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1964 SIGNIFICANT YEAR FOR NAVY

The year 1964 will be a significant one in the development of the Royal Australian Navy, and will mark the R.A.N.'s graduation into the "missile age".

The Minister for the Navy, Dr. Forbes, said that the first R.A.N. warship equipped with an operational missile system would commission during the first half of the year.

The frigate, H.M.A.S. DERWENT, now in its final stages of construction at the Williams-town Naval Dockyard in Melbourne, would go to sea with the Fleet's first Seacat missile system. This close-range, anti-aircraft missile system was the successor to the Bofors gun, and would be installed in all the R.A.N.'s new Type 12 frigates.

Dr. Forbes said 1964 would also see two of Australia's new guided missile destroyers nearing completion in the United States, and work beginning on a third of these versatile warships of the Charles F. Adams Class. The first two, H.M.A.S. PERTH and H.M.A.S. HOBART, would commission during 1965.

In Britain, the year would mark the start of construction of the first Oberon Class boats for the R.A.N.'s new submarine squadron, while in Australia work would begin on a 14,500-ton escort maintenance ship. This mobile work-

shop, to bolster the R.A.N.'s afloat support, would cost £5,300,000, and would be built by the Cockatoo Island Dockyard and Engineering Company of Sydney.

Another new ship to commission in Australia this year would be H.M.A.S. MORESBY, the first specially-designed survey ship for the R.A.N.'s Hydrographic Service.

Reviewing the work of the Navy during the past 12 months, Dr. Forbes said one of the most important developments had been the successful introduction of Australia's first anti-submarine helicopters. A newly-formed front-line squadron of "hunter-killer" helicopters operating from H.M.A.S. MELBOURNE had quickly proved their effectiveness in all conditions.

Also, in the anti-submarine field, progress had been made in the development of the Australian-designed anti-submarine missile, IKARA.

Ships of the Australian Combat Fleet had steamed about half-a-million miles during 1963, and no fewer than two had been on duty at all times with the British Commonwealth Strategic Reserve. Six R.A.N. ships, the largest number for some years, took part in the annual SEATO exercise in South East Asia.

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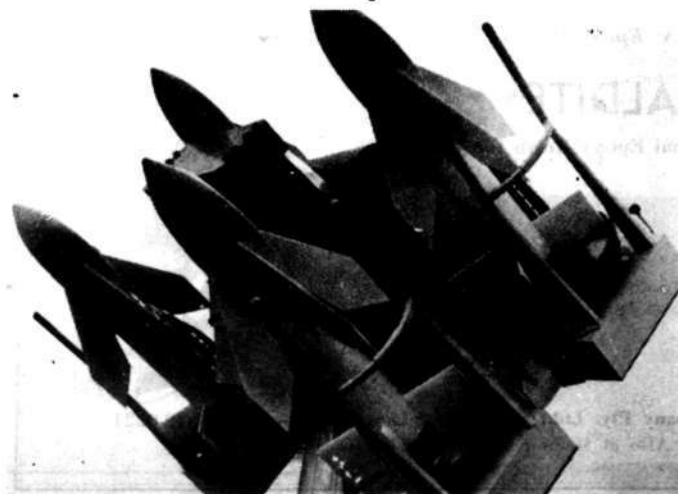


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THE NAVY

PASSING OUT — H.M.A.S. NIRIMBA

CAPTAIN'S REPORT

"Sir,

"It is a privilege and a pleasure for me, on behalf of the Officers, Staff, Ship's Company and Apprentices, to extend to you and Mrs. Davies a very warm welcome to this our eighth Passing Out Ceremony.

"I would like, also, to welcome our official guests, all of whom we thank for their kindly and generous support and help in in many ways throughout the Term.

"A special welcome is extended to the parents and friends of those Apprentices who are Passing Out on this occasion and proceeding to the next, and, in many cases, the final stage of their training.

"To those parents who are here, and to those who are unable to be present, I would like to say thank you for your support during your son's time at NIRIMBA. To know that we have parental support is a great help to us in the satisfying, but rather arduous and demanding task we undertake in training young men for a service career.

"We are always happy to re-

cord another first, Sir, and this is such an occasion, because not only are you the first Officer of the Royal Navy to Review the Passing Out Parade and present the prizes, but you are also the first Reviewing Officer not out of our own Service to undertake this duty.

"Because the R.A.N. originally developed from the R.N., the two are almost identical in nature, principle and ideals, and so it is with Artificer Training which at NIRIMBA is based on systems which have been tried and proved in similar Establishments in the United Kingdom. Many of the Officers and Instructors who have and still are serving in NIRIMBA were trained as R.N. Apprentices, and the presence of these and other Officers of the Royal Navy who do their loan service in this Establishment serves to keep intact our ties with our sister Establishments overseas. For these reasons, we hope, Sir, that you will feel at home amongst us to-day.

Future of Nirimba

"The present Term has seen

a number of important changes in policy take place. One concerns the future of NIRIMBA as the R.A.N. Apprentice Training Establishment. For some time, our future has been shrouded in mystery, but with the decision lately taken by Cabinet not to integrate Service Apprentice Training, and with the resurgence of the Fleet Air Arm consequent on the introduction of Anti-Submarine Helicopters, and the requirement for ALBATROSS as a fully operational airfield, the position has clarified: Naval Apprentice Training will remain at NIRIMBA, and planning can now go ahead for the rebuilding of the Establishment.

"As can be seen at a quick glance, most of the present buildings will need to be replaced and those not requiring such drastic action will need to be extended to accommodate the increasing numbers under training. Action has already been taken to have this latter work put in hand in the reasonably near future.

Some of the
Apprentices who
passed out



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"The number of Apprentices under training continues to increase, and from 400, this Term will increase to approximately 450 next Term. These increases naturally put quite a strain on both the Staff and the facilities of the Establishment, the necessary increases in both inevitably lagging behind the increases in the commitments necessitating them.

"Another important change in policy which concerns us is the designation of Electrical Ordnance and Air Artificers as Systems Artificers Weapons, Communications, Power or Air. In order that these Artificers should be suitably trained to deal with the complex equipments which will be found in Ships of the future, a much higher standard of training than has hitherto been deemed expedient will be necessary. As the necessary facilities to train to the required standard are not yet available in

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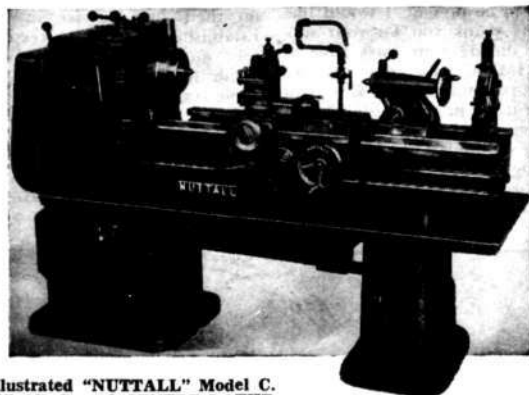
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NIRIMBA, it has been decided that Apprentices to these categories should be initially trained at Technical Colleges in Sydney. The spade work has been completed, and all the scheme requires now is the blessing of the holders of the purse strings, the Treasury, and it will go into operation. We hope this will come through before the beginning of the Technical Colleges' 1st Term, in February, this year. It is not, of course, envisaged that this will continue indefinitely, and in due course this Establishment will be staffed and equipped to train these ratings to the Technical Department's Certificate level.

"The advent of these Courses means, of course, that the Apprentices chosen to undergo them will need to be of a high academic standard, and I think they will also find it necessary to work very hard for the two years the Course takes to complete. However, it will certainly be worth it, both to the Service and to the individuals themselves, because they will be the most highly-trained ratings in the R.A.N. when they qualify. If they fail, they will most likely have to revert to ditch digging somewhere.

"For some time, the lack of experience of Apprentices in dealing with ship fitted equipments has caused concern. The ideal way to overcome this deficiency would, of course be to send them to sea for a time, after they have advanced to a stage where they would be of value as maintainers. Unfortunately, however, billets are not available in sea-going ships, and this cannot be achieved. How then to give them the experience they need, and at what stage of their training would this be most beneficial both to the trainees and to the Navy?

"The formation of the Fleet Maintenance Unit which assists ships undergoing Long Self

FINE TYPES OF YOUNG MEN WHO PASSED OUT
AT NIRIMBA



West Australians:— W. Lozowy (Collie), R. Crofton (Stoneville), C. Godden (Mandurah), R. Pandal (East Victoria Park), R. Mummery (Floreat Park), (T. Robbins (Glendalough), N. McNeill (Geraldton), K. Brew (Mt. Yokine).



From N.S.W.:— J. Williams (North Ryde), D. Chamberlain (Mt. Prichard), R. Hall (Parkes), J. Alford (Collaroy), D. Hinton (Northmead), D. Martin (Singleton).



South Australians:— A. Alderson (Adelaide), C. Glenn (Adelaide), D. Sandery (Port Pirie), B. Anderson (Port Pass), R. Kesting (Adelaide).



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Maintenance periods answers the first question. Appropriate them for a period to that Unit and they should get the experience they need and, at the same time, earn their keep for a while. The Sixth Term has been chosen as the best time to gain this experience, and consequently, beginning in 1964, the E.R.A. and Naval Shipwright Apprentices of the Sixth Term will spend half the Term attached to the Fleet Maintenance Unit. This alone, of course, will tell just how successful this will be, but we are optimistic.

"We continue to supply candidates for the Topman Scheme, and we envisage a greater number of Upper Yardmen candidates being available in the future. The extension of this Scheme will enable an Apprentice to finish his trade training before volunteering for Officer Training, thus enabling him to do what he set out to do in joining the R.A.N. in the first place, qualifying as a tradesman.

"One could, these days, be excused for questioning the suitability of the name R.A.N. Apprentice Training Establishment for NIRIMBA, for in addition to such training we also train Mechanics of the Marine Engineering Branch, Air Mechanics for part of their Course, the Craft part, Direct Entry Engine Room Artificers, and Naval Shipwrights and cheap Naval Shipwrights. The possibility of extending the training at NIRIMBA to include other categories as well, is also currently under discussion.

"In the sports field our greatest achievement this Term was to win the Apprentice Inter-Service Sports which were held at the Army Apprentice Establishment at Balcombe, in Victoria. In spite of the final points score of Navy 60, Army 40, Air Force 20, the result was in doubt

(Continued on Page 25)

THE NAVY

NIRIMBA PASSING OUT PARADE

11th DECEMBER, 1963

ADDRESS BY REAR-ADMIRAL DAVIES

Captain McMurray, Ladies, Gentlemen, Company of H.M.A.S. NIRIMBA.

