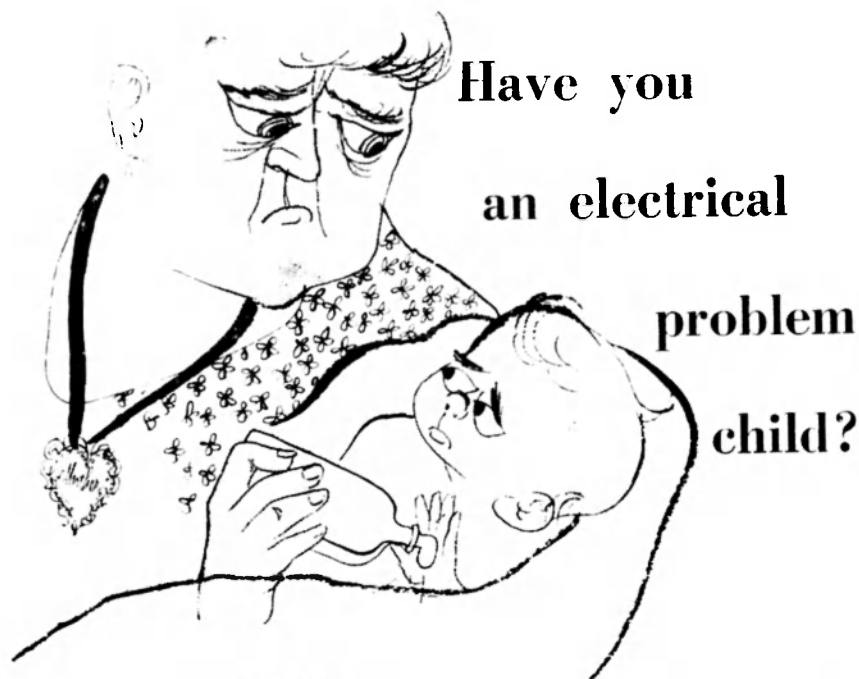


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THE NAVY

PERILOUS STATE OF THE NAVY

To thoughtful men in the fighting Services, a most disquieting element in the present "atomic" age is the British Government's pre-occupation with the concept of atomic warfare and its consequent neglect of conventional war weapons.

It would, of course, be criminally stupid to underestimate the immense strategic value of the A- and H-bombs, or to ignore the present development of tactical atomic weapons. But a great change has occurred in the disposition of these weapons since 1945, when two A-bombs on Japan ended the war.

The Western Powers then assumed that their possession of atomic and, later, hydrogen bombs would be a deterrent to aggression from the East. That was undoubtedly true—so long as the situation remained tipped steeply in favour of the West.

But now we know that Russia has succeeded in producing both types of weapon, and the scales have swung almost level. In a war between East and West use of these terrifyingly powerful weapons by either side could well be fatal to both. Just as in the last war the belligerents witheld the use of highly lethal war-gases, so it may happen that in the next war a similar fear may restrain either side from launching an atomic attack.

That situation is one which we cannot expect with complacent confidence but at the same time which we must not ignore. It is therefore highly important that the Western Powers, while not relaxing their atomic programmes, should not allow their conventional war machines to fall behind the strength of the potential enemy's.

There is no evidence that Russia is shedding her aims of Communist world domination. As well as her atomic development programme she is spending enormous sums on conventional weapons. She is known to have an army of some 3,300,000 men, an air force of 800,000 men and 20,000 aircraft, many of the most modern types. And since the war she has spent £12,000 million building a powerful navy.

The Russian Navy has a manpower of 750,000 and within the next two years is estimated to include 30 fast, powerful cruisers, 150 destroyers, 400 submarines, and a naval air force of 4000 aircraft. The Russian Navy is fully in active service commission and its primary purpose can be interpreted only as a powerful attacking force on Britain's sea communications.

Against Russia's expected strength of 30 cruisers Britain has 24—only ten in active commission—and none of them of a size, power, or speed comparable with the Russian cruisers. Against Russia's 150 destroyers Britain can muster 98, of which

only 26 are in active commission. And Britain's submarine fleet of 57 looks puny alongside the impressive strength of 500 submarines which Russia will probably have in the next two years.

It is not only in numbers that the British Navy is so pitifully out-matched by the Russian. All British warships, other than small antisubmarine and minesweeping vessels, are of wartime or pre-war design and construction, although some of them have been modified by the inclusion of modern devices. Not one warship of a major class has been designed or laid down in Britain since the war.

The Royal Navy must form the major part of the Commonwealth's naval strength. The Commonwealth countries, too, will continue to look to the Admiralty to lead them in naval development—of ships, weapons, and tactics. Unfortunately the Royal Navy is dangerously weak and there is no indication of its recovering its strength.

The Navy League believes that this highly risky situation has come about as the result of three main causes. They are, first, the failure of the Admiralty to give any definite lead to the nation on the duties and responsibilities of the Navy, in peace or in a future war; secondly, the absence of any new Navy building programme of major ships since 1945; and, thirdly, the failure of the British Government to give any counter to the general assumption that

atomic weapons have wholly displaced conventional weapons.

The state of the Navy should be a matter of grave concern to the British Government and to the Governments of all Commonwealth countries.

OUR NEW NAVY CHIEF

Rear Admiral R. R. Dowling, C.B.E., D.S.O., last month took over the appointment of First Naval Member of the Australian Commonwealth Naval Board and Chief of the Naval Staff, Australia's top Naval appointment.

An article by Rear-Admiral Dowling appears on page 7 of this issue.

Rear-Admiral Dowling, who is a graduate of the Royal Australian Naval College, which he entered in January, 1915, was born at Condong, in the Tweed River district of New South Wales. He has had a most distinguished career in the Royal Australian Navy. His service in World War II was outstanding.

When war broke out he was on exchange duty with the Royal Navy as executive officer of the anti-aircraft cruiser *Naiad*, which, after service in the North Sea and the Atlantic, was fiercely attacked by German aircraft off the coast of Crete. In the engagement one of her sides was split open from water-line to keel. Notwithstanding this she



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limped back to Alexandria. Many times afterwards she was in action off the North African coast and was also engaged on the extremely hazardous Tobruk and Malta runs.

Ten months after Crete she was torpedoed at night in another part of the Mediterranean and sank in less than half an hour. All except 66 of her ship's company of about 700 were saved. Rear-Admiral Dowling was in the water for an hour and a half before he was rescued.

Later in the war Captain Dowling, as he then was, commanded the cruiser H.M.A.S. *Hobart* in the South-west Pacific and assisted in the bombardments of Tarakan, Wewak, Labuan and Balikpapan.

and in attacks on the Lingayen Gulf and Aitape. He was awarded the D.S.O. for his services on those occasions.

He was the first captain of the Australian aircraft carrier *Sydney*, which he brought to Australia from England in the early part of 1949.

Apart from his fighting record, he has won a high reputation as an administrator. Among the important administrative appointments that he has held has been that of Second Naval Member of the Naval Board.

He became Flag Officer Commanding the Australian Fleet in December, 1953, and held that post until he succeeded to his present appointment.

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THE ROYAL AUSTRALIAN NAVY

By Rear-Admiral R. R. Dowling, C.B.E., D.S.O.

Rear-Admiral R. R. Dowling on February 22 became First Naval Member and Chief of the Naval Staff, succeeding Vice-Admiral Sir John Collins. Before that he was the Flag Officer Commanding the Australian Fleet.

IN a sense those who go down to the sea in ships live a life apart from the rest of the communities, and for each other they have a real affinity and brotherhood. This fact has been shown again and again, even by seamen whose countries were at war with each other. We know the sea in all its moods—in calm waters and peacefulness, a warming sun by day and star-spangled sky by night, in rain and fog and bitter cold, in times of storm when gale force winds lash up mountainous seas that threaten our very lives

In many respects the Royal Australian Navy is very closely associated with the Royal Navy, and we want it that way. We can, and do, work closely together in peace and war. Our country's resources are not yet sufficiently developed to design and develop new ships, new weapons, equipment and techniques, thus we have always leaned, and for a long time to come will continue to lean, on the Mother Country for such material things. Nevertheless, having acquired the "know how," Australian shipyards, munition factories, and industries can build us the ships and almost all that goes with them. The Naval ships that have been built in Australia are second to none.

Perhaps even more important is the non-material side. We have adopted the traditions of the Royal Navy as our own, and in two world wars we have added to and enriched those traditions in no small way. The losses sustained in men and ships during World War II were indeed heavy, but through

many vicious actions against our enemies and through the long years of patrol that called for almost inhuman endurance, the great spirit of the Navy did not flag. I say this with knowledge and pride—and with confidence that tradition played an enormous part in such an achievement.

The Queen's Regulations and Admiralty Instructions are still used as a major guide for the government of our Australian Navy and we still use (with any necessary modifications) the Naval Discipline Act in use in the Royal Navy. This Act contains, inter alia, the 46 Articles of War.



Rear-Admiral R. R. Dowling.

March, 1955.

Expression of faith

The very first paragraph of the preamble to the Naval Discipline Act refers to "The Navy, whereon, under the good providence of God, the wealth, safety, and strength of the Kingdom chiefly depend." I fondly hope that that expression of faith will never be expunged from the book. It was, and is, the faith of an island people, such as we Australians are.

Another fact of great interest is that the first Article of War instructs "all officers in command of Her Majesty's ships to cause the public worship of Almighty God to be solemnly, orderly, and reverently performed in their respective ships."

I am confident that many people do not realise what a great part the Navy has played in the early development of our country.

Captain William Dampier in H.M.S. *Roebeck* made a landfall at Shark Bay in Western Australia in 1699 but his report on return home was such that no-one gave serious thought to colonising or even acquiring the country then known as New Holland. Everyone knows what followed the discovery of the East Coast by Lieutenant (later Captain) James Cook 71 years later in H.M.S. *Endeavour*, and of the arrival of the First Fleet under the command of Captain Phillip in 1788.

The first four Governors of the colony were all Naval Captains—Phillip, Hunter, King and Bligh. I cannot but comment here on what a great man and Governor Captain (later Admiral) Arthur Phillip was. I believe that if this first Governor had been a man of lesser calibre the colony would have failed.

Then the early explorers by sea: Flinders, who among many other feats, circumnavigated Australia; Bass; Lieutenant John Murray, who discovered and surveyed Westernport and Port Phillip in the sixty-ton *Lady Nelson*. There were many other Naval men who

played their part in our early development.

Of such a Naval lineage, the Royal Australian Navy was born in 1913, with the arrival of the battle cruiser *Australia* and the two light cruisers *Sydney* and *Melbourne*, the opening of the Royal Australian Naval College at Geelong and the commissioning of H.M.A.S. *Tingira* (originally the famous wool clipper *Sobraon*). It is not my intention to trace the growth of the R.A.N. in the past forty-two years or to describe any exploits in the two world wars. Technically, of course, the change has been enormous. You may rest content that the Navy, while holding tight to its traditions, is fully aware of new advances and developments.

The Western Navies are on the threshold of a new generation of ships. The day of the heavily gunned battleship and cruiser is almost gone. Guided weapons will soon, I think, take the place of main armament guns. New techniques and new weapons in new types of ship are needed to meet the threat of the modern submarine. In these days we must be prepared to meet and destroy an enemy on the sea, under the sea, and over the sea.

