic rescue in ship blaze

The night of June 9 saw still a further page added to the annals of marine heroism, by the officers and men of the British ship Apollo.

In the darkness the 10,790 ton Swedish tanker Johannishus and the 7,256 ton Panamanian freighter Buccaneer collided in the English Channel. Both ships caught fire after the collision, but whereas the Johannishus was rapidly brought under control, the tanker and the surrounding sea blazed uncontrollably.

British, French and Dutch ships raced to help and two U.S. Air Force amphibians circled overhead to spotlight survivors who might have clung to the holocaust.

Through it ran the 752 ton British ship Apollo alongside the fiercely burning Johannishus to take on twelve of her fourty-two crewmen who were in difficulty, including the British captain. Together they swam ashore, but older ones drowned within sight of the beach.

Smallpox scare on British ship

Commonwealth Quarantine doctors on June 13 quarantined two seamen with smallpox on a 7,461 ton British motorship Triadic. The Triadic, bound for Melbourne from Nauru, was diverted to Brisbane where it was thought the ship had smallpox.

Doctors boarded the Triadic, examined all the crew and passengers and fumigated the quarters occupied by the men. The Triadic was allowed to proceed to Melbourne that afternoon.

Lifeboats have busy month

Lifeboats of the Royal National Lifeboat Institution were launched 64 times in May and rescued 80 lives.

Never before in the 131 years of the Institution’s history have lifeboats been launched on service so often in May.

Many seek jobs in Antarctica

Nearly 200 Australians have applied for 17 positions on two Antarctic expeditions. The expeditions begin at the end of this year.

The director of the Antarctic Division of External Affairs (Mr. P. G. Law) said the applicants were of a high standard. The positions include medical officers, a surveyor, radio operators, and cooks.

22 holiday-makers drowned in barge

Twenty-two people drowned last month when a pleasure boat sank about 200 yards off the Normandy coast, near Caen, France. The vessel was a former American landing barge used for tourist trips.

Police said that all the victims were French.

About thirty holiday-makers were on the old landing barge for a short trip when its motor failed and it became stranded near shore. Some passengers managed to wade ashore before the swiftly rising tide swamped the barge.

Young members of the party then swam ashore, but older couples drowned within sight of friends on the beach.

Trawler sunk in rescue attempt

A 15-ton fishing trawler was badly holed by a submerged rock off Newcastle Harbour (New South Wales) late last month while trying to assist another fishing boat in distress.

The trawler, Red Fish, struggled up to the harbour for about a mile, then sank in 15 feet of water.

The trawler had just returned from a fishing trip when the other vessel got in difficulty. A strong southerly wind was blowing it toward the Stockton breakwater.

The crew of the Red Fish worked in close and got a line on board, but as she was pulling away she struck a submerged rock.

The other was last taken to its mooring under its own power.

Mr. J. W. Brophy

The Collector of Customs in New South Wales, Mr. J. W. Brophy, was made an Officer of the Order of the British Empire in the Queen’s Birthday Honours List.

WEDNESDAY, June 15, 1955

The Royal Society of St. George

An Anniversary to Remember

By JOHN K. LAVETT

President, The Royal Society of St. George

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THE NAVY REQUIRES . . .

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THE COLD WAR IN ASIA

By Neville Smith — The Call Office

If there is one benefit to be gained from the quickening of the cold war in Asia, it is leading to the arousing of Australian interest in affairs and problems there. Today more attention is being paid to Asia in Australian press, radio and public discussion than even five years ago. New terms like SEATO and ANZUS have become commonplace.

Communism has not halted in its southward march toward our shores, but in some places it has slowed down. Communist candidates, for example, suffered severe defeats in two parts of India where they expected to make progress Andhra and Travancore. Local issues are clouding the picture of Indo-China. The non-Communist Government of Burma is growing stronger.

But any aggression that will threaten Australia from Asia will come from Communism, particularly if the terrible economic and population problems pressing on Japan drive her into closer relationships with Communist China. Strong efforts are being made to keep Japan on the side of the Western nations, but these nations are reluctant to trade with her, supply her with raw materials or give her outlets for her surplus population. Here are 88 million people, increasing at the rate of a million a year, living on a group of islands with one hundredth the arable land that Australia has. It is a problem.

Japan herself is not likely to try conclusions again in a "hot" war, but with her economic and manufacturing aid, Communism would get a fillip in its persistent drive southward into the countries not yet under its control. It is a situation that we in Australia should watch carefully.

"The reward for a good deed is to have done it." — Elbert Hubbard.

THE NAVY

With officers and men dressing ship, the aircraft carrier Vengeance is shown drawing away from Garden Island, Sydney, on her voyage back to the United Kingdom. The ship was on loan to the Royal Australian Navy pending the completion of the new carrier, H.M.A.S. Melbourne.

— Sydney Morning Herald photo.
A NUMiER of small craft with superstructures of curious ark-like appearance have recently been seen in the Sydney and at Spithead; a number of these vessels are laid up in Haslar Creek, Portsmouth.

The appearance of these modern "Noah's arks" is the outcome of a Reserve Fleet programme for the preservation of newly constructed inshore minesweepers which are put into reserve on completion.

To build up its mine-sweeping forces, the Navy has constructed a large number of these vessels at a cost of nearly a quarter of a million pounds for each vessel. About one-third of the completed craft are being commissioned for service inshore minesweepers which are put into reserve on completion.

In Haslar Creek, Portsmouth,

The Navy has recently been

The craft will remain afloat in their temporary berths for more than two years, fitted with removable wood awnings made in sections which can be easily dismantled. These wood awnings give them the "Noah's ark" appearance and provide satisfactory protection against long exposure to sun and rain.

Several methods of preservation were tried by the Navy, but it was finally decided that the "Noah's ark" system gave the best protection against the possibility of shrinkage or dry rot in the wooden parts of the ship and corrosion of deck fittings and instruments.

Although at first sight the structures appear unseamanlike and unwieldy, they have already proved adaptable and as they come to be laid up, the Navy is finding that the use of reserve craft for preservation has had to be undertaken at the base.

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SUBMARINES' VALUE IN POLAR WARFARE

Atomic-powered submarines attacking under the frozen surface of the Arctic seas could be the West's answer to stop Russian aggression, the Australian Polar explorer, Sir Hubert Wilkins, said recently.

Sir Hubert said the great depth of the Polar seas, combined with unusually clear water, made war operations possible for atomic-powered submarines, which could stay submerged for indefinite periods.

In a war in the far north, aircraft from Alaska and other bases would have to smash through a heavy Russian network of surface and air defences, he said. Submarines, however, could move without much protection, could launch their torpedoes and destroyers as unobtrusively as they came.

Admiral Burrell

The Flag Officer Commanding the Australian Fleet, Captain (Acting Rear-Admiral) R.N., Rear-Admiral M. C. Murrell, C.B.E., A.D.C., has been promoted to the rank of Rear-Admiral, effective July 7.

Rear-Admiral M. C. Murrell became Flag Officer Commanding the Australian Fleet on July 1, 1953. Before that he had held the appointment of Deputy Chief of the Naval Staff, after relinquishing command of the aircraft carrier Vengeance.
THE GOOD "COMPANIONS" OF THE PAINTING TRADE . . .
**PERSONALITIES**

Continued from page 25

He returned recently from England where he served with the Royal Navy. Before that he attended the Imperial Defence College in London.

Capt. Harrington, who is 49, was born at Maryborough (Q). He is a graduate of the Royal Australian Naval College which he joined as a cadet-midshipman in January, 1920, and at which he spent four years.

In World War II he commanded H.M.S. Tanna for two and a half years and during that period served in the Mediterranean, the Red Sea, the Persian Gulf and the East Indies.

For his courage, enterprise and devotion to duty in the Persian Gulf he was awarded the D.S.O. and was appointed to the rank of Commander in the Royal Australian Naval College, which he joined in 1944. After passing out of the college towards the end of 1947 he went to the United Kingdom for further training and, after returning to Australia, he joined the R.A.N. Fleet Air Arm. He is one of the six R.A.N. Fleet Air Arm pilots who had recently completed the anti-submarine course at Eglinton.

Admiral Harrington

Rear-Admiral David Harrington, Chief of the Australian Joint Service Staff in Washington, has been awarded the U.S. Legion of Merit for his Korean war service.

The citation says that Admiral Harrington, in command of a carrier task force in the vicinity of the Korean coast, has been responsible for the successful execution of a number of missions, including the evacuation of the wounded and the destruction of enemy shipping.

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**COOK REVIEW**

Continued from page 2b

Admiral Eccles

A message received at Navy Office, Melbourne, states that Vice-Admiral Sir John Eccles, who was serving in the Australian Navy from October, 1949, until October, 1951, has been appointed Commanding - in - Chief Home Fleet in the Royal Navy from December, 1952.

At present Admiral Eccles is Flag Officer Air (Home). He is 57.

**For Sea Cadets**

THE ART OF LOOKING

The Navy League of Australia is affiliated with the Royal Society of St. George. One of the objects of the society is to foster a love of British literature, drama, music, and art. This article was written by Mrs. Douglas Dumas, a member of the society's cultural panel. He is a Fellow of the Royal Society of Arts (London), president of the society of artists, and senior lecturer in painting, Department of Art, East Sydney Technical College.