I want to start by saying how delighted I was to be asked by the Flag Officer Commanding East Australia Area, Admiral Gatacre, to review the Passing Out Parade here to-day, and to present the prizes.

It is very good for me to get away from the confines of an office in Canberra and to see something of what is quite clearly an alert and modern part of the Royal Australian Navy. And it is a particular personal pleasure for me to visit NIRIMBA, for the name of your ship is the same as the name of the last ship I commanded — PELICAN — a very famous ship's name which goes back to Sir Francis Drake's voyage around the world.

I would also like to congratulate the prize-winners. Prizes are won partly by natural ability, but chiefly by a lot of hard work, and so in spite of those from Sir Winston Churchill down who say they "never won a prize at school, and look at me now," I say well done, the prize-winners; you have worked hard!

This ability to work hard is an important part of your education, so whether or not you have won a prize, I also say well done to all who have worked hard.

The Captain has reviewed training policy and the results of the year's activities, and I am sure that all the parents have been as interested as I have been to learn something of what their sons have been doing in the past.

I want, now, to say to parents

and sons a word about the responsibilities and duties of these young men in the future. They have received, or are receiving, an absolutely first-class technical education which I am sure will continue as they gain experience on the job at sea.

A technical education of any sort, whether it is in the techniques of engineering, as in NIRIMBA, or in the techniques of languages, of science of the arts, or anything else, is invaluable, because it stretches the mind, and mind-stretching is essential in education. But mind-stretching is only part of the general education and development of character which we all need if we are to be useful citizens of our country, and of the world. These young men have got to be more than useful citizens, they have got to be leaders in a fighting Service.

Leadership is a difficult thing to define. There are many sides to it. A leader must have knowledge of his job, which is what you have started to get here, and will continue to get as you grow older, and two other of the most important parts of a good leader's character is unselfishness and determination.

However, I have not time to discuss leadership now, but I do want to emphasise to all of you parents that, your sons will, and indeed must, develop qualities of leadership as they grow in wisdom and experience during their service in the Royal Australian Navy. And I would like to add that the family background and the Christian background that they have acquired from their homes and from their Naval training will be a tremendous

and constant help to them. For as much as they give by their service to their Service they will benefit from their service.

I have one other point about the future of these young men.

Not only must they be good technical leaders in the Navy, but they have a particular responsibility when they are abroad — a responsibility as ambassadors of Australia. The ordinary people abroad who have no direct knowledge of this fine country can best judge Australia and Australians by what they see in visiting Australian ships and their companies.

My own case is an example. Although I paid a short visit here in 1945, my only real knowledge of Australia before I came early this year was from Australian Naval friends on courses in England and from what I saw of Australian ships and sailors who were serving with the Commonwealth Strategic Reserve based on Singapore. From these friends and from the high standards of efficiency and cleanliness of these ships, my ideas of Australia before I arrived were good; so good, that when I was thinking this over on my passage out here I feared I would be expecting too much — everything in Australia cannot possibly be as good, I thought, as what I had learned of the Royal Australian Navy. However, I am glad to say, and to acknowledge before you all, that since I arrived here I have found that Australians are just as good as my original expectation; in other words, Australian sailors in the past have proved excellent ambassadors.

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it is the result of education, of training, of discipline and, above all, of self-discipline. So self-discipline is another vital part of education, which I am sure has been instilled in NIRIMBA.

May I repeat again, in conclusion, how pleased and honoured I am to be here to-day, and to see what I have seen. I am grateful for the privilege of being allowed to address you; but although a privilege, it has seemed to me to be a completely natural thing for an officer of the Royal Navy to speak to you people of the Royal Australian Navy, because I have always felt the Royal Australian Navy and the Royal Navy are one Service.

I have been shipmates with Australians in peace and in war, ashore and afloat — indeed, the two Navies have always worked and played and fought and died as one in the past, so I have no doubt we will work and play and, if necessary, fight and win as one in the future.

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THE NAVY

NEW MEDICAL DIRECTOR FOR R.A.N.

Surgeon Captain R. M. Coplans, R.A.N., has succeeded Surgeon Rear Admiral L. Lockwood, C.B.E., M.V.O., as Medical Director General of the Royal Australian Navy.

Appointment of Surgeon Captain Coplans follows the retirement of Surgeon Rear-Admiral Lockwood, recently.

Rear-Admiral Lockwood served continuously in the R.A.N. since 1924 - believed to be a record for a Medical Officer in any of the Permanent Armed Forces.

Born at Natimuk, Victoria, on January 13, 1902, and educated at Ballarat High School and Melbourne University, Rear-Admiral Lockwood joined the R.A.N. on November 12, 1924.

He served in H.M.A.S. AUSTRALIA as S.M.O. in 1932-36 including the Royal Cruise, Australia to England with H.R.H. Duke of Gloucester, 1934-35, and saw exchange service with the Royal Navy in 1935-36, including Mediterranean during the Italo-Abyssinian War.

He was also present at the Jubilee Spithead Naval Review in 1935.

During 1936-37 he underwent special courses at London Hospital and R.N. College, Greenwich.

He received accelerated promotion to Surgeon Lieutenant Commander, 1930, following success in obtaining his M.D. (Melbourne), and to Surgeon Commander, 1935, following record high marks (84 per cent.) in the promotion examination held in London.

On his return to Australia in 1937 he was appointed Medical Officer-in-Charge of the Naval Wing, Prince of Wales Hospital, Randwick, and remained there



Surgeon Rear Admiral Lockwood pays his last official visit to the Balmoral Navy Hospital. With Rear Admiral Lockwood are Senior Sister Katherine Aaseh and Matron Maude Jones.

until early 1941, when he went to sea as Surgeon Commander in H.M.A.S. HOBART until April, 1943.

During this period he served in Indian Ocean, Mediterranean, Java and South China Seas, Singapore, Coral Sea Battle, Guadalcanal, Solomons and S.W. Pacific.

After the 1939-45 war he was appointed Surgeon Captain and Medical Officer-in-Charge, Flinders Naval Hospital, 1946-1950, and as Command Medical Officer, East Australia Area, and Medical Officer-in-Charge, Balmoral Naval Hospital, 1950-55, becoming Surgeon Rear-Admiral, Medical Director General, 1955.

Other appointments held included:

- Honorary Surgeon to H.R.H. Duke of Gloucester when Governor General of Australia, 1945-46.
- Honorary Surgeon to H.M. the late King George VI, 1952.
- Honorary Surgeon to H.M. the Queen, since 1952.
- Member of N.S.W. Executive of St. John Ambulance Association since 1954.
- Member of Central Medical Planning Committee since 1955.
- Member of the National Council of the Australian Red Cross Society since 1955 (Vice-Chairman, 1961).
- Member of the Red Cross National Blood Transfusion Committee since 1955.
- Chairman of the Central Citizens' Appeal Committee, Vic.

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torian Division of the Australian Red Cross Society, 1961, 1962 and 1963 (during which time £618,000 was raised for Red Cross in Victoria).

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to Australian Red Cross Society since 1960.

• Chairman of Medical Services Committee, Department of Defence, 1958 to 1963.

• Member of Medical Rationalisation Committee, Department of Defence, since 1962.

• Member of Committee of Naval and Military Club, Victoria, 1959-1963 (Vice-President, 1963).

• Chairman of Naval, Military and Air Sections, British Medical Congresses, at Brisbane, 1950, and Hobart, 1958.

• Member of Council of Victorian Branch of Australian Medical Association since 1961.

• Chairman of Admiral Cunningham Commemoration Committee, 1963.

• M.V.O., 1935, for services to H.R.H. Duke of Gloucester in H.M.A.S. AUSTRALIA, 1931-35.

• D.S.C., 1942, Java and South China Seas, H.M.A.S. HOBART, C.B.E. (Mil), 1957.

During his periods of service as Medical Officer-in-Charge, Flinders Naval Hospital, Command Medical Officer, E.A.A. and Medical Officer-in-Charge,

Balmoral Naval Hospital and M.D.G., the following eventuated:

Flinders Naval Hospital and Balmoral Naval Hospital were recognised as approved hospitals for registration purposes by the State Medical Boards in relation to hospital residency requirements for medical officers.

Medical and Dental Undergraduates Schemes were introduced and continue to operate successfully.

The perennial shortage of medical officers was overcome; that of dental officers it is hoped will be overcome within the next two or three years.

Female nurses were re-introduced.

Reserve Medical and Dental Officers were brought up to strength.

A comprehensive list of consultants and specialists in medicine, surgery, etc. was inaugurated, mostly of reserve naval officers.

Professional work, both from clinical and instructional points of view, was stepped up.

Naval hospitals were further developed and plans have been made for further development, specially from the angle of integration with other two services.

For the past six years he was closely associated with the move for further integration of medical services.

In 1958 he was responsible for establishment at Balmoral Naval Depot of a course on the medical aspects of Atomic, Biological and Chemical Defence, for Medical, Dental and Ancillary Medical Personnel of the three Services.

Rear-Admiral Lockwood also found time for sporting activity.

He was a football blue (Australian Rules) Melbourne University, captained the R.A.N. at Australian Rules in 1930-34, and represented the R.A.N. also at cricket, tennis and golf.

THE NAVY

Navy Forms Nursing Service

The Minister for the Navy recently announced the creation of a new branch of the Royal Australian Navy.

It is the R.A.N. Nursing Service, which will provide nursing sisters for Naval hospitals.

It is planned to introduce the new Service next year to replace the present system of employing civilian sisters in Naval establishments.

The civilian sisters will be eligible to apply to enter the new Service, which will be an integral part of the Royal Australian Navy.

The introduction of the new Service will contribute to efficiency in Naval hospitals. The sisters have official status in their dealing with Service personnel, and the new Service is expected to result in greater continuity of employment.