The essential task of the Navy is unchanged. It has the duty of securing and holding Australia's sea communications and assisting in the world-wide support of the British Commonwealth's trade interests.

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The development of modern weapons, techniques, and ships is increasing the Navy's ability to discharge its historic role.

The whole world is aware of Russia's vast Naval building programme, including many powerful gun cruisers and a great fleet of submarines, a large proportion of which are ocean-going with an enormous radius of action. That knowledge brings us deep concern, yet spurs us on to reach the peak of efficiency with what we have and can achieve. If global war should come, which Heaven forbid, we all recognise the necessity for this country, in co-operation with the Commonwealth and its allies, to retain control of the sea.

The Merchant Navy

The Merchant Navy, for which I hold a high regard, can rely on the Navy to escort it in the performance of its vital tasks, if war should come. This calls for anti-submarine vessels and escort carriers in the open seas. Shore-based aircraft have greatly increased their range and in war the Navy will be proud to share again with the Royal Australian Air Force the duty of providing a protecting shield for merchant shipping. Recent training exercises have clearly shown the grand spirit of co-operation that exists between the two Services. It will stay that way.

We often carry out exercises with the Australian Army, training so that we are able to support the soldier in the field by means of aircraft and guns.

The Japanese sea invasion of Australia was checked at the Battle of the Coral Sea—a battle fought almost entirely on both sides by carrier-based aircraft. The war in the Pacific against Japan could not have been won without sea supremacy, which in turn was largely brought about by aircraft from carriers. I personally believe that the future of the carrier either in the offensive or defensive role is as firm as any air field.

When, just recently, I relinquished command of the Australian Fleet to take up my present

appointment, I did so with considerable sadness for, as I see it, I can go no more to sea except as a passenger. The Fleet is efficient, and it could not be that without a high morale and plenty of hard work. A sailor's life is, on the whole, a happy one, in spite of discomforts and long separations from wife and family and friends.

We do all we possibly can to make life pleasant and although there is a need to cram more and more machines and gadgets into ships (because of technical progress) we are having some success in that respect. In all the newer ships, including the new carrier *Melbourne*, the fast frigates, and the Daring class under construction, considerable improvements for the comfort of the crews have been made, or are being made.

I am proud of the spirit and understanding that exists in general between all ranks and rates. I believe in "discipline" and I believe the word can best be defined as the only method of getting a body of human beings to work together efficiently and happily. We are proud of our discipline. We know it applies equally to admiral and ordinary seaman—and it never harms a good citizen. Undoubtedly, morale and discipline go hand in hand.

I do not pretend that we as a Service are perfect, indeed quite often something, generally of a minor nature, goes wrong. But we do constantly seek perfection in our profession. We teach that the best form of leadership is by example—and that applies right down through all the ranks and rates.

If ever I get the time I should like to study man management as applied, or not applied, in Australian business, in shops and factories. I may be wrong, but I have the impression that some of the Navy's methods could be adopted with great benefit to output and happiness.

We are doing our best for our National Service trainees and I only wish we could have them for longer and it were possible to have



N.S.W. FLOODS: Navy helicopters played an impressive part in rescue work during last month's disastrous floods in N.S.W. This picture shows P.M.G. linesmen trying to restore communications broken by floods from the Hunter River.

more of them.

One thing I have left until last and it is meant chiefly for the parents of young officers and young men who serve in the Navy as a profession. We do not forget the importance of the spiritual side of life. Indeed, I believe that religious training and consequent ideals are the basis of the highest morale, both shore and afloat. You would be surprised at the very high percentage of young men who join the Navy and when asked will say, "I have never been inside a church." This gives us rather a poor start, doesn't it? We

cannot check the advance of atheist Communism with guns alone!

The sea is not always friendly, and sometimes we become lonely after long separations from our homes. Then, and even more so in the hazards of war, we recall a passage from the 139th Psalm:

If I take the wings of the morning,

And dwell in the uttermost parts of the sea,

Even there shall thy hand lead me,

And thy right hand shall hold me.

Navy Helicopters' Great Job In Tragic N.S.W. Floods

Last month the nation watched with awe and pity while furious floodwaters devastated towns and communities in New South Wales. Police, civilian volunteers, and members of the fighting Services performed heroic rescue and relief work in this tragic period. This is the story of the Navy's part of that great effort.

ON Thursday afternoon—February 24—as the rumbling muddy torrent spilled over the Hunter's banks, the Navy received its first call for help. The call was for helicopters.

Within half an hour of that call a Navy helicopter, piloted by Lieut.-Cdr. Gordon McPhee, had taken off from the Naval Air Station at Nowra and was making for the Air Force Station at Williamstown—in the flood area.

Although warned by air traffic control at Mascot that flying conditions were very bad—and deteriorating—McPhee decided, in view of the seriousness of the flood situation, to try to get through.

The flight, of about 180 miles, was very trying. The wind, fortunately a following one, was rising to gale force. On arriving at Williamstown, McPhee found that visibility was practically zero and he was forced to use ground control approach to land.

It is believed this is the first occasion in Australia that a helicopter has used this method of landing.

At first light on Friday the helicopter was again air-borne on reconnaissance and rescue duties. Near the Singleton railway station the pilot rescued two men who were clinging to a telephone pole. Then he flew to rescue a man who was being washed down the flood-stream. But the man disappeared beneath the swirling water before the helicopter could reach him.

McPhee then flew to the West Maitland signal box in which a group of men were marooned. The box collapsed just as he reached it.

Two men grabbed a wire suspended from the helicopter and were hoisted clear of the water, but the proximity of high tension wires made manoeuvring the helicopter extremely difficult. The men lost their grip on the wire and were killed.

The change in equilibrium caused the helicopter to stall into the water. The pilot was rescued by an Army duck five miles down stream and the observer was picked up a mile further away.

A second Navy helicopter took off from Nowra at first light on Friday and reached Dubbo, a flight of nearly 200 miles, at 11.30 a.m.

Perilous positions

The pilot, Lieut.-Cdr. Farquharson, took off again as soon as he had refuelled and by nightfall had rescued ten people from very perilous positions. The fact that the country is very flat assisted the pilot in locating and rescuing operations.

Talking of his experiences, Lieut.-Cdr. Farquharson said: "One of the things that impressed me was the philosophical way in which the people of this district took their misfortunes. Some were undoubtedly prepared, but others were not; for instance, the first man we rescued was dressed in a pair of shorts, the second had

on a pyjama coat and a pair of trousers, the third and fourth, however, were fully dressed and even had suit cases. Looking back it seems rather humorous, for one man put on the harness, picked up his suitcase and signified that he was 'quite ready to go, thank you'."

Grandmothers, babies

The biggest rescue carried out by this helicopter was of fifteen people who were sheltering in the grandstand of the Dubbo racecourse. With the water only about a foot deep, the pilot brought the "chopper" to within a few feet of the ground and the people, who ranged from grandmothers to a three-weeks-old baby, were lifted straight into the cabin.

Perhaps the most dangerous rescue Farquharson attempted was when he had to go down between a tree and a water tower to rescue a family with five children, all under five. The father was winched up and after discussing the position with him, it was decided not to attempt to take the family out in the "chopper" but to bring back a rubber dinghy in which they could row to safety.

This was done and the family rowed to the nearest dry land, the helicopter hovering over them until the voyage was completed. One of the helicopter blades was dented by a branch of a tree during this operation.

During the four days that the

helicopter was in Dubbo area it rescued 36 people and carried out many other flights with medical supplies, post office technicians and local relief officials.

A third helicopter, which was undergoing maintenance at the Naval Air Station, Nowra, was ready for flying by Saturday morning, February 26, the maintenance men at this station having worked continuously from Thursday night to achieve this.

The pilot for this aircraft, Lieut. J. Ferguson, was flown ashore from H.M.A.S. Sydney on Friday. He went by air from Melbourne to Mascot and then immediately by car to Nowra. He flew the helicopter to Williamstown and during Saturday rescued seven people.

Late on Friday, the Minister for the Navy, Mr. J. Francis, directed, in view of the serious nature of the floods, that the two helicopters carried in H.M.A.S. Sydney should be flown to the area as soon as possible.

The Sydney, which was en route to Fremantle from Melbourne, returned to the vicinity of Melbourne at full speed and flew off her two helicopters, which reached the R.A.A.F. Station at Laverton late on Friday.

Taking off at 7 o'clock the following morning, they reached Williamstown ten hours later.

Lieut.-Cdr. McPhee, who had recovered from his immersion, immediately took off in one of the helicopters and rescued two people from the roof-top of a house that was in danger of being washed away.

On Sunday, a fifth helicopter, which was being overhauled at the Bristol works at Bankstown, was ready for service as a result of intensive all-night work by the employees. A pilot was flown from Williamstown and returned there in the helicopter 'by midday. During the afternoon, the four helicopters in the Maitland area were employed on reconnaissance, dropping medical supplies and food, and rescuing people from trees and roof-tops. They rescued 15 people.

The helicopters also directed Army "ducks," surf- and police-boats to the rescue of many hundreds of other marooned people.

One of the helicopters received a call to take a woman with a 12-hours old baby to hospital at Muswellbrook. The moment the woman entered the aircraft she became hysterical. However, she soon recovered and when leaving the plane told the pilot that the flight had been a marvellous experience.

Night at farmhouse

An old gentleman thought the same thing, apparently. He was rescued by the novel method of sitting in the strop. When he reached dry land he was very loath to leave his comfortable seat, so loath in fact that he had to be assisted by the local police constable.

Two of the helicopters returning from Muswellbrook with a passenger ran into very bad weather nine miles from Maitland and were forced to put down near a farmhouse for the night. The farmer and his wife made them very welcome. Their passenger, a very influential gentleman who was organising flood relief, was not so

happy, however, for the farmer proceeded to tell him, in very strong language, just how the floods must and should be controlled.

Another helicopter picked up a family of ten stranded at Aberglassyn. The aircraft landed in the garden and lifted them three at a time to a safe point. The children enjoyed the trip and so did the parents until mother discovered on leaving the helicopter that she had been sitting on her best hat.

The smartest rescue was effected by a helicopter on the Sunday when a report was received that two boys were adrift in a boat in the Stockton area. Taking off at 6 p.m. the helicopter returned to base at 6.15 p.m. having located the boys and directed a police boat to them.

On Monday the work went on, helicopters taking off from 6 a.m. on reconnaissance and dropping of food and medical supplies. One helicopter was directed to take drugs to a seriously ill woman in the Morpeth area, but no one knew where she lived. The pilot solved the difficulty by dropping in on farmhouses en route until he found out.

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In the meantime the R.A.A.F.'s supply of storepedoes (in which they were dropping foodstuffs to isolated localities) was dwindling seriously. Helicopters were asked to pick up any storepedoes and parachutes which they could locate. They averaged 50 for each helicopter on Monday.

By Monday afternoon, the position was easing in the Maitland-Singleton area; but a fresh danger had arisen in the Narrabri district. Two of the helicopters were therefore sent to this area and by night-fall had succeeded in rescuing ten people.

On Tuesday, these two helicopters were again fully employed on rescuing people and in dropping supplies. While engaged in reconnaissance, one pilot saw a notice in large white letters "Copter, vet, sulphur, pen."