By Douglas Dumas

AN ENGLISH lady visitor, who wished to take back to her homeland an Australian painting, told me, "I have been listening all my life, but I have only recently begun to look, and it's a wonderful, new, exciting experience." She was referring, of course, to listening to music, and looking at paintings.

Not all of us are fortunate enough to hear and to see, but listening and looking with understanding and appreciation go far beyond the ordinary exercise of hearing and seeing. They require a marked characteristic skill in comprehension of essentials combined with economy of irrelevant detail.

The complexity was great; but the skill and experience of the Allies in amphibious warfare was growing all the time. Sir Andrew Cunningham, in reporting to General Eisenhower on the progress of the invasion of Sicily, remarked that the landings at Scapa Flow on December 14th were a greater effort than any that had ever been before in the British Navy. The invasion of Sicily, he said, was the most ambitious operation of its kind that had ever been attempted in the history of warfare. The operation was conducted by the British Fleet, which had been assembled in the Mediterranean for the purpose of bringing aid to the Italian government and to the Italian people.

A message received at Navy Office, Melbourne, states that Vice-Admiral Sir John Eccles, who was serving in the Australian Navy from October, 1949, until October, 1951, has been appointed Commanding - in - Chief Home Fleet in the Royal Navy from December, 1952.

**Victorian Cadets**

Twelve Geelong cadets spent four days, from July 16, aboard T.S. Melbourne, Albert Park.

Once aboard, the cadets were subject to strict naval routine. They were issued with bedding and messtraps and given various duties for the duration of the camp.

On Saturday, the hands were called away from physical training before breakfast at 0700. Colours and inspection at 0800 were followed by signalling and boy drills with T.S. Melbourne whaler (sailing and pulling). After lunch a landing party was sent to the island in the lake and cadets had to crawl through the undergrowth attacking an invisible enemy.

On Sunday afternoon Melbourne's field gun was used in a landing operation on the island.

Acting Leading Seaman Corno and Vivian were sent ashore in a small diversion party, while the main party dismantled the field gun, fought a fire and returned the whaler, pulled it to the island, landed and reassembled it.

Meanwhile, the diversion party had located the enemy and Acting Leading Seaman Vivian, when diving for cover from enemy fire, landed in the swamp!

After "firing" three rounds into the enemy's midst, the field gun was dismantled and ferried ashore after a very successful and round into "enemy" held territory.

Action stations were piped at the last parade and duty watch (red watch) had to "quicken the fire" (for exercise only) on the starboard gangway. Eustigators, buckets and hose were brought to bear and "brazes" extinguished in two and a half minutes from the time of the alarm. These fire drill exercises are frequently sprung upon the cadets at various times of the night to keep the organisation alive to possible dangers.

"Speaking the truth is like writing a book; it goes on only by practice." — Ruskin.
Sweperveness lasts the whole drink through.

For Sea Cadets

ON June 26 the N.S.W. Division held its annual Church parade and review at Garden Island, Sydney.

The parade, under the command of S/C Lieutenant-Commander P. J. Mort, assembled in the following order: the band of the Royal Australian Naval Reserve, Guard of Honour and Colour Party (S/C Lieutenant K. M. Adams, T.S. Australia, in charge), Numbers 1 and 2 Platoons, made up of cadets from T.S.s Sydney, Australia, Warrego, Perth, Sirius, Shropshire, Albatross and Albatross, Number 4 Platoon consisting of cadets from Shropshire.

This was the first time school Sea Cadets had combined with open units for a parade.

The Flag Officer in Charge East Australian Area, Rear-Admiral H. J. Buchanan, inspected the parade. He stopped several times to speak to the cadets of both open units and the school units.

After the inspection, the parade marched past the salute presented by Rear-Admiral Buchanan.

The parade proceeded to the Dockyard Church for a service by the Port Chaplain, Reverend W. E., who delivered an inspiring message to a large congregation of parents, friends, and visitors, and about 200 Sea Cadets.

A party of 33 N.S.W. cadets recently went to Westernport, Victoria, to join H.M.A.S. Sydney, flagship of the Royal Australian Navy, which was returning from a cruise to New Zealand.

The party visited Flinders Naval Depot, the Navy training establishment, where S/C Lieutenant J. R. McConnell, who had undergone training at the depot during the War, showed them over the depot and explained the functions of the various schools.

At 1000 on June 5, the party was taken on board the Sydney and settled in for the journey north. Some rough seas were met with to add to the interest of the cadets, all of whom benefited greatly from their sea time.

T. S. Albatross and T.S. Tobruk cadets had a weekend of training on board H.M.A.S. Ships Wagga and Castlemaine, alongside Garden Island. S/C Sub-Lieutenant R. Switzer of T.S. Sirius took charge of this training.

N.S.W. Division entries:

T.S. Sydney: 1344 John Frederick Clyde, 1346 Peter James Scaly, 1354 Gregory Raymond Henry, 1356 Harold Burgess.


National service training

The following cadets have entered H.M.A.S. Raymond for national service training: Cadet Petty Officer Alven Gillett (T.S. Sydney), Acting Cadet Petty Officer Stewart Harvey (T.S. Warrego), Acting Cadet Petty Officer Barry Wetherall (T.S. Australia), Cadet Leading Seaman James Partidge (T.S. Australia), Acting Cadet Leading Seaman Garth J. Eggleton (T.S. Perth).

Advancements (to date July 20):

To Acting Cadet Petty Officer: 932 John Alan Crawford (T.S. Sydney), 910 Kerry Lawrence Johnson (T.S. Sirius).

To Acting Cadet Leading Seaman: 1187 John Kane (T.S. Sirius).

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T.S. Sydney: 1344 John Frederick Clyde, 1346 Peter James Scaly, 1354 Gregory Raymond Henry, 1356 Harold Burgess.


National service training

The following cadets have entered H.M.A.S. Raymond for national service training: Cadet Petty Officer Alven Gillett (T.S. Sydney), Acting Cadet Petty Officer Stewart Harvey (T.S. Warrego), Acting Cadet Petty Officer Barry Wetherall (T.S. Australia), Cadet Leading Seaman James Partidge (T.S. Australia), Acting Cadet Leading Seaman Garth J. Eggleton (T.S. Perth).

Advancements (to date July 20):

To Acting Cadet Petty Officer: 932 John Alan Crawford (T.S. Sydney), 910 Kerry Lawrence Johnson (T.S. Sirius).

To Acting Cadet Leading Seaman: 1187 John Kane (T.S. Sirius).
The "Battle" of Fort Direction

By G.E.W.B.

Sea Cadets of T.S. "Derwent" (Tasmania) recently took part in a mock combined operations assault. It was a day of fun and good training. Here is the story of the "battle," told by a correspondent in Tasmania.

The object of the exercise was for a mixed force of Army Cadets and Sea Cadets to attack, from scuba and Fort Direction held by the Air Training Corps, undergird their annual camp there.

A party of 50 Army Cadets from various units in the Hobart Command under Major Williams, a Regular Army officer, was embarked in G.P.V. 952 and A.W.B. 423, 25 in each craft. Forty Sea Cadets from the T.S. "Derwent" under Lieutenant J. Hamilton Smith, A.S.C.C., manned the craft. Additional benches were installed in the workboat so that all could arrive at their destination fresh for an attack.

Each craft towed one whaler, previously prepared with a boat's anchor in order to land on a beach and kedging off again. The workboat slipped and proceeded at 0850 and the G.P.V. followed at 0900.

The weather was clear, visibility was good, and the wind about force four. Within the next half-hour the wind had increased in force to five with gusts of force six. In these conditions the tow of the G.P.V. parted at 0935 but a good recovery was made and the tow secured by the Sea Cadets of T.S. "Derwent" under the command of Lieut. Commander, F. R. Green, D.S.C., R.A.N., R.N.O., Tasmania, and Commander G. E. W. W. Bayley, O.B.E., V.R.D., R.A.N.V.R., Senior Officer Tasmanian Division, carried out his annual inspection recently of all units in Tasmania.

The attack was planned on strictly military principles and at no time were the opposing sides in physical contact. From seaward the slopes of the fort were at times shrouded in smoke, and the rattle of small arms fire sounded most intimidating.

The military umpires declared that an enticing movement was carried out and the fort captured from the rear. The combatants then settled down to lunch, and tea was provided by the gallant defenders, no doubt as reports of.

By 1440 the time the beaches were to be evacuated, the sea was much calmer and the operation was simpler than was at one time envisaged. The precaution had been taken of advancing the departure by one hour in view of the difficulty of launching troops in heavy seas. The concern of the Sea Cadets for the comfort of their sister service was most touching. The sturdy sailors with bell bottoms rolled up above the knees carried their khaki breeches back to the boats.

All wet clothes were dried out on the galley fire on the return journey and no one was any the worse for the adventure.

Due appreciation should be given for the excellent spirit of comradeship which the Sea Cadet officers had fostered among their ship's company. This was the first occasion on which they had worked with the Army, and Major Williams expressed himself in terms of high praise in a short speech when he landed at 1700 at the conclusion of the exercise.

The following promotions are announced in the Tasmanian Division: A. B. Brooks to Kingsea man and passed for petty officer; L. S. Brasington and L. S. Moy to petty officer; L. S. Nicholl and L. S. Abrolom passed for petty officer; A. B. Stephens, A. B. Whitford, and A. B. Hall, to leading seaman.