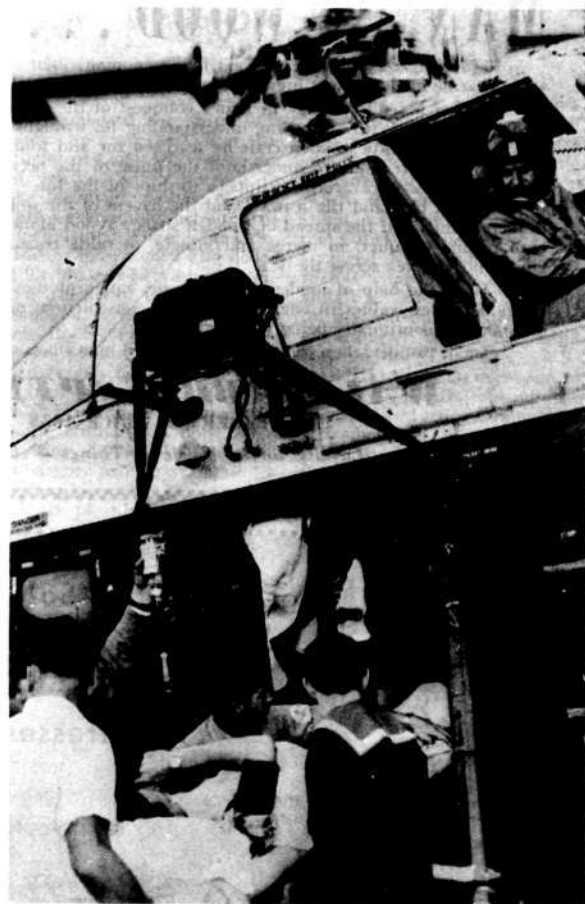
The Navy at present employs 21 nursing sisters. Most of them are at the Flinders Naval Hospital in Victoria and the Balmoral Naval Hospital in Sydney. Others are stationed at Manus Island, the Junior Recruit Training Establishment in Fremantle, the Apprentice Training Establishment near Sydney, the Naval Radio Station in Canberra, and the Royal Australian Naval College at Jervis Bay.

COURT MARTIAL SEQUEL

The Minister for the Navy said recently that the Naval Board had reviewed the proceedings of the trial by court-martial of Captain William John Dovers, D.S.C., R.A.N.

The Naval Board had concluded that the finding of guilty reached by the court-martial was not supported by the evidence, and had therefore decided that that finding should be quashed.

WESSEX HELICOPTER AS AMBULANCE



Lieut.-Commander J. Simmonds (top), pilot of the helicopter, watches Lieut.-Commander E. A. Newton, of the R.N.Z.N. frigate PUKAKI being lifted from the aircraft after it landed on a football field at Middle Head recently. Commander Newton, 41, of Auckland, who is seriously ill, was flown to Sydney from Nowra, suffering from internal bleeding from a gastric ulcer. He was taken ashore from the PUKAKI at Jervis Bay and is now in the R.A.N. hospital at Balmoral.

MAN AND WOOD . . .

From his very beginning wood has been man's best and oldest friend. It was of wood that he made his first fires, fashioned his first weapons, erected his first shelter.

It was a red-letter day in man's conquest of the sea when a floating log bore him across a stream. With awakening understanding he wrought from the log a canoe. And thus, in his first tiny wooden craft he searched for and found new hunting grounds and new peoples. He came to understand the pulse of the ocean and the way of the wind. His canoes grew to caravels, to clippers, to ships of the line. In them he ventured beyond the horizon's rim, and the seaways and the havens of the world came to know the form of timbered hulls and the spread of wooden spars. Wood alone made it possible for man to explore and conquer, to merge and mingle, to trade treasure and exchange ideas, with lands and peoples across the sea.

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Australian Sea Cadet Corps N.S.W. DIVISION

A Review of the 1963 Activities and Training of the N.S.W. Division.

We might well look back over last year's work in the Division with pride. The close co-operation of the Navy ashore and afloat with Training Camps and Courses in H.M.A. Ships and Establishments has enabled practically all members to undergo a period of training which has proved of immense value to them.

The policy of drafting members of the Corps to Ships and Establishments and absorbing them into the ships' companies, as boys under training, has proved more valuable than just sending a number of cadets to a ship or establishment and taking no part in the running of the ship. The Officers and Instructors have gained valuable

experience in their various duties onboard the ship. Of course, we have the Officer, Instructor or Cadet who is unable, through no fault of his own, to take advantage of these courses. This is regrettable, because it is essential that Officers and Instructors have a good knowledge of all phases of training, to enable them to efficiently take command, give instruction or generally be of some value to the Corps. Young boys are quick to note any lack of knowledge in their Officers or Instructors, which is not good for the morale of the Unit. It is hoped that a greater number of Officers and Instructors will be available for courses this year.

It is pleasing to note that

there has been a marked improvement in the Division in all aspects of training, advancements and keenness. A very pleasing exchange of Cadets between N.S.W. Division and Victorian Division has proved a boon to the Cadets. These exchanges, arranged privately between T.S. "SIRIUS" and Units of Victoria and T.S. "SYDNEY" and Victoria at their own expense, has created a deep friendship between the Cadets. T.S. "SIRIUS" made an excursion to T.S. "LATROBE" during the year, and Lieut.-Commander O'Connell, of the "SIRIUS" Unit, is loud in his praises of the hospitality extended to visiting Cadets in Victoria. Such exchanges are good for the



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Corps, and it is unfortunate that more exchanges between other Divisions could not take place.

Most of the activities which have occurred over the year 1963 have been reported, but two very important honours which have come to the N.S.W. Division are the winning of the Waratah Festival Miscellaneous Section of the Band Competition by T.S. "SIRIUS". "SIRIUS" is proud of its band, and they might well be. Under the almost "Iron Heel" rule of C.P.O. Instructor Maurie Dopson, an ex-member of the United Kingdom Sea Cadet Corps, the band has become very efficient. It is Chief Petty Officer Dopson's ambition to match the R.A.N. (?) Band, and by his drive and efficient control of band matters, he could do it, but of course in a small way.

It might be mentioned here that the R.A.N. Bandmaster and

personnel, where practicable, have been very helpful with Sea Cadet bandmen in the making. T.S. "WARREGO" has some budding Cadet musicians, and there is talk of co-operation between "WARREGO" and "SIRIUS" in an effort to produce a combined Sea Cadet Band.

The attendance of Sea Cadet personnel throughout the year has been satisfactory, but there is still room for improvement. The main trouble and problem with attendance is, I should imagine, the same in all Divisions, the Examination periods. We seem to run against the Schooling period; the Study period, and then, when you think it is over, along comes the actual Examination period: this not only affects normal parades, but prevents Cadets from going on continuous training camps and courses. H.M.A. Ships co-op-

erate to the fullest to take the Cadets on seagoing training periods, but we cannot expect the Navy to change their programme to suit the Cadets' availability; consequently only a selected few are available to take advantage of these valuable cruises.

The second big occasion the N.S.W. Division took part in is the winning of the most coveted trophy, "The Navy League of Australia" Efficiency Shield by T.S. "WARREGO". Lieut. Alan Wheeler has not quite recovered from the "shock" yet. Quite a spectacular ceremony took place at Woolwich when T.S. "ALBATROSS" transferred the Colour to T.S. "WARREGO". We were fortunate enough to get through the ceremony during a break in the weather. "WARREGO" worked hard to prepare for the Inspection.



The Band of the Arncliffe Sea Cadet Unit Training ship SIRIUS, taken during the inspection by Captain Scrivenor, RAN, representing the Flag Officer in Charge, East Australia Area, Rear-Ad. Gatacre.

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THE NAVY

Sporting activities in the Division take the form of swimming, athletics, regatta. "SIRIUS" shone in sporting activities for 1963. It is not the size of the Unit, because the entries are limited and therefore any one Unit can only enter a certain number. The atmosphere of complete sportsmanship in which these events are held makes one feel that the Sea Cadet Corps is a well and worthy youth organisation. Of course, we find that parents are not always interested in these events; a pity, because the Cadets would do even better with Mum or Dad present. The N.S.W. Division is endeavouring to form a Sports Committee, assisted by the Command P.T.I. and sporting body. We find that this is necessary. There are so many rules which could easily become "rafferty" if not checked.

Examinations

Examinations, held quarterly for Petty Officer and Leading Rate, have not been quite satisfactory. As I said earlier in this review, we must have efficient Instructors, along with a standard method of instruction and adherence to the syllabus throughout the Corps. The dif-

ference between the standard of Cadets of all Divisions is noticeable when Cadets combine for camps. No two Cadets seem to be instructed in the same way.

I have often thought that standardisation might be achieved by a Central Examination system being introduced. A Standard examination paper, and set of oral questions could be laid down by a central body for all Divisions. This paper would have to be set by the Training Section of Navy Office. The worked papers could be forwarded to the Divisional Senior Officer of each Division for marking. It would be interesting to note the answers, and some idea might then be gained as to the standard of each Division.

Finally

The Corps has still much to learn from the R.A.N., where friendly rivalry between ships and squadrons lead to happy relations and increased efficiency. There is still room for closer co-operation between some neighbouring Units. Sea Cadet Headquarters wish to place on record the admiration and gratitude to all Officers and Instruc-

tors for the splendid work they are doing. They realise only too well how service in the Corps deprives an Officer or Instructor of much of his leisure and home life. In many Units the problem is being overcome by the wife, parents and lady friends of Officers, Instructors and Cadets, who are doing valuable work in the Corps by looking after the canteen and arranging social activities. Headquarters is most grateful to them.

TOP SEA CADET UNIT

The result of the Annual Efficiency Competition among Australia's 38 Sea Cadet Units was announced in Canberra recently by the Minister for the Navy, Dr. Forbes.

Dr. Forbes said the Efficiency Trophy, presented by the Navy League of Australia, had been awarded to the Training Ship "WARREGO" in Sydney. The Naval Board had sent its congratulations to this Unit.

Training Ship "WARREGO" comprises three Sea Cadet Officers, two Instructors, and 45 Cadets. It was granted Naval Board recognition on the 11th December, 1947, when the Australian Sea Cadet Corps of the Navy League of Australia was formed as the Naval counterpart to the Army Cadet Corps and the Air Training Corps.

At that time the Corps comprised six former Navy League Sea Cadet Units in N.S.W., four in Victoria, and the affiliated Unit, T.S. SYDNEY, at Snapper Island, Sydney. In the last 16 years the Australian Sea Cadet Corps has expanded to 38 Units in all States in the Commonwealth.

Award of the Annual Efficiency Trophy follows an inspection of the most efficient Sea Cadet Unit in each State by the Director of Naval Reserve. The Trophy was won last year by the Training Ship BEDFORD, in Western Australia.