The pilot dropped a note to the isolated farmer which read "Presume you want a veterinary surgeon with sulphur drugs and penicillin." On the receipt of a very enthusiastic "Roger" sign from the

farmer, the pilot returned to base to obtain the requirements.

Maintenance and supplies of fuel were proving very difficult in these outlying areas. The naval Dakota, which is normally used for the training of observers and airmen, was pressed into service to carry maintenance personnel, spare parts, and fuel for the helicopters.

During the first five days this aircraft was in the air practically the whole of the daylight hours. In addition, it carried supplies of clothing, whenever the space would allow.

Round-the-clock flying

Wives and families of the personnel who were based at the Naval Air Station, Nowra, in the first two days of the flood, supplied 100 lbs. of babies' clothing, 300 lbs. of childrens' clothing, and 600 lbs. of adults' clothing. The Naval Wives Association in Sydney were also busy, and in the first two days had collected five large cartons of clothing.

At Narrabri on the Wednesday the position was still very dangerous. To keep up fuel supplies for the helicopters—which were flying practically continuously all day—Fireflies were equipped with 45 gallon drop-tanks on each wing, decanting the contents on arrival.

When the power failed at the Narrabri hospital and it appeared that supplies of drugs in the hospital refrigerator would be ruined, an urgent request was broadcast for a kerosene refrigerator. When one was located at the Narrabri State School, a helicopter flew across, lifted it up on the winch, flew across the flood and landed it in the hospital grounds.

By Thursday, the position had eased sufficiently to enable the helicopter at Dubbo to be withdrawn for maintenance. The helicopter landed at the Bankstown works of the Bristol Aircraft Co. and the civilian employees, by working overnight, had the "chopper" ready for service again by 8 o'clock the following morning. It was flown to Williamtown.

By Saturday, the position had eased sufficiently to enable the withdrawal of two helicopters to the Naval Air Station at Nowra. The two in the Narrabri area, which were assisted by an R.A.A.F. helicopter, continued, however, to drop supplies and medical stores to isolated homesteads in that area, and on Sunday, March 6, proceeded to the Walgett area to stand by in case the floods broke into that town.

Although the flood position eased considerably in the next week, two Naval helicopters and the R.A.A.F. helicopter were left in the Walgett area and carried out many sorties with medical and food supplies.

In the first four days, the five Naval helicopters flew 90 sorties in all three areas. In the first four days they rescued 70 people, of which 36 were in the Dubbo area, 18 in the Narrabri area, and 16 in the Maitland area.

Stores carried included medical supplies, yeast, food, milk, blankets, and radio equipment—a total weight of approximately 8000 lbs. of general stores.

Among the passengers carried on relief missions were doctors, nursing sisters and chaplains.

Four Firefly aircraft constantly supported the helicopter and also carried stores and were engaged in reconnaissance duties.

Naval trucks which were in Newcastle for the "Meet the Navy" Exhibition also contributed to the rescue work. One five-ton and three three-ton trucks were used daily during the first week in transporting stores and Army personnel into the Maitland and Singleton areas.

Amongst other Naval stores supplied to the distressed areas were six hundred inflatable life-belts, one fogging machine for spraying insecticide, five hundredweight of chloride of lime, and 200 pounds weight of pyrotechnics.

In addition to the collection of clothing for the distressed areas, an East Australian Area Naval Flood Relief Fund has been opened. Donations to this fund had reached £1,500 by March 10, 1955.

NEWS OF THE WORLD'S NAVIES

Steam catapult installed

The first operational installation of the new steam catapults which are being produced and developed for the Admiralty by Messrs. Brown Brothers & Co. Ltd., of Edinburgh, to launch the fast and large aircraft of the future from aircraft carriers, is in H.M.S. Ark Royal, states the U.K. Information Office.

It is the intention to replace with steam catapults the existing hydro-pneumatic catapults in all other operational carriers of the Royal Navy. They will also be installed on the new carrier Melbourne, building for the Australian Navy.

The old hydro-pneumatic unit, situated below the deck, transmits its power to the aircraft by means of flexible steel wire ropes passing round pulleys. These wires are attached to a small trolley, which pulls the aircraft along the deck by means of a towing bridle.

With the increase in the weight of aircraft and higher launching speeds, larger and heavier power units and heavier wires and pulleys were required. For this reason, catapult experts in the Admiralty and industry sought to find an entirely new launching method, and have succeeded in applying team to the launching of aircraft.

The system incorporates slotted cylinders in which there are free pistons. Arms projecting through the slots transmit the steam power within the cylinder to the aircraft, an ingenious sealing device having been introduced to prevent the steam escaping through the slots.

Small submarines to be named

The Board of Admiralty has decided to give the names of the smaller denizens of the waters to the new class of small submarine which, as the First Lord of the

Admiralty, Mr. J. P. L. Thomas, said in his Navy Estimates speech, would start to come into service soon.

The second of this class, named Shrimp, was due to be launched at the Barrow-in-Furness yard of Messrs. Vickers-Armstrongs, Ltd., on December 30. The first of the new small submarines, launched at the same yard on October 1 and designated the X.51, is to be named Stickleback.

Minesweeper for the French Navy

H.M.S. Frettenham, the first of a group of 15 minesweepers to be completed in British yards under the U.S. Offshore Procurement programme, was officially transferred to the French Government at a ceremony at H.M.S. Diligence, the Royal Navy's commissioning and equipping base at Hythe, near Southampton, in December.

The transfer was made in the presence of the Flag Officer Commanding Reserve Fleet, Vice-Admiral J. W. M. Eaton, C.B., D.S.O., D.S.C., formerly Flag Officer Commanding the Australian Fleet.

Navy's interest in fibre-glass

The Admiralty is continuing experiments with fibre-glass boats. For some time a 20 ft. motor dory has been undergoing sea trials. A more complicated boat—a 25 ft. ship's motor boat—was completed recently and arrangements have been made to test the boat in a sea-going ship.

The technique of construction and the basic materials are in the early stages of development.

R.N. base suggested in Australia

A former Parliamentary Secretary to the Admiralty, Mr.

James Callaghan, M.P., has suggested that part of Britain's Reserve Fleet should be stationed in Australia, Canada, and New Zealand.

Mr. Callaghan made this suggestion in the House of Commons on March 3 during the debate on the Navy Estimates. He was Parliamentary Secretary to the Admiralty in the Attlee Labour Government.

Mr. Callaghan said that Britain's reserve ships were scattered in crowded harbours and anchorages around Britain where they might be exposed to the full force of a hydrogen bomb.

Major bases could be set up in Australia, Canada, and New Zealand, he said, supported by the immigration of skilled British fitters and tradesmen to maintain the heavy aircraft carriers and other major ships there.

The establishment of reserves in other parts of the Commonwealth would be an alternative to extending dockyards at Portsmouth and elsewhere in Britain, he added.

Navy plane to carry atom bomb

The First Lord of the Admiralty, Mr. J. P. L. Thomas, said in London last month that a new jet aircraft which the Navy is developing could carry an atom bomb if required.

The aircraft—tentatively called N113—is to be a twin-jet, swept-wing carrier-borne fighter. The First Lord said it would have exceptional performance.

It would have a "phenomenal" rate of climb and would be equipped with air-to-air guided missiles for air combat.

No more 13-year-olds for R.A.N. College

The Australian Minister for Defence, Sir Philip McBride, has

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announced that the Royal Australian Naval College will no longer take 13-year-old boys for training as officers.

The next cadet intake will be of boys 15½ to 16½. The College also will take boys up to 19 who have passed the matriculation examination.

Applications for the next 15½-16½ year-old entry will probably close on June 15 and for the matriculation entry probably in October, the Minister added.

Navy exhibition tours country centres

A Royal Australian Navy travelling exhibition has been touring N.S.W. country centres since late January. It will return to Sydney in time to be displayed at the Royal Show.

The exhibition may tour the country areas of Victoria later this year.

The purpose of the exhibition is to stimulate interest in the Navy. Its March itinerary includes Glen Innes, March 3-5; Cessnock, March 11-12; Wauchope, March 17-18; Tamworth, March 22-24.

Forty officers and ratings are attached to the exhibition, which is being carried in four three-ton trucks, a bus, and other vehicles.

"ARAWA'S" LAST VOYAGE

THE 15,000 ton Shaw Savill liner *Arawa* leaves from Fremantle this month on the final stage of her last voyage to London, where she will be withdrawn from service.

Built at Wm. Beardmore's Shipyards on the Clyde in 1922 for the first Commonwealth Government Line of Steamers as the *Esperance Bay*, she traded under that name between Australia and England.

In 1928 the Commonwealth Line fleet was acquired by the White Star Line Limited. The *Esperance Bay* continued in the passenger service to the United Kingdom until taken over in 1936 by the Shaw Savill Line, renamed *Arawa* and placed in the tourist class passenger service between New Zealand, Australia and England via South Africa.

Shaw Savills spent large sums on her conversion from a third class to a tourist class ship. The number of passenger berths was reduced from 524 to 274. In addition to passengers, the *Arawa* carried refrigerated meat, butter, cheese, rabbits, fruit, and other perishable foodstuffs, as well as

wool and general cargo from New Zealand and Australia to the United Kingdom.

At the outbreak of World War II, *Arawa* was one of the first ships to be commissioned as an armed merchant cruiser, being requisitioned in New Zealand on August 24, 1939. Officers, engineers and pursers were given temporary R.N.R. commissions and the ship was sent up to the China Station to maintain a patrol for the protection of commerce.

After six months *Arawa* was sent to England and was then employed principally on the Glasgow-Freetown convoys until the armed merchant cruisers were paid off in July, 1941.

Like most of her consorts on cruiser work, the ship was then converted into a transport. She was fitted to carry 1680 troops for whom the accommodation of her original design made her particularly suitable.

Under Captain T. V. Roberts, R.N.R.—who retired from Shaw Savill's service several years after the last war—*Arawa* sailed as a transport in January, 1942. She engaged in troopings to Durban in connection with the Middle East campaign, later to North Africa, and finally carried American troops to the Western Front.

The *Arawa* is the third vessel of that name owned by Shaw Savill Line. The first, built in 1884, was a steel screw steamer of 5026 tons, 14 knots, which made new speed records in the England-N.Z. trade not beaten for years. This vessel was sold in 1900. In 1915 when owned by an Italian company she was torpedoed by a submarine. The second *Arawa* was also a steel screw steamer of 9372 tons (13½ knots) built in 1906 for the frozen meat trade with accommodation for 220 passengers. In 1926 she was sold to Germany.

The third *Arawa* is now ending her service with Shaw Savill's. She is due to leave Fremantle on March 18 and to reach Southampton on April 22.

Helicopter's Important Role in Antisub. Defence

By "Icarus"

NEWS that eight Bell HSL-1 anti-submarine helicopters are to be shipped to the United Kingdom as part of the aid supplied under the Mutual Defence Assistance Programme underlines once again both the increasingly important part that helicopters are scheduled to play in anti-submarine defence, and the deplorable lack of a suitable British type for this exacting role.

Recent deck landing and handling trials of the Bristol Type 173 Mk. 1 on board H.M.S. *Eagle*, release of some details of Sikorsky's new XHSS-1, and formation of the Fleet Air Arm's first helicopter anti-submarine squadron—No. 845, equipped with the Sikorsky HO4S-3—all point to an increasingly urgent desire to use to the full the unique capabilities of rotary-wing aircraft in combating the submarine menace.