For Sea Cadets

THE NAVY

For Sea Cadets

THE "Battle" of Fort Direction

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CONTENTS

Vol. 18. AUGUST-SEPTEMBER, 1955

EDITORIAL:
Ending the Cold War ................................................................................................. 4
Home Truths from the U.S.A. ......................................................................................... 5

ARTICLES:
France's New Navy ........................................................................................................ 7
Submariners Are Quite Sane ......................................................................................... 9
Corel Sea Tribute ........................................................................................................ 11
60 Years of Service ..................................................................................................... 16
South Africa Gets a Naval Base ................................................................................... 24

FEATURES:
News of the World's Navies ....................................................................................... 12
Maritime News of the World ....................................................................................... 20
Personalities .................................................................................................................. 28
For Sea Cadets ............................................................................................................. 29-32

FICTION:
"Brickie" McDoneld ..................................................................................................... 28

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ANCHOR BRAND

August-September, 1955
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THE NAVY LEAGUE OF AUSTRALIA.
ENDING THE COLD WAR

The recent Big Four meeting at Geneva was marked by an air of cordiality and co-operation which few would have predicted; few even dared to hope.

The way has now been paved for a new era of diplomatic relations between West and East. The leaders of Russia, the United States, France, and the United Kingdom in open and frank discussion canvassed bold proposals, intended not only to end the cold war which has shadowed the world in recent years but to secure lasting peace founded on sound and friendly international relations.

A heavy diplomatic task still lies ahead in the detailed examination of these plans. But the first and all-important step—the personal meeting of the leaders of the great powers—has been taken.

To achieve peace, the nations of the West must speak with one voice. They must be able to speak with the authority of an equal—in strength, in preparedness, and ability to maintain their rights and independence.

Any suggestion of slackening either our own national efforts or those of our allies would be of immediate and intimate concern to every Australian. In particular, it is of the greatest moment to the Royal Australian Navy, first line of Australia's defence. Russia is strong. She appears often to mistake conciliation for weakness. This is no time for bluffing on a weak hand. Strength must be matched by strength if eventually armament reduction is to be discussed and achieved.

Russia is now reaping the rewards of its vigorous post-war naval building programme which has narrowed to a dangerous degree the earlier clear naval superiority of the Western Powers. On this point, and with no disregaragement of the apprehensions of Geneva, it is prudent to remember this warning given as recently as June of this year by Admiral Carney, the retiring Chief of Naval Operations of the United States Navy:

"Difficult as it may be to believe, the dark clouds of maritime challenge are again discernible on the Pacific horizon. A Soviet fleet is taking shape and venturing ever further and further from its own shores, and with every forward step it is moving nearer to the shores of our Asiatic friends."

"In addition, an embryo navy is forming under the flag of Communist China, consisting of a nucleus of surface craft, submarines and growing naval air elements."

"Thus, despite the signs on the horizon of lessening world tensions, I cannot tell my fleet commanders to relax on the ramparts."

"Soviet shipyards are busy in the Baltic, the Black Sea and the Pacific. She has fleets in the Murmansk area, the Baltic, the Black Sea and off Manchuria and Siberia."

"It seems that the Soviets have concluded that their circumstances and their political and economic objectives demand a position of solid maritime power, capable of challenging the existing Allied supremacy at sea."

Australia must continue to play her part without stint or reservation to retain that allied sea supremacy of which Admiral Carney speaks.

HOME TRUTHS FROM THE U.S.A.

Britain's present defensive reliance on the United States Navy and Air Force is the subject of a recent article by the London correspondent of the U.S. "News And World Report."

In simple, forthright language, the correspondent analyses the defence position of the United Kingdom to-day, a situation brought home as a rude shock to the British public by Ministerial statements elaborating this year's defence estimates.

The facts are frighteningly plain. In the words of the London "Economist": "Now and for some years to come there will be no effective defence."

The basic cause of this state of affairs lies, of course, in the immediate post-war years.

The fact remains that the Royal Navy to-day is a stripped-down fleet of ageing warships, no longer the traditional main-stay of Allied naval power. The Royal Air Force is a shadow of its war-time self with too many machines still on the drawing board. The Army is dangerously extended with four-fifths of its strength overseas. Britain to-day is facing realities. But it will be many months, in some cases years, before the effects of post-war inertia can be overcome.

Meanwhile, as the correspondent bluntly points out — and it does not make pleasant reading— Britain's defence must depend upon the United States—particularly on the U.S. Navy and Air Force.

August-September, 1955
THERE are a number of illustrations that exemplify the remarkable progress made in aviation to point out that the security of the sea can only be assured by aviation. As it is necessary to protect convoys against possible air peril, warships specialized in pursuit appear to be indispensable, and one can consider aircraft-carriers and escort vessels necessary for at least another ten years as essential elements for the protection of sea communications.

At present, the essential task of the General Staff of the French Navy is to replace worn-out ships by modern ships and to form a homogeneous and well-balanced fleet, complete with naval aeronautic units, constructed in France.

On January 1, 1955, the tonnage of the Fleet in service was very far from having reached the theoretical standard required by the deliberations of the Higher Council of the French Navy. It came to 368,000 tons. This total was composed as follows:

- Ships (armed and available) 289,575 tons
- Ships in reserve 78,865 tons

The tonnage of the Fleet at the end of 1955 was 448,545 tons. The French Navy wishes to be fully equipped and to join the other armies and the other great maritime countries in the continental and maritime zones of the North Atlantic, in particular since the United States, who are against "the dispersal of the navy," are not the opinion of foreign naval critics and authorities, such as those in the United States, who are against "the dispersal of the navy." At the same time advantage seems to be taken of the progress made in aviation to point out that in the future the security of the seas can only be assured by aviation with ground bases.

The conditions relative to the composition of the Fleet naturally are not unalterable. It is evident that the event of atomic weapons and the thermonuclear weapons have greatly modified a certain number of problems. The naval forces comprises in addition to these new weapons.

Some people believe that only small units should be exposed to the effects of the A-bomb. This is not the opinion of foreign naval critics and authorities, such as those in the United States, who are against "the dispersal of the navy." At the same time advantage has been taken of the progress made in aviation to point out that in the future the security of the seas can only be assured by aviation with ground bases.

The essential tasks of the French Navy have not varied for centuries, in particular since the time when the great Cardinal de Richelieu defined them. It has always been important for France, in liaison with her allies, to protect her maritime communications and the French presence in the overseas territories. Since the last war, in conformity with the Atlantic Pact, the mission of French naval forces comprises in addition operations on the high seas and along the coasts in collaboration with the other armies and the forces of the Allied Nations.

The strategic field of action of the French Navy still comprised the same principal zones: the western Mediterranean, the west coast of Africa, the Gulf of Gascony, and the coastal waters of the overseas territories.

For more than fifty years the Navy has been, for the policy of the French Republic, an important insurance. The Republic has always devoted 20 to 25 per cent. of its military expenses, and forces ranging from 60,000 to 80,000 men, to the Navy. It was while bearing in mind these essential factors that in 1952 the Higher Council of the Navy fixed the level to be reached by the French fleet: 340,000 shipping tons with an annual minimum of 30,000 tons for the laying down of ships, and 20 flotillas for naval aeronautics. The first echelon to be realised before 1963 must come to 360,000 tons of new ships and 18 flotillas. It is the minimum amount of naval forces that France must possess at any time for the security of her territories.

The Navy has been taken of the progress made in aviation to point out that in the future the security of the seas can only be assured by aviation with ground bases.

FRANCE'S NEW NAVY

BY EDMOND DELAGE

Vice-President of the Naval Academy of France

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and which played an important part during operations off Norway and near the Antilles, the destroyer Fantasque and the torpedo gunboat Sangro di Braccio.

These reductions in tonnage will continue until the end of a period that can be considered as critical in 1963. Until that time, indeed, the total number of tons of shipping put on the reserve list will exceed the figure of 30,000 tons of new constructions considered as a "vital minimum." Thus in 1963 the tonnage of the Fleet will be reduced to a minimum which will be below 350,000 tons. Only in 1970 will the anticipated figure of 540,000 tons again be realized.

A rapid survey of the principal types of ships allows one to realise the present value of the French Fleet. It possesses two of the fastest warships in the world, the Richelieu and the Jean Bart, both 35,000 tons, which were put into service in 1941. The Fleet also possesses three aircraft-carriers in service. They have a low tonnage if we compare them with those of the large Anglo-Saxon navy, and are already quite old. They are: the Arromanches, 14,000 tons, the La Fayette and the Bou Béteau.

These ships are of foreign origin: the Arromanches was ceded by the British Navy in 1951 and the La Fayette was transferred during the same year by the American Fleet under the mutual assistance pact, while the Bou Béteau was transferred in 1953.

The Clemenceau is the only battleship built at the naval dockyards of Brest. It will have a displacement of 22,000 tons. It will thus be well placed on the list of 119,000 tons of the Fleet.

The cruisers are not very numerous; of the three, the 29,000-ton French Cruiser Union. They are: the Gloire, the Georges Leygues, and the Montcalm, all of which were finished off, built, or in the process of being ceded.

The destroyers are not very numerous; of the three, the 28,000-ton French Destroyer Union. They are: the Canard, the Chevalier Paul and the Jeanne d'Arc. These cruisers which will join the Fleet are the De Grasse, 9000 tons, an anti-aircraft ship at present being finished off in the Brest naval dockyards, and the Colbert, 8300 tons, which is being built in the same dockyards.