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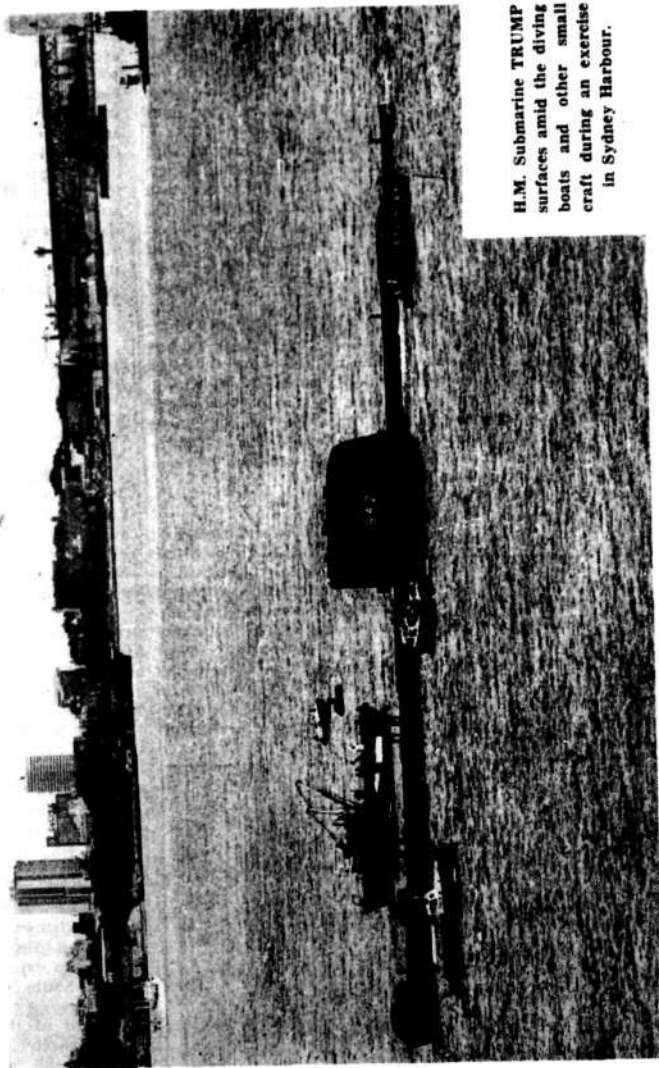
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H.M. Submarine TRUMP surfaces amid the diving boats and other small craft during an exercise in Sydney Harbour.

Selected for Royal Yacht

Ten Australian sailors have been selected to serve in the Royal Yacht, **BRITANNIA**, during the Queen Mother's visit to New Zealand and Australia this year.

The Australian ratings will join the Royal Yacht in Fiji.

The men selected to represent the R.A.N. in **BRITANNIA** range from cooks to engineering mechanics.

An R.A.N. officer, Lieut. Rodney G. Taylor, of Toowoomba, has already been selected for **BRITANNIA**, and has reported for duty in the Royal Yacht.

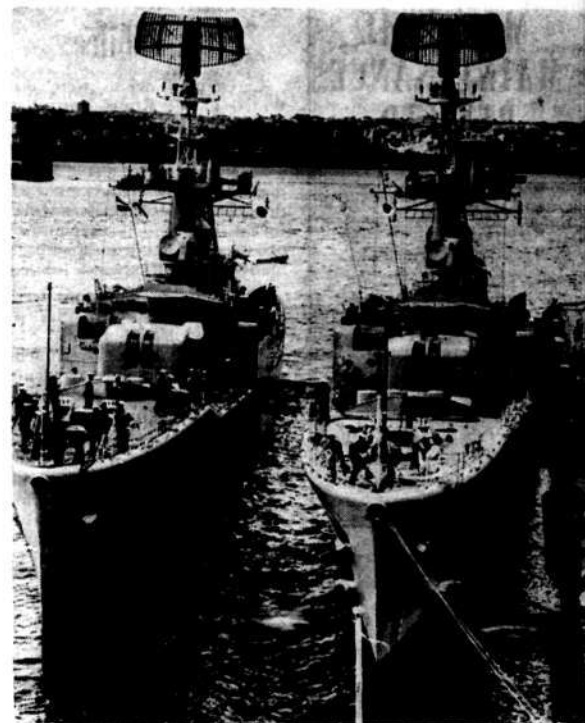
Record Naval Entry

A record number of more than 200 young men from all parts of Australia entered the Navy's Junior Recruit Training School in Western Australia early in January.

The 205 Junior Recruits began training at H.M.A.S. LEEUWIN in Fremantle on the 8th January. This was the biggest single intake into the School, which was playing an increasingly significant part in the Navy's training programme.

There were 660 applicants for the 205 positions at the Junior Recruit School.

The Junior Recruits, aged between 15½ - 16½, spend a year at H.M.A.S. LEEUWIN before being channelled into the regular Naval training system. The 12 months of academic and professional training gives them a solid foundation on which to build their future in the Navy.



H.M.A.S. PARRAMATTA and YARRA alongside the fitting out wharf, Garden Island, prior to their departure for the Far East. They will relieve H.M.A. Ships VENDETTA and QUIBERON who at present represent Australia's contribution to the Strategic Reserve.

The Junior Recruit Training Scheme, first introduced only three years ago, has played an important role in the R.A.N. manpower expansion programme. In particular, it was producing young men with a better potential to cope with the requirements of the "missile age" Navy.

The Junior Recruit Training

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Ceremonial Drums For Jubilee

Ceremonial drums were presented to the Royal Australian Navy at special ceremonies in many parts of Australia late last year.

State Governments were each donating a sterling silver drum to the R.A.N. A complete set of 11 ceremonial drums had been made to mark the Navy's jubilee.

The State presentations were made at public ceremonies attended by Naval bands. In Sydney, the N.S.W. Government officially handed over its drum at a ceremony in Hyde Park.

The Commonwealth Government is also providing some of the instruments. The full set of ceremonial drums will be paraded for the first time this year, when the Commonwealth drums will be handed over at a Naval massed bands ceremony in Canberra.

The drums, for use on important Naval occasions, are a tangible tribute to the R.A.N. from the Commonwealth and States. It was 50 years ago last year that the R.A.N. took delivery of its first fleet.

The Governments of South Australia, Western Australia, Queensland and Tasmania provided a side drum; N.S.W. and Victoria, tenor drums; while the Commonwealth donated one bass and four side drums.

It is expected that Her Majesty the Queen Mother will present the Commonwealth's drums during her visit to Canberra.

Each drum carries a commemorative plaque, and also has the appropriate Commonwealth or State crest, to indicate the donor. The instruments were made by a Brisbane firm.

HMAS HOBART LAUNCHED

The Royal Australian Navy's second guided missile destroyer, H.M.A.S. HOBART was launched in the United States on Thursday, 9th January.

The ceremony took place at the Defoe Shipyard in Bay City, Michigan, where the new £20,000,000 warship was launched by Mrs. David Hay, wife of the Australian Ambassador to the United Nations.

The first of the three Charles F. Adams Class guided missile destroyers for the R.A.N., H.M.A.S. PERTH, was launched at Bay City last September. The versatile, all-purpose warships will be armed with missile systems for use against aircraft and submarines, and will have a speed exceeding 35 knots. PERTH and HOBART will commission in the United States next year. The third guided missile destroyer, H.M.A.S. BRISBANE, will be completed later.

The Lord Mayor of Hobart sent the following message to H.M.A.S. HOBART at Bay City:—

Aldermen and citizens of Hobart convey warm greetings on the occasion of the launching of the guided missile ship, H.M.A.S. Hobart. We trust its life will be both useful and peaceful. The City of Hobart eagerly awaits a first visit, and assures captain and crew of a hearty welcome.—Signed Basil Osbourne.

THE NAVY

H.M.A.S. NIRIMBA GRADUATION

(Continued)

right up to the final event, and we were very pleased with ourselves on coming out on top.

"Another notable achievement was the winning of the Dempster Cup for Rugby Union by the Establishment, with the help of five Apprentices, who very ably filled a weak spot or two, and probably provided just that fine edge which made the difference. It is remarkable what a difference a few really fit men can make to a team.

"In other competitions a number of teams reached the final fours, and two, the Australian Rules team and the B-grade hockey team, reached the grand finals, only to be beaten, but nonetheless unbowed.

"Boxing is a rather Cinderella sport, yet it is the one which probably brought us more fame than any other because of three Apprentices who entered for the N.S.W. State titles. One was beaten in a semi-final, one in a final, and one Apprentice Hobbs won the flyweight title, and was runner-up in the Australian titles after a very close contest with the ultimate winner.

"As far as Summer sports are concerned, we do not find it possible to enter into any competitions, except basketball and athletics. This is due to our long leave period in the middle of the competitions, and the consequent loss of playing days. However, every effort is made to arrange social matches, and we hope to be more successful in this regard than we have been to date.

"Our athletic team competes in the Metropolitan D-grade Competition, and at present holds second place. When our new track becomes available

shortly, we hope to improve greatly on this and rise steadily up the ladder of grades.

"We find we have a pretty good swimming team, and were the members able to get regular training we would, I'm sure, have a very good one. But, and what a big but this is, we do not yet have a swimming pool — not one that could be called such, anyway. However, by hint dropping and the sending of pleading letters, who knows? We are still hoping. However, we are very grateful to Air Commodore Pearce, Air Officer Commanding, R.A.A.F., Richmond, who has kindly allowed us to the use of his excellent pool.

"Another activity we became very proficient in this Term, Sir, was escorting debutantes. After an uncertain start, the demand for 'debs' partners became so great that it was found necessary to appoint a Deb. Officer in order to make sure the right number of partners got to the right place at the right time.

"With your permission, Sir, I

would like just a final word to the Passing Out Term. To-day, you, as the Senior Term, have passed your authority as Senior Apprentices to your successors, the Seventh Term. After another year of training in the Fleet you will assume the mantle of responsibility and authority. You will be carefully observed, and you can rest assured that you will be pretty severely criticised, so don't assume the mantle lightly. Always remember that the Navy's reputation for leadership and service is quite largely in your hands, and that by your example you can enhance that reputation. Never, by word or deed, tarnish that reputation.

"On behalf of us all who remain behind at NIRIMBA, I wish to congratulate you on graduating from this Establishment and to wish you all the luck and good fortune for the future.