In any future war, there can be no doubt that this menace would be a very considerable one, since Russia is known to possess a large and modern fleet of submarines, and to have taken advantage of a great deal of German knowledge in under-sea warfare.

Great strides have been made in this field since 1945, and these have demanded urgent development of suitable counter-measures. One of these is to employ helicopters to detect submarines by means of a "dipping asdic," and there is little doubt that soon armed helicopters will be used to destroy submarines.

For use in an anti-submarine role, the helicopter possesses unique advantages, chief of which are its ability to fly very slowly and to hover. It is now firmly established that high speed is a

disadvantage for an anti-submarine aircraft, being a far less desirable quality than long range and large load-carrying capacity.

In its present stage of development, the helicopter has limited range and carrying capacity, but this is to some extent offset by its slow-flying characteristics, which enable it to hover over a submarine and pin-point its position by radar probably with greater accuracy than a fixed-wing aircraft could do. Also, an explosive charge to destroy a submarine can be delivered from a helicopter far more quickly than from a fixed-wing aircraft, which would have to waste valuable time in making a run over the target.

However, few helicopters in production today could carry both the means of detection and destruction which a fixed-wing aircraft such as a Fairey Gannet or a Douglas Skyraider can, and it seems probable that in the immediate future rotary-wing aircraft will be used primarily for detection, working in conjunction with fixed-wing aircraft, surface forces or other helicopters equipped

primarily with means of destruction.

In fact, the concept of the "hunter/killer" team, as originated by the U.S. Navy with Grumman AF-2S and AF-2W Guardian anti-submarine aircraft seems eminently suited for those smaller helicopters which at present equip Fleet Air Arm units. The Bell HSL-1, however, carries detection and destruction equipment for use in both these roles, and is the first helicopter to be designed specifically for anti-submarine operations with the U.S. Navy.

Its potentialities are a foretaste of what may be expected from really large helicopters.

Such, then, are some of the helicopter's advantages and disadvantages for anti-submarine work. Although it is extremely versatile, being capable of alighting on land, water, ice, or a merchant ship's deck, it is also far more vulnerable to attack than a fixed-wing aircraft, and less able to take violent evasive action.

In this connection it is interesting to note that on Sikorsky's new

Continued on page 32.

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The Royal Australian Navy is using helicopters for air-sea rescue work and considering their use in anti-submarine warfare.

March, 1955.

THE NAVY

Last month the greatest floods in New South Wales history brought death and ruin to towns and communities. The Navy provided helicopters to assist in the massive rescue and relief job which the floods made possible (see story, page 10).

These pictures give some idea of the magnitude of the disaster.

(4) The crew of a surf-boat about to land after a rescue patrol. In the background is an Army "duck" about to reach East Maitland with food supplies.

(2) A motor-cycle buried deep in the mud at Maitland. In the background, a wrecked house.

(1) Wrecked houses and flood debris on the Long Bridge, Maitland, left by the Hunter River.



FLOODS BRING DISASTER IN N.S.W.



By Frank Knight—in London

IN THE National Portrait Gallery there is one portrait—and only one—of a lower deck seaman. This, in a nation of seafarers whose history has been fashioned out of naval warfare and merchant venturing, is an astonishing fact.

Portraits of admirals and great captains there are in plenty, of course; and some of them undoubtedly rose from the lower deck. But the one exception, John Dean, the sailor of the *Sussex*, achieved no higher position than that of head porter in a warehouse.

He lived just on 200 years ago. His ship was an East Indian, three-masted, of about 500 tons.

In 1738 the *Sussex* was returning from a voyage to Canton in company with the *Winchester*, another East Indian. They had reached the approximate longitude of the Cape of Good Hope, which meant in those days that they had been absent from home for something like two years.

They ran into heavy weather. The *Sussex* lost her main and mizen masts and made a lot of water. However, the weather moderated, the ship was still afloat, and the water pumped out. A new foresail was set, and it seemed that the *Sussex* would be able to keep company with the *Winchester* and continue her voyage, or at least make port somewhere.

But the *Sussex* was unfortunate in her captain—one William Gostlin. He decided to abandon ship.

This seems an extraordinary step to take in the circumstances. Like all East India captains he must have had a big financial stake in the ship and her cargo. He stood to lose a great deal more than his wages and his reputation. However, his officers and the supercargoes agreed with him. Abandon ship they would.

It was the ordinary seamen, the men who stood to lose their wages

(because wages were not paid in respect of an uncompleted voyage in those days) who protested. Thirty of them refused to leave the ship.

Gostlin, infuriated, smashed the longboat. That meant that if they remained in the ship, and she sank, they would only have the pinnace with which to save themselves. The argument impressed 14 of the men, who gave in. Sixteen remained obstinate.

Gostlin and the abandoning crew proceeded to plunder the ship. They took away all the portable gear they could carry, even tried to tear down the new foresail, and as a last gesture the captain refused to disclose to the obstinate 16 the ship's longitude. Then he and his party crossed to the *Winchester* and she sailed away.

The 16, among them John Dean, repaired damages as best they could, pumped the ship out, and took the *Sussex* eastwards in search of land.

They found St. Augustine's Bay in Madagascar.

The East Indianmen often put into Madagascar for refitting. There were no facilities except such as they themselves could provide, but it was not uncommon for them to undertake such operations as felling trees to make new masts, or careening a ship to repair its bottom. In the early part of the eighteenth century every voyage to the east was a major expedition. Only resourceful men could complete one.

John Dean and his companions worked for three weeks. By then they considered the ship seaworthy, and they sailed.

There was no navigator among them. They were a pitifully small company to handle such a ship with her clumsy lines and massive gear. Even hoisting a yard must

have strained them to the utmost. And they had had luck.

On the second day at sea the *Sussex* stranded on the Bassas de India Shoal in the Mozambique Channel and became a total loss.

Somehow the men managed to launch the pinnace. But she capsized and eleven of them were drowned or crushed. Five got away in the boat eventually, spent 17 days at sea in her, and reached Madagascar once more.

Terrible hardships and privations followed. Sickness came, and one by one the men died. Only John Dean survived, and he was carried away into slavery by a local ruler.

In July, 1739, about a year after the *Sussex* was originally abandoned, Dean obtained permission from his captor to visit the coast. There, at the mouth of the River Manarivo, he found the *Prince William*, Indianman, sheltering in the roadstead.

Even then he had some difficulty in getting aboard her. He met her captain ashore but had to persuade him to save him. Probably the captain thought he was a deserter or a mutineer (which, in a sense, he was). In those days of tyranny at sea, men deserted in the most unfavourable places. Mutiny was a commonplace.

However, Dean did get away from the natives who were trying to haul him back to captivity, and got on board the *Prince William*. There he must in the end have impressed the captain with his honesty, because he took a statement from him and sent it home to the Directors of the East India Company.

The *Prince William* was outward bound, not homeward. Dean did not reach Britain till 1741.

Meanwhile, in London, Captain Gostlin and his officers were in trouble. The Directors of the East India Company were dissatisfied

Continued on page 28.

The Sea Venom—"a fine all-weather fighter within its subsonic limitations."



By "L'Aiglon"—in London

NINETEEN fifty four was an auspicious year for the Fleet Air Arm, a year of some achievement and considerable promise, an encouraging boost for the Cinderella of aviation.

Firstly, the Supermarine 525, fully swept-wing day interceptors powered by twin Avons, has at last flown and proved itself to be in the top flight of contemporary jet aircraft.

It is to be hoped that some genuine priority will be given to its production. This is not merely a vague plea; it comes from the realisation of a hard fact. Unless the Fleet Air Arm has a powerful high performance interceptor there will be nothing to stop a jet bomber unloading an atomic bomb on a convoy from 60,000 feet.

Can we, for instance, assume that guided missiles will have taken over the job in a few years' time? Not according to the First Lord when he spoke on the Navy Estimates this year. Therefore high performance fighters are more than ever essential. Despite some optimistic advertisements by the makers, little seems to be heard of the progress of that other super-sonic fighter, the DH.110, towards the deck. Is this yet another Naval aircraft scheduled for four years' time when it will be obsolete?

However, to return to the year's achievement. The mirror landing

sight has been a notable British invention and has been adopted by the U.S. Navy. The idea is simply that instead of watching the "hatsman" the pilot now keeps his eye on a blob of light. As long as the light is lined up with other lights either side of it he knows that his aircraft is on the correct approach path for landing on the deck. All the trials so far have been completely successful.

Last year also saw the first two angled deck carriers come into service. Admittedly both *Centaur* and *Albion* are equipped with only an interim angled deck of 5½ degrees but this is considerably better than nothing. It means that barrier accidents are eliminated and provides the pilots with experience of the new technique so that one fine day in the future when *Hermes* and *Victorious* are ready (with fully angled decks) most pilots will have got used to the idea of landing off-centre.

The replacement of piston aircraft with jets has continued satisfactorily.

Two new fixed-wing aircraft have come into service. The *Sea Venom*, a naval version of the *Vampire*, is a fine all-weather fighter within its sub-sonic limitations; after one or two initial snags it seems to be operating successfully in the two squadrons so far equipped.

The *Gannet* is undoubtedly the

most notable of recent new arrivals in the Fleet Air Arm. It is extraordinary to consider that this is the first aircraft ever specifically designed for anti-submarine work in the Royal Navy. This is despite 40 years of intensive submarine activity and development.

The *Gannet* appears to be an excellent aircraft. With the enterprising arrangement of twin *Mamba* engines (either of which can be shut down for cruising) it has a very considerable range and endurance; it carries both search radar and sonobuoys and also the means of destroying a U-boat when found; it also operates on ship's oil fuel which greatly simplifies the fuel storage problem in aircraft carriers. It is thought that two or three squadrons will be formed up by the end of this year. They will eventually operate from Fleet and Light Fleet carriers. For the Escort carriers *Shorts* have, of course, designed the *Seamew*, a comparatively simple anti-submarine aircraft with fixed undercarriage.

A not particularly welcome feature of the Fleet Air Arm at the moment are the four squadrons of *Avengers*. It is a considerable comment on R.N. aircraft progress that we should be using obsolete American planes in front line squadrons.

Naval helicopters have con-

tinued to make their mark. And it was no more than a fitting tribute to their excellent work in Malaya that 848 Squadron were awarded the Boyd Trophy. Another step of great significance has been the formation of 845 Squadron (with Whirlwinds) for anti-submarine duties.

The Royal Navy, for so long convinced exponents of the helicopter, have not been slow in perceiving the great possibilities for rotary wing aircraft in the anti-submarine role. Trials have already been carried out at sea of the Bristol 173, a twin-rotor helicopter which, it is thought, would be large enough to carry a lethal load as well as detection equipment. Naturally enough the Americans are advancing fast along this particular line of development.

Airborne Early Warning assumes more and more importance as the need for intercepting bombers as far away as possible from the Fleet increases. Nothing new has been announced recently but it is interesting to see that Skyraiders are to be found nowadays in all operational carriers as the invaluable watchdogs during Fleet exercises. The U.S. Navy now have four-engined Constella-

tions adapted for radar picket work.