An important type for the protection of convoys is the escort ship. Escort ships comprise fast escort vessels and torpedo gunboats. The ship with the highest tonnage is the Chateaurouault. She has a displacement of a small cruiser: 3360 tons. The series of other small escort ships in construction or being ceded, already has six units being tried out or being finished off. They are the Sure, the Toulon, the Bouvet, the Cassard, the D. Thouars and the Chercheval Paul.

Eleven other units of the same type are being completed in national yards or in private ship-yards. Four escort vessels of 1250 tons are on trial; four are being built; seven are in the ships-yards for "off-shore" orders in France. The French Navy possesses a certain number of torpedo gunboats in service (a relatively large quantity) and minesweepers of 600 and 700 tons. There are 21 coastal minesweepers of 400 tons, being built at Cherbourg or in private ship-yards.

The French submarine fleet, so important at the beginning of the war, possesses a total of only 10,000 tons.

H.M.A.S. Coonamandra passes a line to H.M.A.S. Wagg during minesweeping exercises off Sydney recently.
branch of the Navy. For the Navy's task remains that of denying to an enemy the use of the seas so that we can use them for our own purposes. To the accomplishment of this task the surface ship, the submarine, and the air, both separately and in each contribute their quota; and the war is waged on, above, and under the sea.

Keeping the seas free

Two wars have shown clearly how vulnerable to an intensive campaign of sea power Great Britain is, and with the Commonwealth and all those countries of the world who hold freedom to be a great prize. Our study then, in times of peace, must be directed towards keeping free the seas in time of war. For in our combined strength and preparedness lie the best hopes of maintaining peace or, if, despite this, war should ensue, of prosecuting it to a swift and successful end.

In this scheme submarines have two main duties—that of preparing themselves for the role I have already described, and also of helping the anti-submarine forces, both surface and air, to combat enemy submarines. Our submarines at home and in the Mediterranean, here and in Canada, spend much of their time exercising with ships and aircraft, and such is the demand for their service that it can never wholly be satisfied.

Let us now look at the dividend our submarines, midget submarines, and seaplanes, paid during the last war. They sank nearly 200 warships of all sizes, and damaged over 30 others; they sunk two million tons of supply ships and damaged an other half-million. Over a million tons of this shipping was sunk or damaged in the Mediterranean, a great proportion of which were engaged on supplying the Africa Corps. Those of you who were fighting in the Desert will well understand the effect that this had on the North African campaign.

These results were not achieved without heavy losses, which included 74 submarines, one in three of the submarines that we possessed at the outbreak of war or built during the war. With this total lost over three thousand gallant men. The services rendered by the Officers and ratings of the Submarine Service during the war were equalled only by those of the troops on land and in the air, an Englishman named Day who, two centuries ago, laid a number of bets that he would dive to a depth below the summit of a mountain. How odd that we, who can now ride the world, have not yet reached the bottom of the sea.

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Queen's signal to H.A.M.S. carrier

The aircraft carrier H.M.A.S. Vengeance met the Royal Yacht Britannia in the Irish Sea on August 10. Her Majesty the Queen was in the Royal Yacht at the time. In an interchange of signals between the two ships the following messages were made:

H.M.A.S. Vengeance: "H.M.A.S. Vengeance greets your Majesty when she is on her visit in Australian waters with happy memory. Request permission to proceed.

The Royal Yacht replied, "Approved.""

The Flag Officer of the Royal Yacht then sent to the Vengeance: "I have been asked to convey the following signal: Thank you so much for your kind message which brought back many happy memories. I send my best wishes to you all, and good luck in your new ship.""

H.M.A.S. Vengeance replied: "Please convey the following message to Her Majesty: My ship's company, officers, and I are very happy to be able to convey your gracious message. We retain very happy memories of your tour of our country. Now we hope that it will be our privilege to escort you on the Australian station in H.M.A.S. Melbourne in the not too distant future.""

Big building programme for American Navy

The new United States building programme allocates over $700 million for the fiscal year beginning on July 1. Besides a $71,300,000 carrier it includes three more atomic submarines, three guided missile frigates, and the conversion of a light cruiser and destroyer to guided missile ships.

Altogether 24 warships and 10 auxiliaries with conversion of 21 combatant and seven auxiliary vessels are included in the programme. The conversion of "Forrestal," the Saratoga, is to be launched in October.

H.M.A.S. Queenborough visits London

The anti-submarine frigate H.M.A.S. Queenborough on August 2 became the first Australian warship to cross the Atlantic to the Irish Sea on August 31. The ship, which was commissioned in February, includes three more atomic submarines and is being used for the training of specialist gunnery officers who have been modified in the light of the new responsibilities.

A part of the course is now spent at a Royal Naval Air Station and includes flying experience during weapon exercises as part of the training.

Similarly the course for specialist Torpedo-Submarine officers has been modified and includes flying experience during a course in air weapons at a Naval Air Station.

For close integrating of air and weapon exercise, a certain number of Fleet Air Arm pilots and observers will specialise in gunnery and torpedoes, and carry out the long specialist courses referred to above.

South Africa plans larger Navy

The South African Navy is to be enlarged by posts for 200 officers and 2,000 other ranks and the Permanent Force and Active Citizen Force — which has been enlarged by about 16 feet in length with a 10 feet beam. Inflation is by a mixture of carbon dioxide and nitrogen contained in two bottles rigged on the outside of the raft. When the raft begins to inflate it bursts the lacing of the valve in which it is placed.

To save life in inhospitable climates, the raft has a tent which is erected by inflating two arches 11 inches in diameter. The tent has inflatable sides, with a 3 inch air gap for insulation purposes, and the top of the tent can be bowed down to act as a water catchment during a shower.

In addition, a limited quantity of fresh water can be distilled from sea water in a small solar still which has been developed for the purpose.

Speakers said that work was progressing on immersion suits, weighing only 3 lbs., for the life in very cold water, and on the development of a wireless transmitting set which will reconnoitre the pick-up arrangements in

H.M.S. Newcastle to visit Australia

The 12,200-ton cruiser H.M.S. Newcastle will arrive in Australian waters in September.

During the visit the Newcastle will carry the flag of Vice Admiral R. F. Elkins, C.B., C.V.O., O.B.E., Flag Officer Second-in-Command, Far East Station.

The captain of the cruiser is Captain R. B. Honeywill, R.N.

The Newcastle will arrive in Perth on September 2 from Singapore. It will stop at Melbourne from September 12 to 16 and then leave for New Zealand where it will stop at Dunedin, Wellington, and Auckland.

The Newcastle will arrive at Sydney on October 3 for a seven-day visit. It will then sail for Hong Kong.

H.M.S. Newcastle took part in operations of the Royal Australian Navy in the recent ANZAC
H.M. Submarine Tactician returns to Balmoral Naval Depot, Sydney, after six weeks exercises in Malayan waters.

ships and aircraft and be suitable for installation in a proportion of life rafts.

Submarine on survey job
Observations intended to increase scientific knowledge of the earth's crust are to be made when H.M. Submarine Acheron (Lieutenant-Commander Peter Hay, R.N.) sails round the Cape of Good Hope to Trincomalee and back through the Mediterranean.

Such gravity surveys depend essentially upon the variations in the swinging period of a pendulum. Differences in the composition of the earth's crust produce differences in the effect of gravitational pull, and therefore can be detected by pendulum readings.

Gravity surveys of that portion of the earth's crust which is below the ocean can only be made from submarines which, when submerged, are not subject to wave motion and therefore provide a level platform on which variations in the motion of the pendulum can be observed.

The Acheron sailed from Portsmouth on April 20 and is to be overseas for six months.

Embarked in the submarine is Lieutenant J. C. Harrison, R.N.V.R., a 25-year-old National Service Officer who is also a Doctor of Philosophy and who, after taking his degree at Cambridge, went to the University of California. From the coast of California he has recently made some half-dozen cruises in U.S. submarines in the course of which gravity surveys have been made.

The survey will be in the South Atlantic and Indian Oceans, where extensive observations will be made. It is in response to a resolution passed by the General Assembly of the International Union of Geodesy and Geophysics requesting all maritime powers to carry out as far as possible soundings and gravity measurements in those of the oceans which have not yet been explored.

Reports of two Russian carriers
A French report states that Russia has laid down two carriers of about 50,000 tons, but at which yards is not stated.

Material is being obtained from the Donetz area. Length is said to be 721 ft. with engines of 150,000 h.p. giving 35 knots. If there is any truth in the report such vessels will have much greater significance than the "Sverdlovs."

However, even the Russians might find some difficulty in pushing a vessel of some 13,000 tons greater displacement than the Eagle along at three knots faster with less horse power.

The Eagle is 36,800 tons and needs 152,000 h.p. for 32 knots.

H.M. Submarine Tactician returns to Balmoral Naval Depot, Sydney, after six weeks exercises in Malayan waters.

A pilot, standing, leaves a ship outside Sydney Heads to return to the pilot steamer Captain Cook.