"Thank you, Sir, for being so kind as to be present here to-day. I, and all of us, are very disappointed that the weather has been so unkind.



Successful Hockey Team from H.M.A.S. NIRIMBA

JANUARY/FEBRUARY, 1964

SUBMARINERS — In Inland Australia

(Continued from last issue)

"It grew dark some six miles before King's Canyon, and the expedition made a camp by a large rock pool at the head of the creek. That night the sky remained overcast, and the wind rose. Dawn showed little improvement. There was an occasional spot of rain, and the sky kept its heavy leaden colour.

"Fantastic Sight"

"King's Canyon was indeed a fantastic place.

"The party spent the forenoon climbing far up inside it and along its top.

"From the latter vantage point one could stand on the brink of sheer, smooth sandstone walls and look down on the canyon floor, 300 feet below.

"Also on top was the 'lost city', a wilderness of strange beehive-shaped domes, some 50 to 60 feet high, divided by paved streets and sudden crevasses, the eroded handiwork of a fickle wind and strata rifts.

"Higher up in the canyon a natural dam had trapped rain water into large pools surrounded by palm trees, and above this point the gorge was filled with a rich profusion of tropical vegetation, vividly contrasting with the parched surroundings.

"Time was running out. The party turned southwards and headed for Lake Amadeus, 50 miles away across the sand dunes. This proved to be the toughest phase of the entire trip.

"Initially following a track made by surveyors, and used only two or three times, the expedition very soon came face to face with the problem of driving over soft sand.

"The surveyors had used two short-based Landrovers, and their trail twisted sharply through the scrub, climbing steeply over the soft ridges.

"Many times the expedition had to re-route its less manoeuvrable long-based vehicles, dig out, tow and push itself over the hills.

"Particular trouble was caused by the heavily laden trailer, which acted like a sea anchor, floundering hopelessly, axle deep in sand.

"In all, although the journey to Amadeus was supposed to take 12 hours, it actually involved two and a quarter days of thirsty toil.

Tough Going

"Towing became a commonplace operation that before long was reduced to a fine but demanding art.

"It normally started with the unattached Rover safely on a crest and the second bogged down halfway up the rise.

"After digging it out, cutting channels for its wheels and laying brushwood to get a better

grip, the tow would be connected and the pulling commence.

"All too frequently this resulted in a spectacular spinning of wheels and further sinking into the sand.

"The trailer would then have to be disconnected and its Rover pulled up separately.

"With both Rovers on the crest towing together, and a strong team, shoulders to the trailer wheels, the operation was then usually successful.

"The longest tow took over two hours.

Water Rationed

"There was a feeling of insignificance in tackling these interminable ridges.

"One day a vicious sandstorm completely stopped all work for a quarter of an hour.

"It was the final fling of the bad weather.

"Thereafter the sky cleared



Four of the submariners photographed at Alice Springs with one of the Landrovers.

THE NAVY

and the party sweltered under a blistering sun which drained the colour and energy from everything and everyone.

"Life became uncomfortable.

"Now away from all sources of water and allowing for emergencies, water was strictly rationed.

"Hot work was aggravated by raging thirsts, and midday water rations were divided with minute precision, avidly watched by all.

"Flies, too, became a menace.

"No one was without their personal cloud of faithful admirers, which buzzed incessantly in exasperating circles.

"They were as ubiquitous as the sand itself, crawling into the eyes, nose and ears, clustering round the mouth and driving everyone to the limits of patience.

"Welcome, indeed, were the cool evenings when all flies miraculously disappeared, and there was time to relax and appreciate a good billy of tea.

"By the end of the first day the expedition had travelled only 20 miles.

"Early during the second day the surveyors' track petered out, and the party made its own way across the dunes, using a compass.

"It was late in the evening of the second day after a particularly tedious tow that the somewhat weary pioneers gained a crest and looked down on Lake Amadeus, a sinuous thread of white stretching far out into the darkening dunes.

"It was a both stirring and welcome sight.

"During this second day amongst the sand dunes, the expedition stumbled upon some aboriginal cave drawings.

"Feeling its way down a narrow creek, building a primitive road as it went, the party was making a pass through a long 50-ft-high ridge when someone noticed caves in its southern banks.

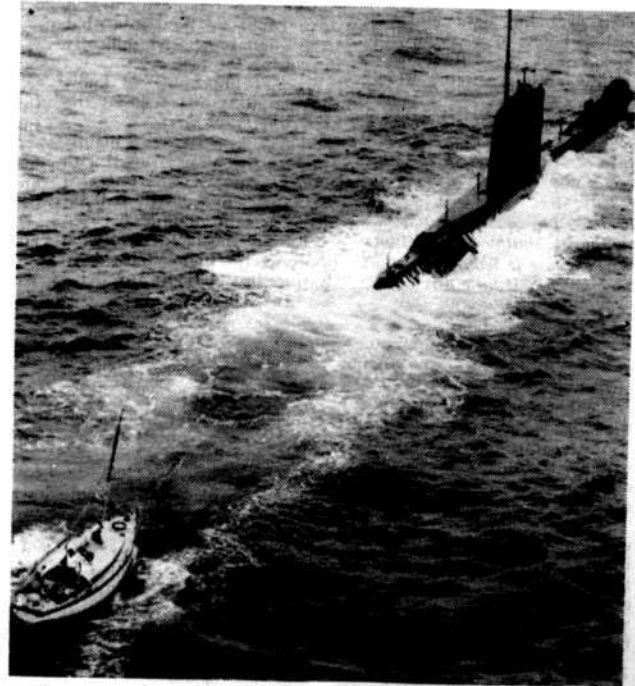
Investigation revealed numerous drawings prudely scratched in a kind of chalk.

"Hell of Muddy Flats"

"There was a well defined spoked wheel, some primitive human outlines, and several indistinct blotched patterns.

There was also evidence of old fireplaces, and the area was littered with bones.

H.M. Submarine TRUMP tows the disabled yacht LOLITA, one of the yachts in the Hobart Yacht Race — a different view to those submariners who recently visited Central Australia.



JANUARY/FEBRUARY, 1964

"Everything was comprehensively photographed before the expedition moved on.

"Later, after returning to Alice Springs, no one appeared to have heard of these particular drawings.

"It is possible that the expedition was the first to discover them, as the creek was extremely well hidden and very narrow where it passed through the ridge.

"The expedition had struck Lake Amadeus in the middle, more to the west than had been anticipated.

"As it happened, the area had very many islands close by, but it was also one of the wildest parts of the Lake.

"To cross the salt in Landrovers was against the advice of all authorities at Alice Springs, nevertheless, several teams scattered over the Lake and dug testing holes to ascertain the thickness of the salt crust.

"The results were widely varied.

"The Lake itself is described in the Australian Encyclopaedia as a 'bottomless hell of mud-flats.'

"A slim wedge-shape, it stretches for about 70 miles in a northwest-southwest direction.

"To cross it would therefore have saved a 35-mile drive along its shores to get round the end.

"It was not to be.

"The salt appeared firm, but suddenly it became softer than putty.

"Tentatively the Rovers were tried on the very edge.

"They ran perfectly until, without warning, one of them sank up to its axles in a grey slime.

"Only by dint of reversing it up its own tracks, unloading all its equipment, digging all round its wheels and towing from firm ground with the second Rover was it just cleared after two hours' of desperately hot work.

"There was no alternative but to go round the end of the Lake.

"Loathe to Leave Lake"

"Knowing the speed of travel over sand dunes, it was also becoming clear that there was little time to carry out a biological survey.

"The extra 35 miles down the lakeside, followed by a further 25 miles over sand ridges would have to be covered before reaching the main graded dirt road from Alice Springs to Ayre's Rock, and there only remained two days in which to do it.

"Reluctantly, the decision was made to press on; only a few hours were devoted to looking at the survey area.

"It was established, however, that there were several animal tracks in the salt.

"Dingo, kangaroos, camel and emu tracks were all evident, and there could be no doubt that large animals had no difficulty in crossing the Lake.

"It was impossible to know whether all fauna enjoyed the same liberty.

"The Lake surface was mainly a light brown, finely rutted with a thin crisp layer of congealed dust, sufficient to give small lizards a certain amount of cover.

"By day the temperature was oppressively high and dehydrating, but at night any living creature would have little trouble in crossing from an island to the shore.

"The party was loathe to leave the Lake.

"Hot and glaring with shimmering mirages hovering round the edge, it had been the aim of the expedition.

"It was frustrating after so much hard work, to have reached the goal and yet to have been unable to devote any time to research.

"The possibility of an evolution peculiar to those islands therefore still exists, and will remain an uncertainty until

another biological expedition reaches the area.

"The journey down the lakeside was uneventful, and the following day the expedition made good time across the dunes.

"By noon, Ayre's Rock was reached, and there was an opportunity to drink unrestricted quantities of cool, clear water.

"With the extra mobility afforded by flat roads, there was even time to visit the Elgas, another group of weird dome-shaped mountains.

"Everyone staggered enthusiastically to the top of Ayre's Rock, the world's largest monolith, a vast red hemisphere rising abruptly 1100 feet above the surrounding dunes.

"From its top, far away on the northern horizon could be discerned the fine white line of Lake Amadeus.

"Back at Alice Springs there was a feverish hustle to return gear and vehicles.

"The Landrovers had served well, the only trouble being three punctures and one broken spring leaf.

"By the morning, all equipment was packed into the train, and the long journey home had begun.

"It was completed without incident.

"In Sydney, the expedition had few material achievements to display.

"There were sundry specimens that had been collected throughout the trip at various campsites, a choice selection of minerals very kindly given to the party at Alice Springs, the knowledge the salt lake was not an impenetrable barrier to all wild life and, perhaps, most noteworthy of all, was the discovery of aboriginal drawings.

"Apart from these material results, however, there could be no doubt of the success of the trip, in getting away from the sea, and exploring a little of Central Australia.