The strike role of the Fleet Air Arm still seems rather enigmatic. 813 Squadron continue to fly their Wyverns on N.A.T.O. exercises and yet remain firmly shore-based. Heaven alone knows whether anyone has yet designed a new torpedo for dropping from high-speed aircraft. The Wyvern may well be an excellent aircraft but it seems to be rather oddly limited in use for the Navy when it neither embarks in a carrier nor drops torpedoes.

It is particularly gratifying to have a carrier with the proud name of Ark Royal back in the Navy; it is only regrettable that whereas she will have the new steam catapult she will not have a fully angled deck.

Recruitment of aircrew still presents a problem but, although by no means solved, it looks as though numbers are being kept up if not actually increased. The chief point of it all is definitely that the prospects of a career should be offered to a young man. Short service engagements are basically a stop-gap treatment. It has been a welcome sign this year to see an increase in the number

of promotions from Lieut.-Commander to Commander in the Air Branch—and also the comparatively young age of many of them.

This is undoubtedly a critical time for the Fleet Air Arm. It has at last been equipped with some reasonable straight-wing jet aircraft (admittedly at a time when the R.A.F. are getting swept-wing aircraft and the U.S. Navy have had them for some time). The question now is whether the powers-that-be intend to press on with successors to the Sea Hawk and the Sea Venom or whether they are merely giving the Navy a few optimistic glimpses of the Supermarine 525 and the D.H.110 to keep them quiet. In, say, five years' time when everyone else in the world, including no doubt the Swiss Navy, are rocketing themselves through space at fabulous Mach numbers will the Fleet Air Arm still be flying Sea Hawks and Venoms and will the "latest" Naval aircraft still be making its umpteenth annual appearance at Farnborough?

The First Sea Lord said recently in a message to *The Navy*: "Carrier-borne aircraft remain the main striking power of the Fleet... far from being outmoded, the full importance of the aircraft carrier has yet to make itself felt." Surely the myopic politicians have not already forgotten the disaster of the last war because the Fleet Air Arm were flying obsolete aircraft, in any post-war month and is, in Would it not be more economical to spend several million pounds on naval aircraft development now than bear the appalling cost of a merchant fleet decimated in the event of a future war

—From the London *Navy*

Two cruisers visit Australia

The Canadian cruiser *Ontario* and the New Zealand cruiser *Black Prince* visited Australia last month.

Both took part in exercises off the Australian coast with units of the Australian Fleet.



MARITIME NEWS OF THE WORLD

From our Correspondents in
LONDON and NEW YORK

By
AIR MAIL

All-time high in U.K. exports

U.K. exports have reached an all-time high record. In the first three-quarters of 1954, the volume was eight per cent. higher than in the corresponding period of 1953.

World trading conditions were even more competitive last year than in 1953. British exporters have maintained their share of world exports of manufactured goods at slightly above one-fifth of the total.

British shipbuilders' achievement

Exports of British-built ships in November last were valued at £9,828,623, according to figures published by the Board of Trade.

This is the highest total achieved in any post-war month and is, in all probability, the highest export total ever achieved by British shipbuilders.

The total was over £3 million in excess of the October figure.

The only post-war months which have, in any way, approached this level of ship exports were January, 1950, when the figure was £8 million and May, 1951, when it was £8,900,000.

In the first 11 months of 1954, exports of ships amounted to £46,853,745, more than £10 million above the total at this time in 1953.

Ship exports to Norway in November amounted to £4,230,567,

bringing the total for that country in the January-November period to £15,681,898. In second place is Liberia which took £13,178,922 worth of ships.

Total of vessels completed in U.K. shipyards during the year was 208, aggregating 1,357,236 tons.

More passengers by air than sea

More passengers crossed the world's oceans by air than by sea in 1954. Announcing this in Montreal, the International Air Transport Association points out that it is the first time that this has happened.

Traffic was worth nearly 2000 million dollars (£714,300,000 sterling) to the 71 members of I.A.T.A.

British shipyards "challenged"

British shipbuilding yards achieved a post-war record in the 12 months ended September 1954 but, says Mr. J. W. Elliott, president of the Shipbuilding Conference, the need still remains to turn out ships "more quickly and more cheaply."

He points out that by September the shipyards achieved for the first time in any twelve months since the war a total of completions of merchant ships exceeding 1,500,000 tons; but Britain's claim to be the world's shipbuilder was subject to "continuous challenge."

The U.K. yards' order book stood at about 4,000,000 tons gross.

"The working down of the order book at an increasing pace and to a level nearer normal will bring acceleration of delivery dates," he says, "and will in due course substantially help British yards to meet competition."

Machine tool lands world orders

A new portable machine tool which, it is claimed, is revolutionising crankshaft grinding, has attracted world-wide interest and orders in recent months.

The tool allows crankshaft grinding and super-finishing to be done on the spot and thereby obviates the lifting of massive engine installations for repair. Recently the Glasgow firm manufacturing the tool was asked if it could undertake the reconditioning of the complete crankshafts of the motor-tanker *Southern Atlantic*, lying at Rotterdam. This job normally would have taken two months; but there were only eight days available. The firm flew seven operators and two machines to Holland on November 16. By November 23 the work was completed and passed by a Lloyd's inspector.

The firm is now making available this sort of service in many parts of the world, in addition to selling its equipment. This week

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THE NAVY, March, 1955.

PAGES GLUED TOGETHER

its equipment was sent to East Africa, Norway, Sweden, and Holland. Other recent deliveries have been to France, Italy, and Germany; while a New York firm has undertaken the sole manufacturing agency for the U.S.A.

"New era in ship propulsion"

What is described as a new era in ship propulsion has been announced in Britain.

The 12,000-ton oil tanker *Auris* is to have her conventional engines removed and replaced with a 3500 h.p. gas turbine engine.

The engine has been developed by the Shell marine research and development department.

At the same time the problem of direct transmission and the design of a form of direct gearing coupled to a fixed propeller are being tackled by the company's engineers. Mr. J. W. Platt, chairman of Shell tankers, the owners of the *Auris*, described his company's plans in this field when he spoke at the launching of a new tanker in Birkenhead recently.

The gas turbine may take the place of steam and diesel engines in ship propulsion, says Mr. F. A. Hull, chairman and managing director of the Ellerman and Bucknall Steamship Co. Speaking in London recently he said that one of the ways of reducing building costs would be the discovery of a form of propulsion which would be cheap to instal and economical to run.

"Have we got an answer in the

gas turbine?" he asked. "We shall know during the next seven years. If it is a success when applied to marine engines, and I think it will be, then in a short time the steam turbine and the diesel engine will be as obsolete as sail."

Guided-weapon ships for Royal Navy

Britain's nuclear-age Navy will be equipped with guided-weapons ships, a fleet of submarines—many of them midgets—and a Fleet Air Arm with a front line of jet and turbo-jet attackers, the First Lord of the Admiralty, Mr. J. P. L. Thomas, told the House of Commons on March 3.

New guided-weapons ships, the first of which is in sight, will replace the cruisers, he added. New jet aircraft would replace the present front-line service this year. The R.N. now possessed five of the most modern aircraft carriers in the world, Mr. Thomas said.

Lifeboat rescue of freighter's crew

A lifeboat from Selsey (U.K.) rescued the captain and 37 crew of the United States freighter *Meta D* (7212 tons) six miles off the Sussex coast on February 24.

The ship ran on to rocks during a gale. Reports from London stated that there seemed little chance of refloating her.

The captain and 13 of his crew at first decided to remain aboard but a few hours later agreed to be taken ashore to join the other 24 rescued.

The incident happened during storms which lashed the whole of England's south and east coasts, and drove 13 ships to shelter in Great Yarmouth Roads, off Norfolk.

U.K. freighter crew reported safe

Reports from Bombay on March 4 stated that the crew of the 4290-ton British freighter *Inchkeith* were safe at Port Blair, in the Andaman Islands, after they had abandoned their ship.

The ship struck uncharted rocks north east of Port Blair, the reports stated.

HEAVY DEMAND FOR SWORDS

More and more Commonwealth officers are carrying swords on special occasions, according to one of Britain's oldest firms of sword manufacturers.

Orders for swords from many parts of the world are keeping the firm so busy that there is now a slight delay in delivery.

The London firm (Wilkinson Sword Company Ltd.) was founded in 1772 by Henry Wilkinson when he set up a forge in Greys Inn Road and opened a shop on Ludgate Hill. Since then the tradition of swordmaking has been carried on through the centuries with very few alterations. Swords are still made almost entirely by hand, and the services of the most highly skilled craftsmen are required in the process.

One of the curious and little known facts about sword making is the part that fish skin plays in their manufacture. The skin of shark and sunfish is used to bind the grip.

Most of the swords made by Wilkinsons for officers are inscribed with battle honours of a regiment or some other individual decoration. Royal Air Force swords have ivory grips.

Probably the most famous sword ever made by the firm was the Stalinerad Sword, which Sir Winston Churchill presented to Marshal Stalin at Teheran.

ARK ROYAL—THE NAVY'S NEWEST CARRIER

By Lieutenant-Commander Nowell Hall

A ship destined to make naval history was commissioned by the Royal Navy on Tuesday, February 22. She is the mighty "Ark Royal," an aircraft carrier with a standard displacement of 36,800 tons and a full load reported to be 46,000 tons.

WHEN her front line aircraft are embarked she will carry altogether about 2200 officers and men. It is a huge complement for one ship. This is the peace-time figure however; in wartime the total would be larger.

Although the *Ark Royal* and her sister ship, the *Eagle*, are easily the biggest carriers ever built for the Royal Navy, it is not the sheer size of the vessel that is particularly noteworthy. She is, in fact, the most up-to-date carrier afloat, foreshadowing the shape and equipment of fleet "capital ships" in the foreseeable future, despite the present period of scientific development.

Laid down over 11 years ago, her completion was delayed so that the very latest ideas could be incorporated in her design. Consequently, the *Ark Royal* will be the first carrier in commission to have all the important post-war developments for this type of warship.

For instance, she will be the first in any of the world's active fleets to have three outstanding British post-war inventions. To describe them as "outstanding" does not give a true idea of their importance in naval tactical planning, for they will certainly profoundly affect the pattern of war at sea. These three innovations are being adopted for use in carriers of the United States Navy—the huge carriers America is now building are to be equipped with them—and by the navies of the Commonwealth. Undoubtedly the

latest carriers of all the major N.A.T.O. maritime powers will have them in due course.

Among the *Ark Royal*'s new features are:

● **Two steam catapults.** Powered by steam from the ship's engines, the pressure available being limited only by other operational requirements, and, in certain conditions, by the full capacity of the boilers, these catapults are so powerful that they can put into the air with ease the heaviest naval jet and turbo-prop aircraft likely to be in service for a long time. Unless a new and revolutionary form of flight is applied to naval aircraft—such as the vertical take-off—it may be that the steam catapult will be required as long as the carrier herself has a place in modern fleets.

The *Ark Royal* has been modified to incorporate the invention. Work was begun on this costly warship long before the necessity was visualised for carriers to use aircraft of supersonic speeds. The steam catapult can launch aircraft even when the ship is stationary, and sometimes when she is steaming downwind. No longer will it usually be necessary for a carrier to leave the fleet or for the whole or part of the fleet to change course to enable her to steam into the wind to operate her aircraft. Hitherto the movements of the fleet in good flying weather have depended largely on those of the carriers.