August-September, 1958

THE NAVY
The Navy League was born on 31st January, 1895. Many of the circumstances of its origin and its fatal tendency to that misplaced economy which is the worst form of extravagance were pointed out in a letter to the English Press, which the League had been forced to publish. It was argued that, as was the opinion of every kind. They were convinced that, as was the case with many other organisations, the League was founded and the objects were expressed to be "for the purpose of securing as the primary object of the national policy the command of the sea, of spreading information and knowledge of its importance to the British Empire of the Naval supremacy which depends on its trade, food supply and national existence, and thereby ensuring to the Government the support of the people for the expenditure necessary for providing a Navy capable of rendering service to the nation."

The objects were said to be "the creation of an organisation to which the future is adaptively demand." The League has been in existence for 60 years. It has been a hard-worked truism that "history repeats itself. The experience upon which the League was based has its culmination in the series of successive Russian and French "scares," each characterised by a British financial history by a sudden jump in naval expenditure, even by panic buying of ships wherever they could be bought, followed by a collapse when the temperature had subsided.

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The Corps were given a final intensive training in visual and wireless signalling up to the standard of Ordinary Signaller and Telegraphist. Thus the Corps was able to offer the Admiralty regular groups of trained young men, so saving the Navy many weeks of instruction in Naval establishments. This service, however valuable to the Admiralty, pressed by and large because the Corps was first financed purely as a voluntary effort by the League, the Admiralty soon came to its aid. Similarly, but a year later in 1942 the Admiralty, pressed by war, came into partnership with the Navy League in the general control of the Corps, much upon the lines ably and vigorously proposed by the League some years before, and which persist to this day.

As in 1914, so in 1939, the League created a vast organisation for the supply of comforts of all kinds to men of the Navy and the Merchant Navy in its losing battle against subsided and protected foreign competition, and supplied quantities of garments, games and money for the care of their own navies, supported by the enthusiastic support of great numbers of people as well as the affiliated Navy Leagues in the Dominions. These, together with the growing generation of Sea Cadets founded and sponsored by it, the future guardians of our heritage, the sea. It has served this country and the Empire well in the past. The opportunities and duties of the future will not be shirked.

Of the handful of far-sighted men, now gone from us, who conceived that Empire family, it can only be said, si monumentum requiris, circumspice.

AIRCRAFT CARRIER'S MISSION

A seaman who was seriously injured by an explosion of a detonation rocket in the Polish merchant ship Braterstwo was treated in the aircraft carrier H.M.A.S. Vengeance.

The merchant ship signalled the Vengeance for medical aid on August 30. The carrier raced to the Braterstwo and the injured man was made early the following morning about 100 miles north east of Cape Finisterre.

The Vengeance took the seaman to Portsmouth. He received treatment during the voyage from naval medical officers in the ship's hospital.

H.M.A.S. Vengeance was on its way to the United Kingdom with a major portion of the ship's company which will man the Melbourne, the R.A.N.'s new aircraft carrier.
Freight rates up on Far East run

Shipping freights between Australia and Japan, the Philippines and Hong Kong will be increased by 10 per cent from October 1. Mr. A. G. Rose, the chairman of the Far Eastern Conference of Shipowners, which carries most of the trade on these routes, announced in Sydney on August 18 that the conference had decided on a general increase because of high operating costs.

The current rate of freights was uneconomic, he said.

Mr. Rose said that oil was the most important cargo of the conference lines.

The conference comprises four British companies (Eastern and Australian - Oriental, China Navigation and Australia-China), three Japanese companies (O.S.K., N.Y.K., and J.A.L.), and a Swedish company (Australia-West Pacific).

Mr. Rose said that about 26 conference ships were on the Far Eastern trade.

Seaman's mother a security risk

The U.S. Coast Guard has withheld a commission from a graduate of its officer candidate school because of security matters involving his mother, Press agency reports from Washington stated on August 18.

The case, the second of its type within a month, involves Appren-
tice-Seaman Norton Pierre Gars
ton, 23.

Gaston's lawyer said that his mother, Mrs. Jean Grisez, is accused of having been a member of several organisations listed as subversive.

The Navy recently denied a reservation commission to Eugene Landly, 21-year-old graduate of the U.S. Merchant Marine Academy at King's Point, New York, on the ground that his mother was once a Communist.

Two fish stories from abroad

Here are two fishy stories from our London correspondent:

- Customs officers who boarded the 5,000 ton British ship Daresse when she reached Karachi from the Persian Gulf on July 28 found gold bars worth £2,500 — stuffed inside fish carried in an unclaimed basket.

- Since 1948 on the Great Ouse River in East Anglia, U.K., the fisheries officer Mr. N. McKen
zie has been fishing with electricity, using an improved technique developed by himself.

The equipment consists of a portable generator driven by a petrol engine, and two poles with electrodes like tennis racquets attached and connected to electrical output by waterproof cable.

Each electrode has a shocking area of about seven feet radius within which the fish are stunned, and a further area out to a 14 ft. radius in which they are tickled and can be driven towards a stop net.

"Electrical fishing" is used in Britain for surveys, restocking and improving fish in inland waters.

On the River Ouse and in tributaries alone, from April, 1934, to March, 1953, about a million fish were handled.

Merchant Navy learns A-bomb protection

Merchant Navy defence courses in the U.K. have been revised in the light of increased knowledge of the effects of nuclear weapons and other warlike techniques.

Originally instituted in 1938, the courses, after a brief cessation, were revived in 1951 at centres in London, Newcastle, Liverpool, Glasgow, Cardiff, Southampton, and Hull.

The object of the courses, which are of two weeks' duration, is to inform masters, officers and men of the Merchant Navy of the measures that would be taken in time of war for their protection by the Royal Navy and of the steps which they can take themselves.

The range of subjects covered in the officers' course includes trade protection, convoy work, communications and radar, and protection against submarines and mines, atomic, biological, and chemical protection, damage control, fire-fighting, and the principles of gun control. The men's course includes A.B.C. protection, damage control, and fire-fighting.

The subject - matter of the courses is constantly under review to keep it in line with policy in merchant ship protection.

The atomic, biological, and chemical defence and fire-fighting sessions have been revised and new material has been introduced.

Instruction is given on the hazards to be faced on the fringe of an atomic explosion at sea and the measures that can be adopted before the event to reduce damage and casualties to a minimum.

This is followed by detailed damage control, incorporating first-aid repairs to ships and techniques to keep them afloat and moving after they have been damaged in action.

A new lecture incorporating the latest medical research has been introduced to deal with survival at sea.

Since the courses were re-insti-
tuted in 1951, 6,000 masters and officers and 6,400 men of the Mer-
chant Navy have attended at the seven centres. One-week courses, incorporating the theoretical part of the course with a visit to Fleet Air Arm stations, have been introduced for officers and men of the Merchant Navy in Australia and New Zealand.

Russians rescue Jap fishermen

Japanese officials on August 15 announced that all nine crew members of the Japanese fishing boat Kamome Maru had been rescued by the Russians, and were safe on an island in the central Kuriles.

They were missing since late in July when their boat was caught in a typhoon.

French ship fight gale off W.A.

The French motorship Jironaddy off the Western Australian coast in August fought a two-day battle against a gale, with 1,150 drums of oil loose in a hold.

The ship, bound from Marseilles to Adelaide, was about 200 miles off Cape Leeuwin when the gale struck her.

For two days the crew worked desperately to restore the oil, but the drums continued to roll around the hold.

The captain decided to return to Fremantle to restore the cargo.

U.S. liners to arrive for Olympic Games

Two 14,000-ton freighters which the Matson Line is converting to luxury liners for the U.S. Australia run will be ready in time to bring Americans to Aus-
tralia for the Olympic Games next year.

Cost of converting the ships is estimated at $21 million each. The U.S. Government will subsidise the cost.

Each ship will have accommodation for 365 passengers.

The two ships are scheduled to make a total of 15 round trips a year. They will call at Honolulu, Samoa, Fiji, Tahiti, and New Zealand.

The last Matson liner, the Marine Phoenix, left Sydney in July.

British tanker fleet soon world's largest

Britain's tanker fleet will soon be larger than that of the United States, which at present has the biggest fleet in the world, it is stated in the thirteenth annual survey of world tanker fleets made by the Sun Oil Company.

The United States with 525 tankers — 25 less than the year before — had only 23 per cent of the world's carrying capacity at the end of 1953.

The United Kingdom had almost 18 per cent of the world's carrying capacity at the end of 1954, and it would rise even higher in the future, the survey said.

150TH ANNIVERSARY OF TRAFALGAR BATTLE

October 21 will be the 150th anniversary of the Battle of Trafalgar.

In Sydney the anniversary will be celebrated by an all-day display at the Naval Dockyard, Garden Island, on a Saturday, October 21, by a Navy helicopter display in the Domain at lunchtime on October 20, and by a performance by the massed bands at lunchtime in Hyde Park on October 21.

The dockyard will be open to the public at 10.30 a.m. on that day.

In Melbourne, Trafalgar Day will be celebrated by a display at Como Park on Sunday afternoon, October 16.

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The aircraft carrier Vengeance, which left Australia recently to rejoin the Royal Navy, is shown here on arrival in England. The carrier was on loan to the Royal Australian Navy pending the completion of the R.A.N.'s new carrier, H.M.A.S. Melbourne. Australian sailors who took the Vengeance back to England will man the Melbourne when she sails for Australia next year.

Admiral's Praise for Cadets

THE First Naval Member, Vice-Admiral R. R. Dowling, has congratulated Victorian Sea Cadets on their turnout at the Annual Navy League Ball at the Royal Exhibition Building, Melbourne, on July 8.