HMAS SUPPLY

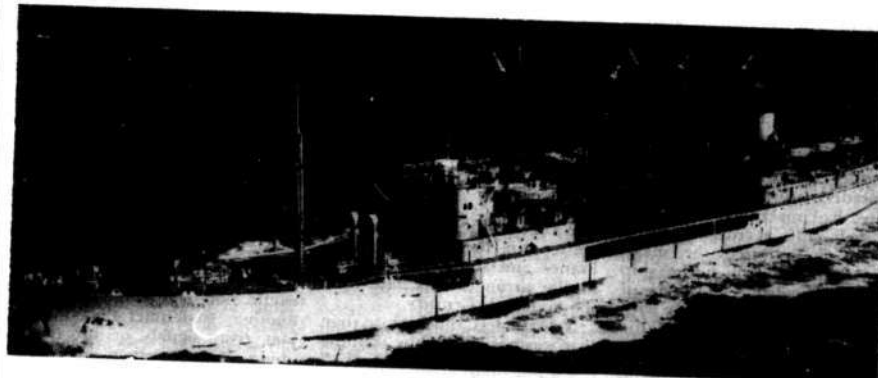
Right: Captain G. V. Gladstone, of H.M.A.S. SUPPLY, places a wreath at the Kieta War Memorial. Officers and men of the Australian Minesweeping Squadron and the Fleet Tanker SUPPLY, held the commemoration ceremony in honour of Australians who fought and died in the Solomon Islands in the Second World War.



Below: H.M.A.S. SUPPLY returned to Sydney on 10th December after assisting the minesweepers to complete the biggest minesweeping operation carried out by the R.A.N. for 16 years. SUPPLY left Captain Cook Dock on Monday, 17th January after a hull clean and paint.

ENGINE ROOM FLOODED

In the early hours of January 19, the engine room was flooded to a reported depth of 20 feet. The cause of the mishap has not yet been reported.



JANUARY/FEBRUARY, 1964

THE NAVY

FOR THOSE IN PERIL ON THE SEA

By DAVID WOODWARD

(Reprinted from the *UNESCO Courier*)

During the years 1960 and 1961 nearly 200 ships, totalling more than three quarters of a million gross tons, were lost at sea. The exact figures were 114 ships of 418,195 tons in 1960 and 78 ships of 355,362 tons in 1961. But while details are available for ships of a certain size—only vessels of over 500 tons are included in the figures given above—it is quite impossible to obtain precise figures for small craft or the loss of life by drowning.

The most nearly authoritative guesses speak of about 200,000 lives lost annually in every kind of drowning accident from a collision between passenger liners in the North Atlantic to the destruction of tiny fishing vessels and their crews by a typhoon in the Far East. Accidents at sea are thus so numerous that the dead go unnumbered. The sea is still cruel and there are times when even the best-handed ship is at its mercy.

To prevent folly or greed from jeopardizing ships and the lives of seafarers, regulations have existed since Noah limited the passenger capacity of the Ark. The Greeks and Romans established regular laws. Emerging from the Middle Ages, 600 years ago, the English and the French made laws to regulate the traffic by sea; already in the Twelfth Century, the Crusaders, using mostly Italian ships, had marked on the sides of their craft a cross, the arms of which indicated the maximum depth to which the ship might be loaded. The mark of the Crusaders made its way with the flow of trade to the Baltic and within a hundred years it had been adopted by the merchants of Visby on the Swedish

island of Gotland.

This use of a load line was, of course, on the same principle as the famous Plimsoll line, adopted by British shipping in 1876 after a tremendous battle in Parliament. Plimsoll himself was by no means careful of the accuracy of the charges he flung about the House of Commons. But fundamentally, he was right. Many men were being sent to sea in overloaded or inadequate ships for the sake of gain; such ships were too often disaster-prone in bad weather. When Britain stipulated that her ships should not be overloaded, the British Government also laid down that foreign ships using British ports should conform to the same regulations.

The problem of safety at sea had become especially grave by the nineteenth century because of the great development in world trade and because iron steamships could sustain greater hazards than wooden sailing ships. However, for centuries before the Industrial Revolution the training of sea captains, pilots and seamen had been an object of concern to the principal maritime powers. Henry the Navigator, of Portugal, had, perhaps, first of all, tried to systematize these matters; the Emperor Charles V had followed his example, and Henry VIII of England founded the establishment known as the Brethren of Trinity House which, to this day, controls lights and pilotage matters in British waters. In France and the Low Countries similar arrangements date from the Sixteenth Century.

Nevertheless, much more than that was needed for the training of seafarers in the first half of the Nineteenth Century. The

Foreign Office in London, through its consuls abroad, began a long agitation to raise the standards of conduct and technical proficiency in the British merchant service—not only for humanitarian reasons but for economic ones as well. The consul at Riga reported in 1843:

"Foreign shipmasters are generally a more respectable and sober class of men than the British. I have always been convinced that British shipowners are great losers from the serious delays occasioned while on the voyage and discharging and taking in cargoes, growing out of the incapacity of their shipmasters and their intemperate habits. I have had occasion to remark that American vessels, in particular, will make three voyages to two of a British vessel, in this way having an immense advantage over their competitor" (1).

(1) *Seafarers and Their Ships*, London, H.M.S.O., 1955, p. 22.

Developments in the field of trade and in naval construction had brought increased problems to the seafarer, but at the end of the nineteenth century developments in telecommunications more than redressed the balance. Nevertheless, when radio telegraphy was first introduced, it began in a state of confusion. Ships and shore stations were often fitted with different types of equipment operated by different companies. Competition became so keen that the employees of one radio company would not handle the traffic of another; sometimes they would jam rival signals or broadcast abuse of each other. It took two big international confer-

ences, held in Berlin in 1903 and 1906 to bring some order to the situation and to secure an acceptable agreement between the various countries.

A little later, in 1909, came the first use of wireless telegraphy to summon aid to a vessel in distress, when the White Star liner *REPUBLIC* was sunk in collision off Nantucket. A young man who was the ship's radio operator made history and a name for himself by sticking to his post and summoning aid which was brought by ships of five different nationalities. These immediate replies to the *REPUBLIC*'s distress signals were an extension of the unwritten law of the sea whereby a response must be given to appeals for help. There is also a material side, since the first ship to answer effectively an appeal for help may be able to earn her owners and crew very considerable sums for salvage.

The original radio distress call had been the letters *CQD*—Come Quick Danger—but by 1912, this had been changed by international agreement to *SOS*—not because these letters stand for anything, but because the combination of three dots, three dashes, three dots in Morse code was judged to be especially ear-catching. The signal is sent: "SOSOSOS..." while a much lesser degree of emergency is signified by the letters "TTT." Much later, with the advent of radio telephony, the phrase "May Day" (from the French *m'aidez*) was used for a spoken, as opposed to Morse, appeal for help.

Three years after the loss of the *REPUBLIC* came the sinking of the *TITANIC*, perhaps the greatest peacetime sea disaster in history.

Even after fifty years crowded with terrible events, the story of this disaster still has power to horrify. In 1912, when the nations had experienced no

world war for almost a hundred years, it came as a blow so shocking that it made men doubt the order in which they lived.

Briefly, four vital factors caused the disaster and the enormous loss of life which accompanied it. They were:

- The failure of the iceberg warning measures.
- Insufficient life boats to hold all the passengers and crew.
- Poor water-tight compartmentation, so that the ship flooded easily, and
- Confusion over radio traffic which hampered reception of the *TITANIC*'s SOS.

A conference of the principal sea-faring powers was convened in London during the winter of 1913-14 to deal with these points on an international basis. Although the agreements were never officially ratified, because of the outbreak of World War I, they did bit by bit come off the conference table and begin to shape the lives of those who worked or travelled by sea.

First and foremost of these agreements was the formation of the North Atlantic Ice Patrol. This was set up by the United States Coast Guard with international financial support and functions to this day, using ships and aircraft to spot dangerous icebergs.

The *TITANIC*'s boats held only 1,178 people, and the ship had on board at the time over 2,200 people. In fact, owing to the difficulty of loading and handling the boats, not more than 700 actually found places in the boats, and 1,517 people lost their lives, hundreds of them not drowned, but found next morning floating in their life jackets, frozen to death in the icy waters.

Accordingly, "boats for all" became a popular slogan and the 1913-14 conference laid great stress on these being provided in the future—perhaps too much

stress, because there are many occasions upon which a ship sinks so fast that there is no time to complete the launching of boats, and extra life rafts would be more valuable than boats.

Regulations were also proposed by the Conference to improve the standard of water-tight compartmentation and also to diminish confusion over radio messages. Warnings of icebergs had failed to reach the *TITANIC*'s captain and his SOS went unheeded by a ship within sight of the lights of the stricken liner, because her radio operator had gone to bed.

At the conclusion of World War I and with the creation of the International Labour Organisation (ILO) in Geneva, another approach was made to the question of safety of life at sea. The ILO's principal preoccupation was with working conditions and hours, but their immediate relevance to safety may be seen when efficiency is considered in terms of a well-fed, well-rested and healthy crew, compared with one which is not.

Crowded forecastles, where men sleep in damp straw, eat badly cooked mixtures of food from a single dish, after it has been carried from the galley across an open half-deck, where there is a struggle to dry soaked clothing and as hard a struggle to get sufficient fresh water, are not quite a thing of the past. But the picture is certainly brighter than it was thirty years ago and international action can take much credit for the improvements that have been made.

While the conference room has thus been productive of reform at its own tempo over the past four decades, the laboratory and the electrical workshop have within the past 15 years or so provided a series of revolutions of their own in the field of maritime safety. At the end

of both world wars, international co-operation at sea on a large scale was necessary to sweep the hundreds of thousands of mines laid by both sides.

In between 1914 and 1918 some 240,000 mines were laid, while that figure was nearly doubled in the Second World War. The mines were most thickly strewn in European waters and in the three years after V-E Day, 1,900 mine-sweepers took three years to sweep safe channels of some 125,000 miles. In theory, these mines become useless after a period of years, but no chances can be taken. After all, live mines from the Russo-Japanese war of 1904-5 were still being reported in the 1930's.

Some wartime developments for detecting ships and aircraft have resulted in entirely new devices which have revolutionized navigation, especially in dangerous waters. Nor is there any sign of this process of change being complete — future developments, it would seem, will be just as far-reaching as those which have occurred since 1945. Radar and its refinements have combined to offer solutions to a great many of the mariner's safety problems, although they have in turn set problems of their own.

Briefly, radar's supersonic electrical impulses, reflected off objects which they strike above the surface of the sea, reveal the presence in fog or darkness of rocks, other ships, or other obstacles. At the same time, the electric impulses of asdic or sonar can reveal the depth of the sea and the presence of submerged obstacles.

These new sciences are still in their infancy. Refinements of radar are now being developed whereby stations ashore and on board a ship, working together in coastal waters, can indicate a ship's position as a tiny disc of light on her own chart. Experts

point out, however, that these and other devices are only aids to navigation, and that the first line of defence against disaster is the mariner himself, his eyes and his brain.