● **The angled deck.** Appropriately, this idea, involving a re-

arrangement of the flight deck lay-out, was partly that of Captain D. R. F. Cambell, D.S.C., R.N., the *Ark Royal*'s commanding officer.

The carrier has a modified angled deck of 5 degrees, instead of the full 8½ degrees. The principle is simple: by approaching astern at a few degrees to starboard of the ship's fore-and-aft line, instead of from dead astern as formerly, the pilot of the aircraft about to land finds his task enormously simplified.

Previously he ran the risk of overshooting the arrestor wires and barrier and crashing into other aircraft in the forward deck park, perhaps causing serious damage, injury or even loss of life. Now, with his view unobstructed, he can if necessary fly straight off the port side of the carrier to make another attempt, thus obviating the deck park having to be cleared for it to take off again—if, indeed, it can do so.

Apart from much reducing risks of accident, the angled deck arrangement makes possible a great increase in operational flying efficiency. Whereas the *Eagle*, which not yet acquired the angled deck (although she is in dockyard hands, in process of doing so), has 14 arrestor wires, the *Ark Royal* needs only six.

● **The "mirror sight."** This enables high-speed aircraft to land with greater ease, it speeds up operations, and is therefore com-

Continued on page 28.

March, 1955.

THE NAVY

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WAR MARTYRS' LAST MESSAGES

WHEN the war ended, efforts were made in all European countries to gather and publish the last messages of those who fell in the struggle against the invader, in order that they might be kept as a kind of monument to the martyrs of freedom. Now a European anthology of such messages has been compiled by two young Italians, Piero Malvezzi and Giovanni Pirelli.

Soberly and intelligently edited, with notes that give the history of the occupation in each of the Nazi-dominated countries, the book has already been a great success in Italy, where the first editions were quickly sold out under the title of "Lettere di Condannati a Morte della Resistenza Europea."

Thomas Mann has contributed a preface to the volume. "The frontispiece of this book, which is a monument," the great German novelist writes, "might well have had as a motto the words written by a young French workman a few hours before his

execution in February, 1944: 'I hope that my comrades and myself will not be forgotten, for what we did is memorable!'"

The most striking thing about these letters from men who were condemned to death—Belgians and Bulgarians, Austrians and Greeks, Frenchmen and Danes—is the serenity with which the writers met their fate and, in the great majority of cases, their calm assurance that their sacrifices would help pave the way for a better future. It is interesting to note that this notion of redemption by death is found as frequently among nonbelievers—Communists, for example—as among the most fervent Christians, though, of course, without the same spiritual content. These men died with a common conviction, whether they believed in heaven or not.

The reader is also struck by the extreme simplicity of expression. Bombastic phrases and patriotic tirades are rare. At most, one might point out that

the last letters of men from southern Europe (Italians and Greeks) are sometimes a little more high-sounding than the rest, that those of Norwegians and Danes are animated by concern about the fate of survivors (their families and friends), and that those of the Slavs are often marked by a somewhat mystical belief in the final victory of justice.

The letters might also be differentiated according to social class and according to the motives that inspired their authors' action—nationalism, anti-totalitarianism, a concern for working-class solidarity, or intellectual revolt.

Richard Altenhoff, a Belgian engineer, was 28 years old when he was arrested as one of the organizers of the Belgian Sabotage Group and was sentenced to death by a German military court.

"I had thought," he wrote to his his mother on the eve of his execution, "that the approach of death would be something terrible, something frightful. Experience shows me that this isn't so. I am quite serene. The only thing that hangs over me is the thought of your grief. Mother, hundreds of thousands of soldiers have died in this war. I am one of them . . . I don't at all regret what I've done. The only thing I regret is that I was caught."

Christian Ulrik Hansen, a Dane, had been a theological student. He entered the underground and organized a system for receiving and distributing arms parachuted by the Allies. After he had been sentenced to death, he wrote from his cell a secret letter to his fellow-fighters, who were also imprisoned.

It's hard to die," he wrote, "but my death is not in vain. In order that a nation may live, certain individuals have to die."

He wrote to a childhood friend, "You know why I'm dying. Explain why to my family and friends. I had to act the way I did. Explain to them that I couldn't choose any other way."

"I and my companions shall be shot at 11 o'clock," wrote Lucien Legros, 18 years old, a pupil at the Lycee Buffon in Paris, in a letter to his parents. "We shall die with a smile on our lips, for we are dying for the finest of ideals. At this moment I feel that I have lived a complete life."

Nothing is known about the activity in the Resistance of Julien Ducos, a wine-grower. All we know is that he was shot by the Germans on February 19, 1944.

"They're coming to take me," he wrote to his parents. "At dawn, we'll no longer be in this world. I think that our sacrifice will not have been in vain, for when victory finally comes, it will give France too the right to be proud of her

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ARK ROYAL

Continued from page 23.

plementary to the catapult and the angled deck.

The Ark Royal will have two of these, disposed on the port and starboard sides. The principle of the invention is well known. Modern aircraft approach at such high speeds that no opportunity occurs for normal human contact to be established between the pilot and "batsman," the landing signals officer on deck who formerly, by raising or lowering a bat in each hand, was able to indicate to the incoming pilot whether he was in a suitable position to land.

The services of the "batsman" can now be dispensed with. To ensure a safe landing the pilot has to keep in alignment three spots of light, one of which is reflected in a curved mirror. If he does so, the aircraft makes a perfect touchdown.

There are other innovations.

The Admiralty, giving new details which indicate the size of this great ship, says she had about 1300 compartment, 750 miles of electric cable (weighing 110 tons), about 1000 electrical connections, over 1000 motors of all sizes—600 to serve the ventilation system.

Being rather like a small, self-contained, floating town, the Ark Royal has her own complex telephone system.

No other British aircraft carrier has a deck edge lift—which again makes for high speed handling of aircraft. This lift gives access to the upper hangar and is one of there. The other two are located along the centre line of the flight deck.

Both the Eagle (she joined the British Fleet in March, 1952) and the Ark Royal can steam at well over 30 knots and are fine sea ships—as has been evident from the Eagle's performance in the bad weather attending several recent N.A.T.O. exercises.



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THE NAVY

March, 1955.

Distinguished Sailor ends his Navy Career

VICE-ADMIRAL Sir John Collins, who in February relinquished his appointment as First Naval Member and Chief of the Naval Staff, retires from the R.A.N. on March 15, after completing leave.

Sir John was the first graduate of the R.A.N. College to command the Australia Fleet. He was also the first to become First Naval Member and Chief of the Naval Staff—the highest appointment in the Navy.

The Government has conveyed to Sir John its "high appreciation of the able services which he rendered as its Naval adviser."

The Minister for Defence, Sir Philip McBride, last month said that as a member of the Defence Committee and the Chiefs of Staff Committee Sir John's wide experience and advice had been of great value to the Government.

He had made a significant contribution to the development of Naval co-operation with the United States and Commonwealth countries in the Pacific.

Sir John commanded H.M.A.S. Sydney, which was engaged in many battles, including the sinking of the Italian cruiser *Barotomeo Colleoni*. For that action he was made a Companion of the Order of the Bath.

He later commanded H.M.A.S. *Shropshire*. He was Commodore Commanding the British Naval Forces in the Java campaign. The Netherlands Government made him a Knight Commander of *Oranje-Nassau*.

In June, 1944, Sir John became Commodore Commanding the Australian Squadron as part of the United States 7th Fleet. He was wounded in the Leyte Gulf operations in the Philippines in October, 1944, when his flagship, H.M.A.S. *Australia*, was struck by Japanese suicide planes.

After that action he was awarded the United States Legion of Merit.

He received the K.B.E. in the 1951 New Year's Honours List.

Duke's Sailing Master

Lieutenant-Commander Graham Hargrave Mann, R.N., is to succeed Lieutenant-Commander (E) R. L. Hewitt, R.N., as sailing master of H.R.H. the Duke of Edinburgh's yacht *Bluebottle*.

Born in June, 1924, Lieutenant-Commander Mann joined the Royal Navy as a Dartmouth cadet in 1938 and saw service afloat in a number of H.M. ships during the latter part of World War II.

In 1949 he specialised as a communications officer, and in August, 1950, he was appointed as Fleet Communications Assistant to the Staff of the Commander-in-Chief, Far East, where he served during the Korean War. In May, 1951, he transferred to H.M.S. *Cossack* as Staff Communications Officer to the Captain (D) of the 8th Destroyer Flotilla.

Returning to the United Kingdom in 1952 he went to the Royal Naval Signal School, H.M.S. *Mercury*, and in December of that year was promoted Lieutenant-Commander. After a period in H.M.S. *Vanguard* he returned to the Signal School on the Instructional Staff.

Lieutenant-Commander Mann has for a long time been a keen yachtsman, owned a boat of his own, and is a member of the Royal Naval Sailing Association. With other officers he sailed in *Mercury's* Windfall yacht, the *New Maid*, when she won the Monarch Bowl—a series of races for all Windfall yachts in the Portsmouth Command—during 1954.

Lieutenant-Commander Mann, a bachelor, lives at Boldre, Lymington, Hants.

Cdr. (E) Berry-Smith

Acting Commander (E) Phillip Berry-Smith, whose promotion from lieutenant-commander was announced on December 31 last year, entered the R.A.N. College in 1935 and was awarded his colours for rowing.

He became a midshipman (E) in January, 1939, sub-lieutenant (E) in December, 1940, and lieutenant (E) in November, 1942.

His first ship was H.M.A.S. *Canberra*, which he joined towards the end of January, 1939. In the latter part of the year he proceeded to the United Kingdom to undergo his engineering course at Keyham, which he completed in December, 1942.

He was then appointed to H.M.S. *Cumberland*, in which he served until May, 1943, when he joined H.M.A.S. *Shropshire*.

He served in this ship till the end of August, 1945, being appointed to H.M.A.S. *Nizam* on September 1. He was promoted lieutenant-commander in November, 1950.

Commander Gladstone

Commander Geoffrey V. Gladstone, D.S.C. and bar, whose promotion to his present rank was announced on December 31 last year, entered the Royal Australian Naval College in 1935.

He was made cadet-captain and gained his colours in cricket. He became a midshipman on January 1, 1939, sub-lieutenant in 1940, and lieutenant in 1942.

His first ship was H.M.A.S. *Canberra* in January, 1939. He joined H.M.S. *Sussex* in June of that year and served in her in the Atlantic and Indian Oceans until September, 1940, when he proceeded to do his courses. These were completed by the end of the year and he was then appointed to H.M.A.S. *Australia*, serving in her in the Atlantic, Indian, and Pacific Oceans from December, 1940, to February, 1942.

In May, 1942, he was appointed to H.M.S. *Victory* for the *Quick-march*, which he joined on commissioning, and again served in the Atlantic and Indian Oceans. While serving in her he was awarded the D.S.C. in connection with the attack upon the Japanese Naval Base at Sabang.

In November, 1944, he proceeded to the United Kingdom for a long A/S course, which lasted from January to September, 1945, after which he proceeded to serve on two years' exchange duty with the Royal Navy.

He was awarded a bar to his D.S.C. in June, 1952.