In a letter to Commander R. A. Nettelfold, D.S.C., R.A.N.R., president of the Victorian Division, the day after the ball, Admiral Dowling wrote:

"This is to thank the Navy League on behalf of my wife and myself for a very happy evening last night. It was a great success and it certainly was much enjoyed by us."

"Would you please pass on my congratulations to the Sea Cadets who formed the ceremonial lines and in particular those who gave us the excellent gymnastic display. I thought the boys in uniform were well turned out and they looked well. It is so important on these State occasions of ceremony that boots are clean, hair cut, hands and nails clean, and so on, not forgetting standing with shoulders squared and heads up looking on the world with justifiable pride in their Corps. I think the lads had all these attributes.

"The vaulting display and drill, which is an essential part of the gymnastics, was very good indeed. The instructor did a grand job in the training and the Cadets were a credit to him and the Corps."

NEW U.S. WARSHIP

A new type of warship has been launched which is known as a "Carronader."

"Carronaders" are intended for the support of landing operations.

Royal Australian Navy ratings drop a Dan buoy over the side of a minesweeper during recent minesweeping exercises off the New South Wales coast, near Sydney.
South Africa Gets a Naval Base

BY ADMIRAL SIR HERBERT PACKER, K.C.B., C.B.E.

Federal President of the Navy League of South Africa and former Commander-in-Chief, South Atlantic Station.

THE recent British-South African naval agreement, which includes the transfer to the Union Government of the naval base at Simonstown, is the logical sequel to many years of discussion. In itself there is nothing startling. It has followed precedent in that as the navies of the British Empire have grown from nothing to the South African Navy consisted in 1922 there was considerable political agitation to turn over to the countries concerned, first of all Esquimault and then Halifax to Canada; Garden Island, Sydney, to Australia; Devonport Dockyard, Wellington, to New Zealand, and now Simonstown to the Union of South Africa.

But what to my mind is remarkable and a matter for universal congratulation is the wide acclaim the agreement has received. Both countries, the United Kingdom and the Union of South Africa, approved it, and in both countries the opposing political parties seem equally satisfied. This is a remarkable achievement.

Not only are the provisions of the agreement wise, but the timing has been excellent. There is no more point in having a first-class naval base, which is designed in having a formidable fleet and no suitable base. The two are interdependent.

For instance, when I was serving on the South African Station in 1921 there was considerable political agitation to turn over Simonstown Dockyard to the Union Government. At that time the South African Navy consisted of three vessels, the Protea, Immortal and Somersby. What a nonsense it would have been to have had a full-scale naval dockyard to support three minesweepers!

But just as I have seen the Australian, Canadian, and New Zealand Navies grow from nothing to a formidable force, so I have seen the South African Navy grow to its present day strength of two destroyers, three frigates, three minesweepers, one repair dockyard, one depot base, one defence vessel, a surveying ship, and various small craft. And now there is an eight-year plan on hand for a £10 million development, and which will involve the addition of six anti-submarine frigates, ten coastal minesweepers, and four seaward defence boats. A formidable force.

The maintenance of this Fleet will certainly keep Simonstown busy, but will last long enough to cover its other commitments.

Incidentally, as ex-Fourth Sea-Lord (responsible for supplies), I am delighted from the point of view to see that these vessels are to come from the South African National Nautical College, and that the Union of South Africa can ensure standardisation and thus reduce considerably the stocks of spares and stores which the base will have to carry.

Now that the agreement has been concluded, it remains to put it into effect. So far as the Dockyard with its highly specialised work is concerned, it will take many years to train fully from the dockyard the principal and other dockyard officers essential to the efficiency of the yard. The necessity for this training is recognised in the agreement. Meanwhile, to maintain the efficiency and war potential of the dockyard, the replacement of these important officers from the United Kingdom by South Africans will be "a gradual and controlled process."

So much for the dockyard. But the real story of the naval dockyard is the training of the minds of all of the men whose future the South African Navy and the defence of the Union at heart—the manning of the ships in active commission and the provision of adequate reserves on mobilisation.

The official steps to be taken are not my business, but I have read with the fine start which has been made with the Naval gymnasium at Saldanha Bay. But it is in the field of naval matters that the South African Navy can continue to be of real help by assisting the authorities through our various branches, both at the coast and inland.

For the past 30 years the Navy League of South Africa has made its influence felt throughout the country in its efforts to make the youth of South Africa more sea-minded. Assistance to Sea Cadet branches is, of course, one of the main lines of work in the League, and it has to be congratulated on the wide acclaim that the League of South Africa has made on the countries concerned, first of all Esquimault and then Halifax.

The official steps to be taken are not my business, but I have noticed in having a formidable reserve force. The provision of adequate reserves can Nautical College General Giraud from the South Atlantic Station, in December, 1951, first in H.M.S. Sheffield, and as Chief of Staff to Admiral Sir I. Fawkes, who was appointed in command of H.M. Submarine Orat, in the China Station and in 1938, on promotion to Commander, as Staff Officer Operations, to Admiral Sir W. F. Short. Early in 1941 he founded the 8th Submarine Flotilla at Gibraltar. In July, 1941, as a member of the British Military Mission to the U.S.A., he appointed to H.M.S. Fawkes served with the Russian Black Sea Fleet based at Sebastopol in the Crimea.

Rear-Admiral Fawkes, who was born in 1903, joined the Royal Naval College, Osborne, in 1917. After two cruises as a cadet in H.M.S. Temeraire and H.M.S. Thunderer, he was served as a midshipman in H.M.S. Queen Elizabeth (Admiral Sir Charles Maddalen, Commander-in-Chief, Home Fleet) from 1921-23. After sub-leadership, in submarines, he specialised in submarines, being appointed to H.M. Submarine M.3 (carrying a 12-inch gun) in 1925. With the exception of four months at the Royal Naval College, Torrid in 1928, he served continuously in submarines until 1933, having been appointed in command of H.M. Submarine H.50 in 1932.

In 1933, Lieutenant Fawkes graduated from the Royal Naval College, Osborne, in 1917, as Lieutenant-Commander, served on the staff of the South African National Nautical College, the annual Navy Essay Competition which reaches schools in all parts of the Union, and the principal and other dockyard officers essential to the efficiency of the yard. The necessity for this training is recognised in the agreement. Meanwhile, to maintain the efficiency and war potential of the dockyard, the replacement of these important officers from the United Kingdom by South Africans will be "a gradual and controlled process."

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The 8th Submarine Flotilla, which was responsible for the secret landing of U.S. General Mark Clark in North Africa and the evacuation of the French General Giraud from the South of France, operated in the Mediterranean as well as the North Atlantic.

In May, 1944, he was appointed as Chief of Staff to Admiral (Submariners), where he served until June, 1944. He was the senior supply officer in the Royal Australian Navy's first aircraft carrier, H.M.A.S. Sydney, in commission 1948. He also held the same appointment in the cruiser H.M.A.S. Australia when it commissioned in 1943.

He was the R.A.N. accountant officer for the 7th Destroyer Flotilla and the Australian Naval Air Arm.

He entered the Royal Australian Navy in 1915 and in 1916 became a writer. He was made an officer in 1932. He was the only serving captain to be awarded the French Legion of Honour and Croix de Guerre for his services in the First World War.

In 1948 he was promoted to Rear-Admiral, O.B.E., recently appointed Commander, Submarine Force, Eastern Atlantic, on 9th February, 1954.

In addition to his British decorations he held the French Legion of Honour and Croix de Guerre, and the American Legion of Merit.

Captain Blacklock

Captain (S) C. H. Blacklock, R.A.N. of Brighton Beach (Victoria), entered the Royal Australian Navy on August 3, after more than 40 years' service. He was the only serving captain in the R.A.N. who has risen to that rank from the lower deck.

Captain Blacklock was employed at Navy Office, Melbourne, since 1952.

He was the senior supply officer in the Royal Australian Navy's first aircraft carrier, H.M.A.S. Sydney, in commission 1948. He also held the same appointment in the cruiser H.M.A.S. Australia when it commissioned in 1943.

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Surgeon-Captain Flettery

Surgeon-Captain James Flatter
ty, O.B.E., recently appointed Command Medical Officer for the East Australian Area, has a service career which extends over many years. His name is most closely associated with the renowned H.M.A.S. Australia.

He first served in that ship in the Pacific during World War II, and later in the Abyssinian crisis in 1936, remaining in it until 1938.

September, 1939, found him

THE NAVY

34

South African Navy

34
again in the ship on the outbreak of war, and he remained there until 1942.

During this period he had action experience in the engagement off Dakar, and saw service over a wide range of areas, as far North as in the Arctic regions, and 30° South in the Atlantic, Indian and Pacific Oceans.

The ship had some very narrow escapes, especially during the severe blizzards of the dockyard at Liverpool during 1940.

In 1942, he had a short appointment as Medical Officer in Charge at Balmoral Naval Depot.

He was present at both Leyte and Lingayen, when the ship became almost a special target for the Japanese suicide dive-bombers, the Kamikaze. In the two engagements, there were two engagements, the Japanese suicide dive-bombers, the Kamikaze, and Lingayen, when the ship became almost a special target for the Japanese suicide dive-bombers, the Kamikaze. In the two engagements, there were two engagements.

Officer in Charge at Balmoral Naval Depot.