The precision of such development is such that the suggestion has now been put forward that in crowded waters and fog — the seaman's worst enemy — the movements of ships should be controlled from the shore in the same manner that the landings and take-offs of aircraft are controlled from the ground. The traditional independence of ship-masters is likely to give this proposal a discouraging reception but as traffic grows, it may be necessary to impose it, nevertheless. It is, at any rate, a far cry from the fog-horn, hitherto the only aid to safety and navigation in thick weather.

A similar measure of control which has been proposed is the introduction of a kind of one-way traffic system in the Straits of Dover, whereby west-bound ships use one channel and east-bound ships another. The Straits are still the busiest sea lane in the world, with 750 ships passing every day.

IMCO, to which this proposal has been referred, is the Inter-Governmental Maritime Consultative Organization which was set up in London in 1959 as the maritime agency of the United Nations. In its first four years of existence, more than 50 nations with most of the world's shipping, have become members. One of its main tasks is to place the international work on safety of life at sea on a permanent basis, which was hitherto the task of international conferences summoned from time to time at sporadic intervals. The first such conference was that already mentioned after the TITANIC disaster in 1914-15; two more followed in 1929 and 1948.

However, IMCO's concern is not only with the safety of life

at sea; the agency also deals with discriminatory actions and restrictive practices in the field of shipping, organizes the exchange of information between governments and considers any maritime question that may be referred to it by the United Nations or by any other of the specialised agencies.

In May and June, 1960, IMCO held a conference in London on the safety of life at sea, at which fifty-four nations were represented. This meeting thrashed out the technical aspects and drew up a new Convention which included up-to-date provisions on the use of radar and modern types of life-saving equipment. The safety of nuclear-powered ships, signalling, fire-fighting, electrical equipment and collision regulations were all included in the final Convention. The measures adopted represented another step forward to reduce the risks run by seafarers.

But in the struggle with the sea there can be no final victory. Vigilance, courage and ingenuity are always required. International regulation and electronic invention can strengthen these qualities, but are no substitutes for them. A note of the grim reality which lies behind IMCO's work was provided recently by that organization's request to the World Health Organization to set up an expert committee to investigate the controversial problem of whether shipwrecked mariners should, in an emergency, drink sea water. The experts unanimously decided against such a remedy, despite recent claims that this is one way in which the castaway can prolong his life.

David Woodward is a documentary writer-producer for the British Broadcasting Corporation, London.

THE NAVY



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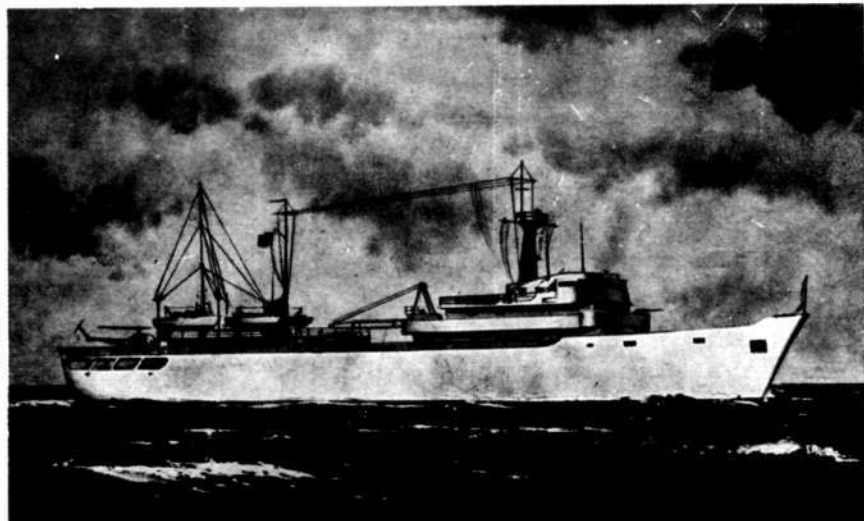
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NAVAL TRAGEDY

The whole of Australia was shocked when the Daring Class destroyer, H.M.A.S. VOYAGER was sunk after a collision with H.M.A.S. MELBOURNE on the night of Monday, 10th February, with the loss of 82 lives.

STATEMENT BY MINISTER FOR NAVY

At 9 p.m. last night, MELBOURNE and VOYAGER were conducting flying operations about 20 miles off Jervis Bay. VOYAGER was acting as rescue ship, and her function was to stand by and pick up the crew of any aircraft which might fall into the sea while in the process of landing on or taking off from MELBOURNE.

VOYAGER was roughly half a mile astern of MELBOURNE, so that when the carrier reversed her course it was necessary for her escort to transfer her position from ahead to astern. It appears that in carrying out this manoeuvre VOYAGER cut across the bows of the MELBOURNE, and was cut in half. The forward part appears to have sunk almost immediately, the after part remaining afloat for about three hours.

"ROYAL COMMISSION" — Prime Minister

The Prime Minister, Sir Robert Menzies, described the disaster as unparalleled in the peace-time history of Australia. "The Government and the Naval Board extend their very deep sympathy to the bereaved families who have sustained so sudden and tragic loss," he said.

Sir Robert also announced that he considered that the normal machinery for Naval investigation was inadequate in this case, and that there would be a full public investigation, conducted by a judge.

Sir John Spicer, the Chief Judge of the Commonwealth Industrial Court, was later appointed the Royal Commissioner. His terms of reference are:—

- (a) The cause or causes of the collision that occurred on February 10, 1964, between the ships of our Australian Navy, MELBOURNE and VOYAGER, and the resulting loss of VOYAGER and the lives of persons on board VOYAGER.
- (b) The facts and circumstances leading up to, contributing to or other relating to the collision and the loss, including so far as relevant to the cause of the collision, the nature of the exercise on which the ships were engaged and the suitability and preparedness of the ships and of their equipment, and crews for that exercise.
- (c) The facts and circumstances relating to the rescue and treatment of survivors.

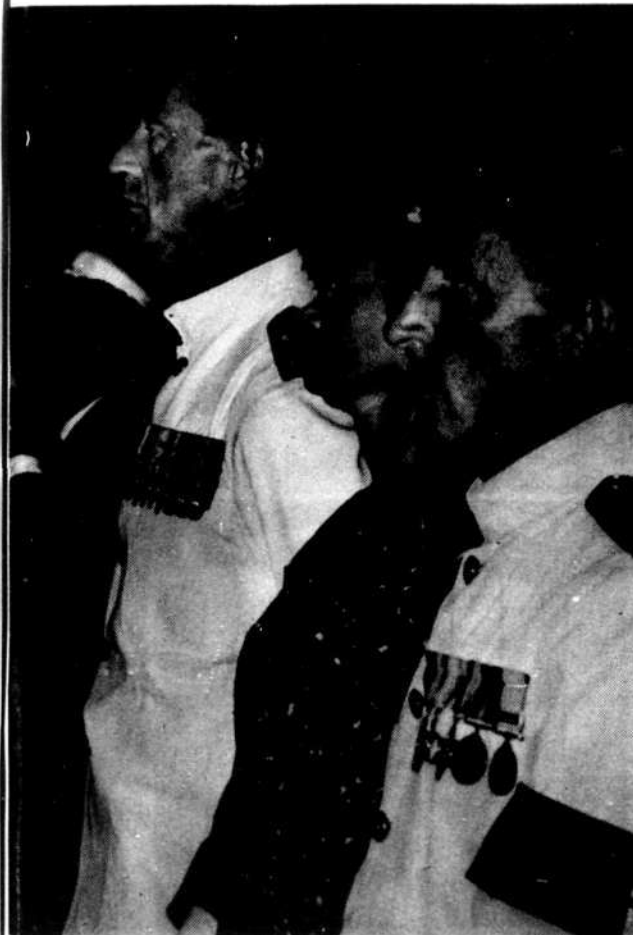
The terms of reference were prepared by Sir Robert Menzies and the Attorney-General, Sir Garfield Barwick.

MARCH, 1964



H.M.A.S. VOYAGER, pictured above, was named after one of Australia's World War II "Scrap Iron Flotilla". Of 3,500 tons, she carried a complement of 317 men. Built at Cockatoo Dockyard, Sydney, she cost over £6,750,000.

MOURNING FOR VOYAGER



Captain J. R. Robertson, captain of the RAN flagship Melbourne, and his wife, at the memorial service for the Voyager dead at St. Mary's Cathedral, Sydney. On the right is Lieut. Commander Charles Morbey, Fleet direction officer stationed on HMAS Sydney. Captain Robertson also attended the service at St. Andrew's Cathedral.

Messages of sympathy on the loss of VOYAGER were received from all parts of the world.

They ranged from a message from Her Majesty, Queen Elizabeth, to condolences from the small Japanese port of Karatsu. VOYAGER visited Karatsu on her recent tour of duty in South East Asia.

ROBERT H. BARNUM, National President, Navy League of the United States:—

"The entire membership of the Navy League of the United States joins me in expressing deepest sympathy for your tragic loss of the gallant men of the crew of the destroyer VOYAGER.

Please pass on to their families and the officers and men of the Royal Australian Navy our heartfelt condolences."

MEMORIAL SERVICES

At the request of the Naval Board, memorial services were held throughout Australia on February 21, which was declared a day of national mourning for the Navy.

The Navy arranged free transport for next-of-kin to attend the services in the capital cities.



Part of the overflow congregation who listened to the memorial service on loudspeakers outside St Andrew's Cathedral.