Flag List

The Admiralty has announced the following changes on the Flag List:—

Placed on the Retired List:

Admiral Sir William R. Slayter, K.C.B., D.S.O., D.S.C.; Vice-Admiral Sir W. York La R. Beverley, K.B.E., C.B.; Vice-Admiral Sir C. Aubrey L. Mansergh, K.B.E., C.B., D.S.C.; Vice-Admiral Sir Albert L. Poland, K.B.E., C.B., D.S.O. and Bar, D.S.C.; Rear-Admiral A. D. Torlesse, C.B., D.S.O.

Promoted Admiral in Her Majesty's Fleet:

Vice-Admiral Sir C. T. Mark Percy, K.B.E., C.B., D.S.O. and Bar.

Promoted Vice-Admiral in Her Majesty's Fleet:

Rear-Admiral A. G. V. Hubback, C.B., C.B.E.; Rear-Admiral H. Carlill, C.B., D.S.O.; Rear-Admiral J. S. C. Salter, C.B., D.S.O. and Bar, O.B.E.; Rear-Admiral M. Richmond, C.B., D.S.O., O.B.E.

Rear-Admiral Peile

The Admiralty has announced the promotion of Captain (E) L. A. B. Peile, D.S.O., M.V.O., to Rear-Admiral (E) from February 21. He will relieve Rear-Admiral (E) C. Littlewood, C.B., O.B.E., Assistant Director of Dockyards,

who is being placed on the Retired List.

Captain M. Bennett

Captain M. Bennett, master of the Shaw Saville motor vessel *Waipawa*, who was landed sick from his ship at Gravesend in January and taken to Middlesex Hospital, London, died there on Wednesday, February 9, aged 62.

The whole of Captain Bennett's apprenticeship in sail was served overseas. When he completed the necessary sea service he returned home and obtained his square-rigged master's Certificate.

On the outbreak of the 1914-1918 war he joined the R.N.R. and during the last three years of the war served as navigating lieutenant in submarines.

Captain Bennett joined the Shaw Saville Line in 1932 as 3rd officer. When he was called up for R.N.R. service in 1939 he was serving as 2nd officer and during his absence was promoted to chief officer in 1941. Most of his war service was performed as commodore of convoys.

He was appointed acting captain, R.N.R., in February, 1943,

and promoted to captain, R.N.R., in September, 1945.

Captain Bennett's first command in the Shaw Saville Line was the *Tropic* in August, 1948. He transferred to the *Taranaki* in May, 1949. In August, 1954, he was appointed to the *Waipawa*.

DEATH OF ADMIRAL PRITCHARD

Surgeon Rear-Admiral D. A. Pritchard died in Melbourne on March 11.

He was Director of Naval Medical Services and Honorary Physician to the Queen.

He was to have retired on April 26, his 60th birthday.

The Minister for the Navy, Mr. J. Francis, said that Rear-Admiral Pritchard had a distinguished record of service. He held a degree in science as well as in surgery and medicine.

Rear-Admiral Pritchard was educated at Sydney Grammar School and Sydney University. He served in H.M.A.S. *Australia* and H.M.A.S. *Perth* in World War II.

He died after a serious operation.

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WAR MARTYRS' LAST MESSAGES.

Continued from page 25.

sons. I have always been a good patriot. I regret nothing."

"I greet you for the last time," wrote Konstantinos Vavourakis, a Cretan workman who had been condemned to death for sabotage and for sending out signals to RAF planes, in a letter to his wife and sister-in-law. "As I've already told you, I want Dina (his wife) to go to Crete for the birth of the baby. If he's a boy, name him after me. I pray to God that He will console you and give you strength, and forgive us for any wrong we may have done. I kiss you very tenderly, my dear wife Dina Vavourakis."

Guglielmo Jervis, Italian engineer and mountain climber, helped Allied prisoners of war cross the Alps into Switzerland. Eventually he was caught. Near his place of execution a Bible was later found, with the following inscription scratched on it with a pin: "Don't weep for me and don't pity me.

I died serving an ideal."

"Dear General," wrote Major Arne Laudal of the Norwegian army to his commander-in-chief, a few minutes before being shot by the Germans. "The condemnation to death is going to be carried out. It is not, of course, death on the field of honor, but it's enough for me. . . . The period I have just lived through in the underground (Laudal had been in charge of a military resistance sector in southern Norway) has been the richest of my life. . . ."

Willem Robert Douma, a municipal employee in Amsterdam, wrote to his parents: "We (there were 12 of them) shall be shot at 2 p.m. I can say proudly that we all received this terrible news calmly and without fear. . . . In a few more hours it will all be over. Over? I don't know, but I shall know. I shall know at last whether there is a better life after the one here below. . . . Isn't it true that my life has been a good one? I can say that at the age of

24 I have done something to help make this world a better place. . . ."

At the liberation of Warsaw, many letters of men who had been condemned to death were found in the clandestine archives of the ghetto. The following was written by a painter who was killed in a gas chamber at the Treblinka concentration camp: "I am absolutely calm. I am condemned to death. I have to die, but I've done all that had to be done—that is, I've hidden what remains of my works. Farewell. . . . Don't let such a catastrophe ever occur again!"

It is this last cry that resounds throughout the entire anthology.

—From "World Veteran."

PORTRAIT OF A SAILOR.

Continued from page 18.

with their story of the abandonment and set up a Court of Inquiry. When Dean's statement reached them in 1740 they promptly filed a suit against Gostlin to recover damages. In 1743 their suit succeeded and they were awarded £25,000.

This gives an indication of the position and substance of the East India captains. Apparently Gostlin paid it, large fortune though it was.

In the same year John Dean reached home, some seven years after leaving it, and was received as a hero. In November the Directors awarded him a pension of £100 a year for life, and £50 a year to his wife if she should survive him. They also gave him a present of 50 guineas for immediate needs, and in 1745 made him head porter at one of their warehouses.

These were handsome rewards to a common seaman. Probably John Dean thought all his sufferings well worth while.

Finally the Directors ordered his portrait to be painted by William Verelst, and it hung in East India House for more than a century. Thence, via the India Office, it came to its present home, the National Portrait Gallery, where it remains the sole tribute to the lower deck and to that vanished race, the East India seamen.



V.2," by Major-General Walter Dornberger; Hurst & Blackett (London).

In an era when guided weapons have asserted their right to a major role in both offensive and defensive operations, a book by a man so closely connected with their development as Major-General Dornberger is bound to arouse interest.

Dornberger, a technical officer from the start, went into rocketry "straight from school" when, in 1930, he was appointed to the Ballistic Council of the Army Weapons Department on completion of his technical studies.

At this stage high-powered rockets were the foible of a few individual inventors. For two years the Army Weapons Department, which had recently taken over the responsibility for rocketry, supported many of these men with small grants.

The layman, who knows vaguely that the Chinese used rockets some hundreds of years ago to set fire to enemy strong-points, is apt to think of the German vengeance weapon, the V.2, as a product of the second world war, a hastily developed, alternative to the failing Luftwaffe.

As far as the German high command was concerned, it was. But there is no doubt that in the mind of Dornberger and many of his associates there was already maturing a clear picture of a powerful weapon that would play a major part in advancing the schemes of German imperialism. In 1932 the Army Weapons Department, having failed to interest industry in the project, set up its department at Kummersdorf, a clearing in the pine woods near Berlin, which was subsequently transferred to Peenemünde.

Dornberger was put in charge

and told to pick a team. Among his earliest collaborators was the young von Braun, later to become technical director of the V.2 project and, after the war, to take on the same task for the Americans.

"It was not easy," Dornberger writes, "to get my young collaborators away from their space dreams and make them settle down quietly to hard research and development work."

In March, 1943, one year after the first successful launching of a V.2 rocket, the Peenemünde group were still trying to obtain first priority for the project.

Then came a fateful message from Army Headquarters. "The Führer has dreamed a dream that no A.4 (the earlier name for V.2) will ever reach England." They were back where they started.

Hitler later apologised for that decision, but by then it was too late. The British and American armies were steadily denying to the Germans every new launching area.

The German V.2 project was great in conception and the work done by Dornberger's organisation has formed the basis of all modern high power missile development. His own association with it was unique in that he came in at the

start and was in charge throughout.

From this point of view alone, his memoirs are of great interest. The light they cast on the political picture, the intrigues and jealousies of the time, add much to their interest.

Dornberger's own style is live and most readable. It is a pity that his chronology is so completely mixed up. It makes difficult and tiresome the task of following the succession of events.—G.P.T.

—From the London "Navy"

"Raiders from the Sea," by Rear-Admiral Lepotier; William Kimber (London).

The stories of the famous combined operations, Vaagso, Bruncval, St. Nazaire and Dieppe, have now been told often. They do not stale in the telling. Rear-Admiral Lepotier's book, *Raiders from the Sea*, views them from a new angle, that of a Frenchman whose country was the objective of the most important of these expeditions and whose civilian compatriots were spectators of them, deeply involved emotionally but militarily impotent.

French civilians suffered loss of life and the torture of hope followed by disappointment in the course of these operations, which were mainly experiments for the great "Operation Overlord," the invasion of Normandy.

It is interesting that Rear-Admiral Lepotier endorses so definitely their necessity and their ultimate justification by "Overlord's" success.

—From the London "Navy"

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CRUMP GETS THE BIRD

By J. H. Adams

IF you've never met Customs Inspector Augustus Crump, you've missed the greatest character who ever stalked the Sydney waterfront (said Captain George Mansley).

Tubby, but active, Crump with his bowler hat jammed on his head, pokes his long inquisitive nose into every overseas ship that enters the port.

The *Camberwell* was berthed at Circular Quay discharging her inward cargo when he paid one of his visits to me. Suddenly my cabin doorway was darkened at midday, as I wrote a report at my desk. A bowler thudded on the papers at my left elbow. A voice said:

"I'll have a beer."

I knew Customs Inspector Crump had arrived.

"What do you want, Crump?"

I asked, without looking up.

"Nothing. Routine check, that's all."

"Routine thirst," I replied good humoredly, ringing the bell for my steward. Crump sank into a chair and his needle-point eyes gave the cabin a professional scrutiny. He was the terror of smugglers.

While we were drinking, our ship's surgeon, Dr. Ramsay, came in and I introduced them. Doc put his voyage medical report for the assistant manager on my desk and joined us.

Old Crump has a terrific ego—not without justification. A few beers put him in a reminiscent mood and he told us of his anti-smuggling prowess.

Bald, lean Dr. Ramsay eyed him with mounting irritation. Men who boasted, even when the boasts were emphasis upon truth, annoyed him. They began to argue.

"Your detection may be brilliant, but I challenge you," old Doc said at length. "I'll smuggle

This is the third of the Captain George Mansley series of short stories, published by courtesy of the Sydney "Sun."

something in right under your nose next voyage, just out of sheer cussedness."

We went up to Vancouver, where Dr. Ramsay bought a vivid-hued Mexican parrot in a pet shop. I wondered why Doc suddenly had become a bird fancier. He was going to smuggle it ashore and beat Inspector Crump.

Well, bust me hinnacle! Of all the crazy ideas of smuggling that was the craziest!

All the voyage he tried to make the blighter talk. Nary a word would the parrot say; only looked down his beak with an expression of disdain.

"Why don't you try to smuggle in a grand piano?" I asked Doc. "It would be just as easy as getting that feathered Sphinx through."

I couldn't interpret Dr. Ramsay's glance. So I held my peace and waited. In due course we dropped our pick in Watson's Bay.