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He became a midshipman 1st Class in 1918, and was awarded the prize for English-History.

Acting-Captain McDonald served in the Second World War and also did two tours of duty in the Korean area. He was in H.M.S. Barham when she was torpedoed and sunk in November, 1941. On the first occasion on which he served in Korean waters he was captain of the frigate Condamine, and on the second occasion was captain of the Tobruk. Commander Murray served in H.M.S. Australia and H.M.S. Nepal in the Second World War, and also served in the Korean area in the aircraft carrier Sydney.

Commander Prime was serving in H.M.S. Vengeance in the Second World War when she was sunk. He was captain of H.M.S. Gascoyne in the action off Luzon in January, 1945. He was later awarded the D.S.C. and the United States Legion of Merit.

New R.A.N. Posts

New posts for three senior officers of the Royal Australian Navy have been announced by the Minister for the Navy, Mr. J. M. Francis.

Commander I. H. McDonald, R.A.N., until recently executive officer of the Royal Australian Navy air station at Nowra (N.S.W.), has been appointed Assistant Controller of Naval Training at Melbourne. Mr. McDonald, President of the Permanent Interviewing Committee and Inspector of Naval Recruiting, has been given the acting rank of Captain.

Commander R. D. Watson, C.B.E., D.S.O., has been appointed to the positions of Acting-Captain of the Battle Class destroyer Anzac, which, with her sister-ship Topham, will leave Australia for the Malayan area in November to relieve the Tribal class destroyers in that area.

R.N. Promotions, etc.

The Admiralty has announced the following promotions, appointments, and retirements:


R.A.N. has Busy Year

A busy programme lies ahead of the ships of the Australian Fleet from now until Christmas.

Their tasks will include service as part of the strategic reserve in the Malayan area, service in Korea, and patrol duties in the northern waters. In addition, the ships will exercise in the Sydney area, as well as weapon and anti-submarine training, and anti-submarine training, and anti-submarine training.

Announcing the programme recently, Mr. Francis said that, as previously stated, the first ship to take part in the Anzac exercises between Darwin and Singapore in the South China Sea was the Arunta and Warramunga, which recently took part in the Anzac exercises between Darwin and Singapore in the South China Sea.

The Arunta and Warramunga will remain in the Malayan area until December when they will be extended to the Korean area, and Warramunga will return to Sydney in time for Christmas.

The frigate Condensation, which is at present on a tour of duty in Korea, is expected to return to Sydney in November.

The Fleet will be strengthened this year by the fast anti-submarine frigate Quickswich, which, like the fast anti-submarine frigates Quickswich and Quadrant, is a conversion of the former auxiliary minesweeper Q.C. Quickswich last month was undergoing trials following her conversion to a frigate.

The Australian Navy, which went to England last year to gain experience in hunting fast, modern, long-range submarines and to obtain an evaluation of her new weapons and detecting equipment, returns to Australia in December.

On her way back from Australia, the frigate Shoahaven in the Darwin area in anti-submarine and anti-aircraft operations, assisted by Firey air-craft, flown from the R.A.N. air station at Nowra (N.S.W.). The Shoahaven will remain on patrol duties in the Darwin area until November when she will be relieved by the ocean minesweeper Coomandare.

The aircraft carrier Sydney, now serving in the Indian Ocean, will be employed in national service, and other training, will visit Adelaide on September 16 and September 18 to embark reserve sailors.

She will be available for the landing training of aircraft pilots between November 21 and November 30.

When the new aircraft carrier Middlesbrough arrived in Australian waters from England next year the Royal Australian Navy would possess the most modern light fleet aircraft carrier fleet.
"BRICKIE" MCDONALD

By J. H. Adams

I LIKED the cut of the fellow's jib (said Captain George Mans-ley). He was young, athletic and of good approach — McDonald by name, an Australian Scot.

And because my regular ship's surgeon, Dr. Ramsay, was ashore on leave, I pulled up with McDonald. Doc and I had been together for years in the Camberwell. We were firm friends, even if he did consider me a bit of a dill and we sometimes had our little disagreements.

I'm rather slow to make friends. I strike up a sort of superficial friendship with my passengers from the first day out and it seldom goes beyond that.

The night we left Sydney, bound for Vancouver, I met McDonald. I set the course, went down to dinner in the saloon, and when I emerged on the promenade deck, I found McDonald at my elbow. He was smart in dinner suit, and affable. He opened a conversation on nautical affairs and showed right out of the jump that he knew something about the sea.

"You talk like a sailor," I remarked.

"I am — or was — in a way. Navy in the war, you know," he replied. "Given it up now." Perhaps that's the reason why I chatted on to him. We strolled and yarmed for fully an hour. Then he excused himself, saying that he had a date on the evening's farewell to the ship.

It was a fleeting rear view.

In the evening I met him again. He was uneasy and obviously withholding something.

"Er — he was McDonald, sir," I asked.

" 'Brickie' McDonald. The new AB. Called 'Brickie' 'cause he's so low. Suave, polished raconteur, first class. Household name in the Camberwell. We're firm friends, even if he did say he never heard of you. Who is it, anyway?"

"McDonald? McDonald? Don't know him. We haven't got a McDonald on the passenger list," the chief answered.

The chief steward went away looking puzzled and promising to make some inquiries. Perhaps a mistake had been made and a name had been dropped off the list. I accepted this explanation.

My friendship with McDonald continued. He mentioned that he was a rather good bridge player and hinted at a game. I didn't take the hint, for at that particular time I'd gone off the game a little. I'd been playing night after night, voyage after voyage, and had had enough.

The chief steward came back to me.

"This McDonald, sir. He's not on our passenger list; we haven't a ticket for him. He isn't a passenger. Because he's a friend of Dr. Ramsay, I haven't had him questioned. But —"

"You think he's a stowaway?"

"I did until I had the ship searched. Quietly at night by my staff. Can't for the life of me find where he sleeps. I've had a steward shadowing him. He always loses McDonald. The fellow is most elusive."

One morning, half-way up the Pacific, as I looked down from the bridge, a doddering old hand in the ship. I leaned over the bridge rail and called him. I took him into my room and closed the door.

"Martin, who was that disappearing into the fo'c'sle?"

He was uneasy and obviously withholding something.

"Er — he was McDonald, sir."

"And who's McDonald?"

" 'Brickie' McDonald. The new AB. Called 'Brickie' 'cause he's so hard-headed you can't 'im with a brick."

"What's been going on in this ship? Now come clean!"

Out it came. This fellow McDonald had made bets with some of his shipmates about pulling up with the Old Man. He had dressed up, strolled to the saloon, taken a vacant seat at one of the tables and generally behaved like a first class passenger.

"He hasn't won his bet, though, sir," Martin added, with an amused gleam in his eyes. "The exact terms were that he had to play bridge with you in a dinner suite."

"Well, I'll be keel-hauled!"

I had an excuse for flogging for this practical joke. A captain can't have to know every man in the ship, especially new hands making their first voyage. Maybe old Doc Ramsay, who gave me a couple of licks and a lot of strife, was right. I shouldn't be allowed at large without a keeper.

As a former naval man, he was unlikely to be seasick in such calm weather.

In the evening I met him again. We adjourned to the smoking-room and had a couple of beers together. He was an amusing fellow, but I told him some rather sad stories in the best wardroom manner. Suave, polished raconteur, was McDonald.

The days wore on and we were constantly together, except in the mornings, when I never saw him. I asked him where he got up, and he said he slept in and rarely ate breakfast.

I had to confer with the chief steward in the afternoon and, in the course of our pow-wow, I mentioned McDonald.

"Nice chap," I said. "Talks quite freely, but when you leave you find that he hasn't said a darned word about himself. Who is it, anyway?"

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Energy is passed to the receiver, and by means of a cathode ray tube the time which has elapsed is measured between the impulse leaving the aerial and its echo returning.

Because the speed of a radio wave is constant, the time taken for a pulse to travel from one point to another represents an accurate measure of distance. This constant speed of transmitted pulse and reflected echo is known to be 186,000 miles per second, or a scale of 3,000 yards in six millionths of a second. Therefore, an object one mile from the radar aerial will give an echo only twelve millionths of a second later than the departure of the transmitted pulse. The cathode ray tube is an electronic device which in conjunction with a time base, can register and measure split second intervals precisely, so permitting an over-all transit time of the pulses. By using transmitted pulses with sufficient interval between each pulse to allow the echo to return, the radar ray tube furnishes a means of measuring the range of objects.

To measure bearing

In order to measure bearings, the radar equipment is provided with a directional aerial or "scanner" which, by its physical design, sends out the pulses in a narrow beam.

This scanner is rotated continuously as the pulses are transmitted, and an echo is received when the aerial is pointing at a target. In the marine navigational radar set the echoes are displayed on a plan position indicator. The radar-equipped ship, located in the circular screen, and all the targets surrounding it are indicated by spots of light on the screen face, range and bearing being read off from the centre of the tube — the ship's own relative position. The echoes do not resemble ships or buoys, but are interpretative by the navigator after very little operational experience.

Radar navigation is often referred to as though it was something new, but this is hardly true; the basic principles of navigation, such as chart work, plotting and ship's steering, still apply. The only thing which is new is the presentation of the information. But in order to obtain a correct appreciation of the equipment, some idea of how it functions is necessary. The electronic principles and techniques used are fairly complex and a somewhat detailed scientific knowledge is required.