Customs Inspector Crump puffed up the gangway. Dr. Ramsay had pushed the parrot into an empty cupboard and stuck the cage in a corner, throwing a blanket over it.

The whole thing was so obvious that I despaired for Doc's sanity. Crump found Cocky in exactly 20 seconds.

And Cock would have to be sentenced to death. Danger of psittacosis or parrot's disease. He couldn't land in Australia: regulations said he was a menace to health.

Inspector Crump was taking the parrot in his cage aft for the execution when in front of all

the passengers he was subjected to a tirade of abuse.

"Curse the Customs! Curse the Customs! Crump the killer! Inspector Crump kills little birds! Bust his bowler!"

Passengers sniggered. Before the travelling public, Inspector Crump is a figure of bowlered pomposity. This was more than he could stand. He glared at the cage. Cocky fixed a beady eye upon him and said no more.

He dropped the cage on the deck and went down to the wharf for one of his henchmen.

Before the henchmen could arrive to wring the bird's neck, Cocky had been passed on to the chief engineer of the freighter *Maori-lander*, outward bound, and his life was saved.

I cornered Dr. Ramsay before he went ashore. I wanted to know how he had managed to make the darned bird talk after a voyage of surliness.

"I didn't teach him a word. One of the stewards is a pretty fair ventriloquist, and he was walking right behind Crump. I knew the regulation about parrots and arranged in advance for the *Maori-lander* to take Cocky over."

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

He grinned at me as I strolled away. I hadn't heard or seen all. That afternoon I met Dr. Ramsay up in the city. He had a camera slung in a case over his shoulder. He showed it to me.

"Mighty fine camera, worth a tidy sum," I remarked.

"Picked it up in Vancouver with four others. I'd intended to buy them a couple of voyages ago for my nephews and nieces. Smuggled 'em in under the nose of old Crump. He was too busy with Cocky to notice."

Continued on page 32.

THE STORY OF THE "SOBRAON"

By Lieutenant-Commander D. J. Mort, A.S.C.C.

SEA CADET training today being so closely related to the boys' training as carried out in H.M.A.S. *Tingira* during the days when she swung proudly at her mooring in Rose Bay, I am inspired to repeat the story of the days when she was the *Sobraon*.

On January 23, 1917, I proudly became a member of the *Tingira* and along with other boys commenced a career which I followed for 28½ years. Never once did I regret having joined the Navy, and my period of training in the *Tingira* is always a pleasant memory for me to look back on.

With other "Old" boys of the *Tingira*, I regretted to see her pass out of existence and boys' training cease. Looking back over the years, one can recall the many heroes who started their career on the *Tinnie*. Some have passed on, but their memory lives forever, likewise the memory of the ship itself.

Sea Cadets, or rather the boys who first think of becoming Sea Cadets, must have the same feeling that I had when I first saw the *Tingira*. The only difference is that the Corps is voluntary. But too much emphasis should not be placed on the word voluntary, because once a boy enters the Sea Cadet Corps he must obey the rules and regulations and must at all times remain loyal to the Corps. Now for the story of the *Tingira*.

His Majesty's Australian Training Ship *Tingira*, when anchored in Rose Bay, was a familiar sight to the residents of the suburb of the same name, as well as to all who passed down or up the harbour. Originally she was one of the finest ships that visited Port

Jackson when sailing ships held pride of place—her name being the *Sobraon*.

She was built at Aberdeen by Hall, a noted shipbuilder, in 1866, and was what was termed a composite ship—that is, she had an iron frame, planked. Whilst being built her owners got into financial difficulties, and she was sold. She had been intended for a screw steamer, but her new owners (Messrs. Devitt and Moore) did not want steam—they pinned their faith to canvas, and completed her as a sailing ship, her timber being teak. Her dimensions were: 300 feet long, 40 feet broad, with a depth of 28 feet of hold; she was 2130 registered tonnage, with a carrying capacity of 3500 tons.

She made her first voyage to Sydney in 1867 under command of Captain Kyle. On her voyage home he developed aberration of mind, causing the ship to be similarly afflicted in her compass, and instead of sailing up the English Channel the *Sobraon* found herself up the Bristol Channel. This contretemps caused a change in the command, and Mr. J. A. Elmslie, the chief officer, was appointed captain.

On his first voyage in command he had as passengers Lord Belmore, with his wife and family. The ship reached Sydney on January 7, 1868, and Lord Belmore was sworn-in as Governor of New South Wales on the following day.

The *Sobraon* made seven voyages to Sydney, and always secured a full complement of cabin passengers, both on account of the ship herself, and also because Captain Elmslie had an attractive and genial personality.

The eighth voyage was made to Melbourne, and as a passenger and cargo vessel Sydney saw her no more. But she made regular voyages to the southern capital, retaining her popularity to the end under Captain Elmslie.

In 1891 she was purchased by the New South Wales Government, to be transformed into a nautical ship to replace the *Vernon*, which had been in use as such for 24 years, having been bought at Brisbane in 1867, and as she was an old ship then, she had become quite unsuitable.

The *Vernon* terminated her career in Berry's Bay, where she took fire and was destroyed on May 29, 1893.

The first officer to command the *Vernon* was Captain James S. V. Main, who died on her on March 18, 1878. He was succeeded by Captain Frederick William Neitensstein who, on the *Sobraon* replacing the *Vernon*, took command of her, which he held until he was appointed Controller-General of Prisons. On reaching the age limit he was retired, and died on April 23, 1921, aged 71 years.

The next commander of the *Sobraon* was Captain W. H. Mason, for some time previously the chief officer of the ship. He retained the command until she passed into the possession of the Federal Government, to be used as a training ship for boys for the Royal Australian Navy.

There seems to be some misunderstanding as to what the *Sobraon* actually was while she was the property of the New South Wales Government, and what she was under the name *Tingira*.

Her official status was the

"Nautical School Ship *Sobraon*," as part of the Public Instruction Department, under the Minister of Public Instruction, and was in no way connected with the Prison Department as some have supposed. The boys who were sent on to her were those who, by the loss of their parents, or by neglect had become a charge on the State.

As the Royal Australian Navy training ship, the *Tingira* meant to the lower deck ratings what the Royal Australian Naval College means to the ranks, and a boy, to get on her, had to be able to produce the highest testimonials as to his character, thus ensuring that the men of the Australian Navy are of the best type.

A Sydney paper, many years ago, discussing "the Bluejacket in the making," and what Australia had to do in manning a proposed navy, said: "The mainspring is the man behind the gun, and as the gun and the ship become more and more subtle and complex, so must the man become of higher mental calibre and capable of fine accomplishment." It was to give Australian boys that mental calibre that the old *Tingira* was specially fitted up.

CRUMP GETS THE BIRD.

Continued from page 10.

A pause.

"Mustn't defraud the revenue. I'll pop along to the Customs House and pay the duty to Crump."

I passed the Customs House on my way back to the *Camberwell*, two hours later.

Out in the square Crump stood like a statue, his bowler held ceremoniously in the crook of his right arm. Dr. Ramsay was taking his photograph. The shutter clicked. Crump unshipped a stiff smile.

They linked arms, deep in conversation as they marched through the welcoming door of the nearest hostelry.

HELICOPTERS' IMPORTANT ROLE IN ANTI-SUBMARINE DEFENCE.

Continued from page 15.

S.56 or XHR2S-1 assault transport helicopter, the five-bladed main rotor is, it is reported, designed to retain a high measure of efficiency should one blade be shot away.

The assault transport version is fitted with what are described as "nylon flak curtains," and this, together with a payload of 5500 lb. of cargo, indicates that an anti-submarine version of this aircraft would have great possibilities.

What place will helicopters occupy in Britain's anti-submarine defence arrangements? At present, until larger types such as the Bell HSL-1 and Bristol Type 173 are in squadron service, helicopters such as the Sikorsky HO4S-3, Westland-Sikorsky Dragonfly and Bristol Sycamore will probably be used for shore-based coastal patrols rather than carrier-based operations.

Sikorsky HO4S-3s of No. 845 squadron, and their British-built counterparts, the Westland-Sikorsky S.55 Whirlwinds, will continue to develop those special tactics associated with the "dipping asdic" in preparation for their use by larger helicopters capable of both searching and striking.

The "dipping asdic" is carried in a container and is lowered into the water by winch from the hovering HO4S-3, normal crew of which is a pilot and two asdic operators. But as most helicopters are tiring to fly for any length of time, because they lack inherent stability, and as anti-submarine sorties may last up to three or four hours, it seems better to use the U.S. Navy's system of two pilots and one asdic operator, as employed in their Piasecki HUP-2 and HUP-3 Retriever and Sikorsky HO4S helicopters.

Present efforts are, therefore, being directed to working out how the helicopter's unique qualities can best be fitted into the pattern of anti-submarine defence, and to overcoming as far as possible its present limitations in this role.

In the Bell HSL-1, these limitations have been avoided to a greater extent than in almost any other helicopter. Unofficially it is stated to carry search radar, "dunking" sonobuoys and over 4000 lb. of anti-submarine weapons, so that even the small number ordered for Fleet Air Arm use will, when "worked up" into a squadron, be a formidable addition to our anti-submarine defences.

Another great advantage of the Bell HSL-1 is its high degree of inherent stability which, in combination with an automatic pilot developed by Bell, makes it fully capable of all-weather operation. Such types as the Bell HSL-1 and Sikorsky HSS-1 will supersede the Sikorsky HO4S which, it is generally agreed in the U.S. Navy, is too small for anti-submarine roles, although it is an excellent and widely used type. It lacks the range and load-carrying capacity needed for real effectiveness.

In passing, the deplorable lack of British helicopters in squadron service which are comparable with the Bell HSL-1 must not go unnoticed. Our only design in this category, the Bristol Type 173, is not yet in production, although it is to be developed for anti-submarine duties, and an order for about 100 of these versions has been placed.

However, it seems that fairly extensive modifications will be necessary for this role, and it may easily be two or three years before squadrons of this type are available. Given the prospect of firm orders, there is no reason why British designers could not have provided by now an anti-submarine helicopter comparable with the Bell HSL-1 and Sikorsky HSS-1. As regards helicopters, must Britain always act as the poor relation and rely on the U.S.A. to supply her wants?

—From the London "Navy"

"Keep steaming. When in doubt, take the bold course—a craven heart never got anywhere."
—Admiral Sir John Collins.

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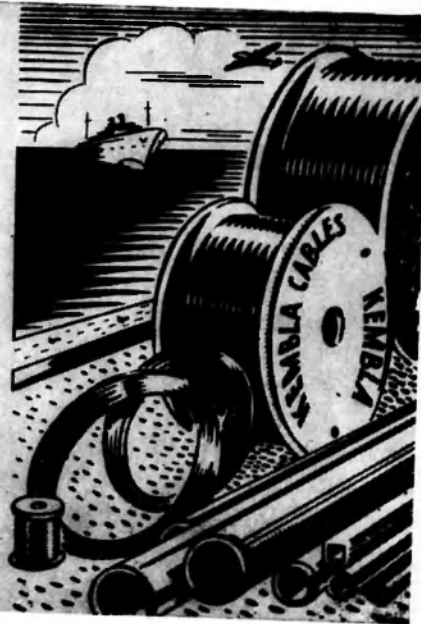
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