Since pulse technique is the heart of the system, these short electrical pulses are generated in the microwave tube. The number of pulses generated per second is the pulse repetition frequency, usually about 1,000 to 2,000. As already mentioned the pulses are very short, generally 0.1 to 1 microsecond. The pulses are passed to the transmitting valve — the magnetron. The magnetron generates powerful, high frequency radio oscillations each time it is triggered off by one of the pulses, and these powerful radio bursts are passed through the waveguide to the scanner unit from which they are radiated. At the ultra high frequencies at which radar operates, the speed of light is so much, and hence the time of energy radiated by the transmitter is of such high frequency that it cannot be fed to the scanner by cable; a such the energy will pass along conventional transmission lines and so the rectangular metal pipe, or waveguide, to the transmitting unit dimensions of this are governed by the frequency of the energy it has to pass.

The receiver is connected to the aerial as the transmitter, and to prevent damage to the receiver from the transmitted pulse, an electronic switch is used — the "T.R. cell"; this blocks off the receiver while the transmitter is working, and connects it to the aerial immediately the transmission of the pulse is over. Any magnetic effect will not disturb the ship's compass as its noise the officers' sleep. All the controls for the operation of the equipment are in the display unit and it can, therefore, be started, used, and stopped from this position.

Britain still leads the way in radar development, having been first to develop commercially after the war. Radar reaches its worth, not only in ships of all sizes, but also in busy ports and difficult harbour entrances.

Shore-based radar

The main function of shore-based radar is to help maintain normal shipping movement in conditions of fog or bad visibility. To a lesser extent, a land-based radar is capable of doing this. There are cases on record of radar-fitted ships having found their way to the berth in the fog by radar alone.

The radar station operates at the entrance to the fjord, coal is mined throughout the year. Owing to the Arctic conditions, however, the fjord is only open for three to four months throughout the short summer, and during this time the accumulated stocks of coal have to be shipped. The large shipbuilding port of Sandefjord has a radar station situated in the Pilot House. The radar installation is a fine example of how standard land-based radar can be adapted for use in a shore station. Information is collected and co-ordinated on the state of the entrance and approaches for a fjord or harbour in a way hitherto impossible to achieve with much rapidity and accuracy.

The function of this radar station is to give ships on request a correct position "fix" within the area covered, at the same time giving the movement of other vessels. The town of Barentsburg, Longyearbyen, situated on the fjord, coal is mined throughout the year. All the controls for the operation of the equipment are in the display unit and it can, therefore, be started, used, and stopped from this position.

The most northerly land-based radar station operates at the entrance to Isfjorden Harbour, Spitsbergen. This station provides a fine example of how standard marine radar can be adapted for use in a shore station. Information is collected and co-ordinated on the state of the entrance and approaches for a fjord or harbour in a way hitherto impossible to achieve with much rapidity and accuracy.

A shore-based radar installation is not intended to be used in any form for "control" of shipping in the navigational sense. The master remains in sole control of his vessel and merely receives information from the pilot at the radar via the pilot on board his ship. On board the pilot vessel, a continuous listening watch is maintained for instructions from the radar station. In operation at Sunderland, the pilot vessel is directed to a certain point by the radar radio. Once contact has been made and a pilot has come aboard with a walkie-talkie, he is given a complete course from the radar stations. The pilot has to provide navigational aid for the pilotage of vessels entering and leaving Sunderland harbour.

Communication is established by radio-telephone between a fixed radio installation — located with the radar equipment in the Pilot Office — and the radio set fitted in the pilot's launch, or the portable walkie-talkie apparatus carried by the pilot. The system is unique in that it is operated completely by the pilots themselves.

The fittings of radar equipment both aboard ship and ashore are of the same type, and an almost standard procedure has been adopted. In general, this means that the scanner unit is to be mounted on top of the wheelhouse with the cables and waveguide passing through glands in the wheelhouse to the transmitter unit situated in the wheelhouse below. The display unit is usually placed on the forward part of the wheelhouse, although some offices prefer it to be placed on the chart room. The motor generator can be stowed in some convenient place away from the equipment, where its magnetic effect will not disturb the ship's compass or noise the officers' sleep.

Many problems arise with the radar scanner, and they are not limited to the scanner itself. No attempt is made to train a radar scanner to read a radar picture. It is obvious that in any system where the energy level is so high, it is almost impossible to prevent it from reflecting back on to the display unit, to cause visual confusion. Most of the energy is wasted that the scanner unit is to give ships on request a correct position "fix" within the area covered, at the same time giving the movement of other vessels.

The main function of shore-based radar is to help maintain normal shipping movement in conditions of fog or bad visibility. To a lesser extent, a land-based radar is capable of doing this. There are cases on record of radar-fitted ships having found their way to the berth in the fog by radar alone. The radar station operates at the entrance to the fjord, coal is mined throughout the year. Owing to the Arctic conditions, however, the fjord is only open for three to four months throughout the short summer, and during this time the accumulated stocks of coal have to be shipped. The large shipbuilding port of Sandefjord has a radar station situated in the Pilot House. The radar installation is a fine example of how standard land-based radar can be adapted for use in a shore station. Information is collected and co-ordinated on the state of the entrance and approaches for a fjord or harbour in a way hitherto impossible to achieve with much rapidity and accuracy.

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be found to bring the vessel into harbour. After some years of use with this radar system, the port maintains a steady flow of inward and outward traffic despite a high incidence of fog.

Other uses for radar are being developed and two which interest shipbuilders are those dealing with measurement of ship's speed on trials, and "turning circles."

When new vessels are undergoing trials an estimate of their speed capabilities is obtained by runs up and down the "measured mile." This distance is measured from marks set up on shore which are observed visually from the ship. A stop watch is started when the ship is abeam of one set of marks, and stopped when the ship is observed to be abeam of the second set of marks—indicating that a measured mile has been covered. However visibility is often such that the shore marks are obscured, and much time is wasted in doing the speed trials. In some cases persistent haze or fog means that satisfactory speed trials are impossible.

On the Newbiggin Mile off the North-East coast, where ships built on the Tyne and Wear do their trials, a simpler radar system has been devised so that speed measurements can be taken irrespective of visibility. An anchored buoy is fitted with a radar reflector, which causes it to create a bright well-defined echo on the ship's radar display. As the ship starts her run and the stop watch is started, a radar range and bearing of the buoy is taken and laid off on the chart. Another radar range and bearing is taken at the conclusion of the run. From these plotted positions, together with the time consideration, satisfactory assessments of the ship's speed can be calculated even though the shore marks are obscured.

The problem of measuring the turning circle of a vessel has confronted naval architects and their colleagues for as long as they have been designing and building ships. The dimensions of this circle are often called for—when the question of a ship's manœuvrability arises, in cases involving accident for instance. In merchant shipping the method to date has been rather haphazard. It consisted of working up the ship's engine revolutions to a normal full speed figure and then putting the helm hard over. The naval architects and senior marine personnel would then assess the extent of the turning circle by visual observation of the wake, and agree on a figure. Usually the phrase to "call that four ship's lengths" or some such figure was unanimously agreed on, and concluded that portion of a ship's trials.

In H.M. ships, of course, where this information is required to be more accurately measured for the purpose of service manœuvres and evolutions, a much more lengthy procedure has to be adopted. This consists of making the turns in a specific area in the proximity of convenient buoys, or to lay special buoys for the purpose. Whilst the ship is turning under helm continuous bearings are taken by observers in the bow and stern of the vessel, and from the figures obtained, together with other physical factors, a more accurate appreciation of the turning circle is obtained. The whole operation is a lengthy one, however, and the accuracy of the results is dependent on the circumstances prevailing, particularly the weather.

The radar method was first demonstrated to representatives of the Ministry of Transport during the trials of the Irish Cross-Channel vessel, m.v. Leinster, using her standard radar installation. By experienced adjustment of the controls, it is possible to obtain a clear picture of the complete circle described by the ship's wake; by means of the accurately calibrated range marker fitted to the instrument it can be measured to an accuracy of plus or minus 25 yards. It is found in a vessel of this class that the actual turning circle is considerably smaller than could be estimated by the older method, which was only very approximate.

The accurate assessment of distance at sea has long been known to be most deceiving when working only from visual aid without bearings, but the advent of radar with its accurate ranging has been a revelation to seamen. Most of them admit to having been astounded at how erroneous their estimates of ranges have been, when compared with the actual range as displayed on their radar set.
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THE Bristol Sycamore Mark 4 helicopter is here shown equipped for search and rescue duties, for which it has been adopted by the Royal Air Force. The hydraulic winch, which is served by a hydraulic pump attached to the drive on the main gearbox, is installed on the side of the fuselage above and immediately aft of the starboard entry, so that the cable hangs directly in front of the opening. The intercommunication cable which links the crewman with his pilot during a rescue operation is secured immediately beside the opening, below which is a guard-rail which provides a convenient handgrip when a casualty is brought aboard. The canvas screen which covers the aperture during flights to and from the scene of rescue is rolled up above the opening, leaving a completely unobstructed entry. The door sill is flush with the floor, which is level throughout and wholly covered by a rubber drip-tray. The three canvas folding seats at the rear of the cabin are shown ready for use, and first-aid equipment is secured to the bulkhead immediately above the seats.

_The Sycamore is powered by the Alvis Leonides_

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