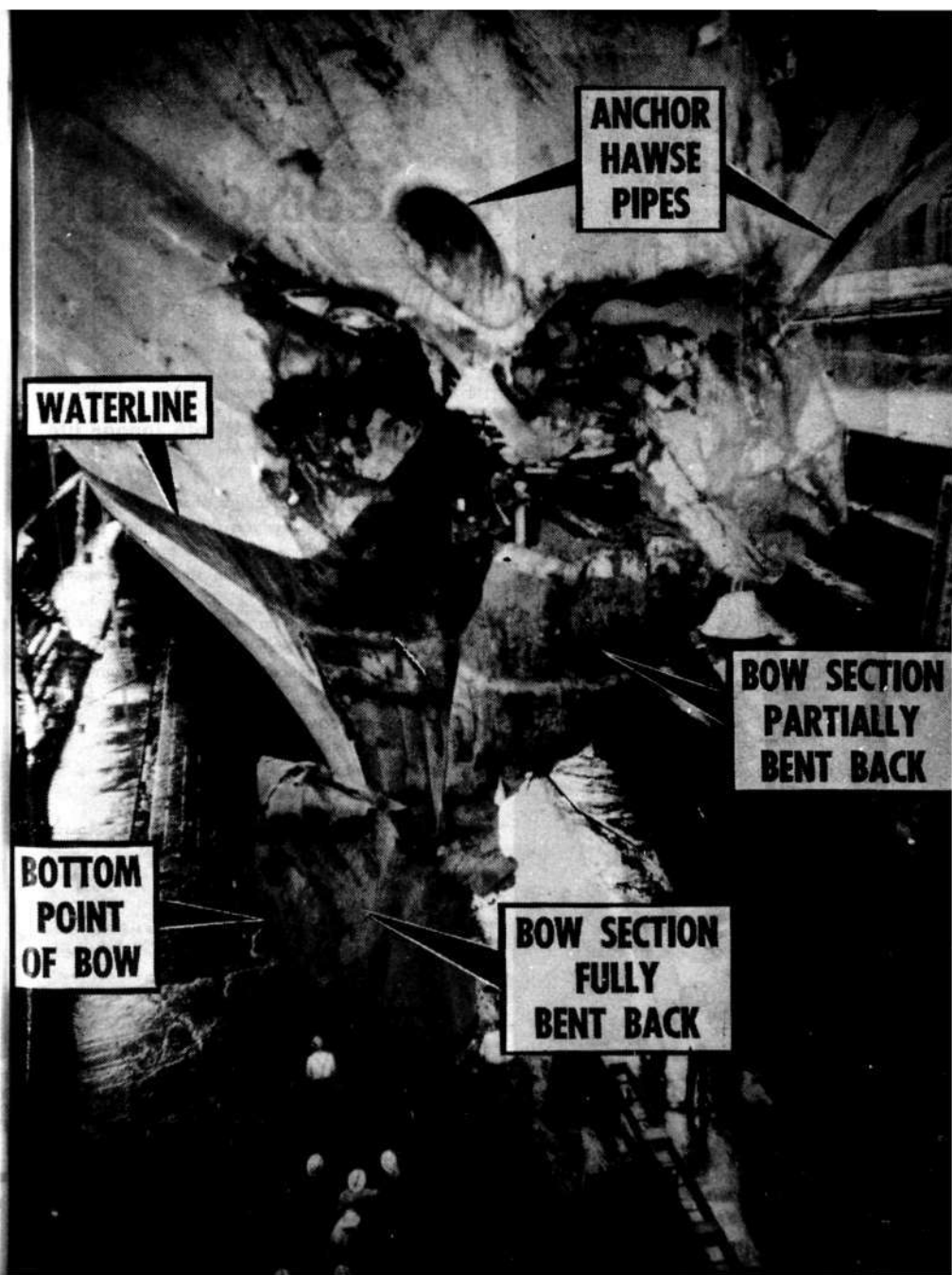
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Protestant Chaplain, the Rev. W. J. Bates, conducts the service for Lieut. H. D. Cook at H.M.A.S. Watson. Through the window, H.M.A.S. Vampire returns from the sea burial of A. B. Parker.

THE NAVY



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MARCH, 1964

7

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Launching Of "EMPRESS OF AUSTRALIA"

Statement by Minister for Shipping and Transport at Cockatoo Island Dockyard

The Australian National Line had ordered many new ships at a time when the domestic shipping industry was languishing.

This was said by the Minister for Shipping and Transport, Mr. Freeth, shortly after the 9850 tons *Empress of Australia* was launched at Cockatoo Island Dockyard, Sydney.

Since its formation in 1957, the Australian National Line had added 14 new ships, at a cost of £13 million, to its fleet, Mr. Freeth said.

The A.N.L. had provided stability and allowed an expansion of the shipbuilding industry generally, and it had operated profitably.

The Minister said that if oil companies proceeded with their proposals to build in Australia tankers for use on the Australian coast, manned by Australian

crews, the shipbuilding industry could look forward with confidence to the future. The Australian shipbuilding industry had advanced rapidly since it was restored after World War II.

There were now four major shipyards capable of building large vessels, and additionally a number of other shipyards had successfully constructed smaller vessels.

The decision to build in Australia bulk carriers of up to 47,000 tons showed the confidence shipowners, including A.N.L., had in Australian shipbuilding industry.

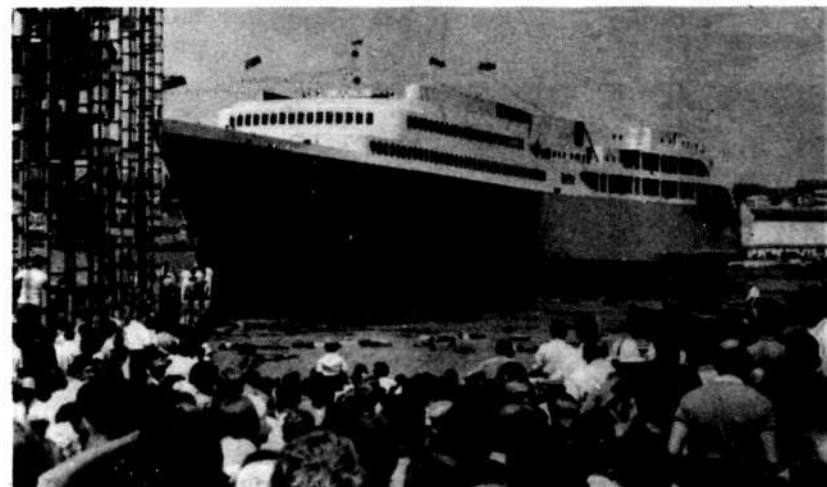
To allow the shipping industry to compete favourably with overseas competitors, the Government had provided a subsidy of up to 33 1/3% for vessels of over 500 tons built in Australian yards.

This policy would continue pending the Government's consideration of the findings of the recent Tariff Board inquiry into the industry.

Mr. Freeth said that by comparison with overseas shipbuilding yards which had been in recession for some years, the Australian industry, mainly because of the support it had received from the Government, had enjoyed much greater stability.

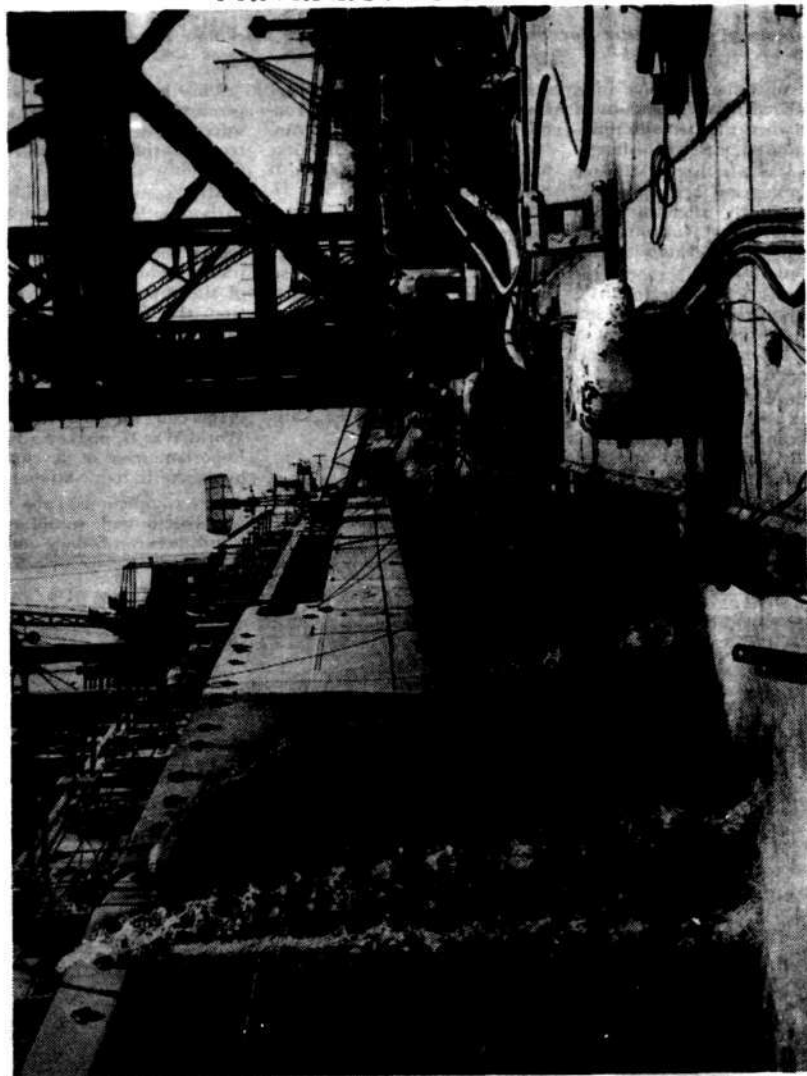
The Minister said the resumption of the direct passenger service between Sydney and Tasmania for the first time since World War II, marked a further important stage of development by the Australian National Line.

The completion of the vessel, Mr. Freeth said, would restore a link between Sydney and Tasmania, which had long been in demand.



MARCH, 1964

H.M.A.S. SUPPLY



Fire engines pumping out engine room of H.M.A.S. Supply at Garden Island. See story on page 21.

TOAST TO "EMPRESS OF AUSTRALIA" AND HER SPONSOR, THE HON. CATHERINE SIDNEY

By Captain G. I. D. Hutcheson, Chairman of Directors, Cockatoo Dock and Engineering Pty. Ltd.

Your Excellency,
Honourable Ministers of State,
Ladies and Gentlemen.

I have the very pleasant duty to-day of proposing the toast of the ship, coupled with the name of her sponsor, the Honourable Catherine Sidney.

I am sure that we are all most grateful to her for the great compliment she has paid us in coming to Cockatoo and so gracefully naming, and so successfully, launching *Empress of Australia*.

We are also very honoured by the presence of His Excellency the Governor-General, and welcome him and other members of his family to the Dockyard.

This great ship, about which you will no doubt hear more

from other speakers, is one of the most important that has been constructed in Australia. Following the undoubted success of her elder sister, *Princess of Tasmania*, for the Australian National Line in the Melbourne-Tasmanian service, this ship has been designed to run between Sydney and Hobart, and other ports in Tasmania.

It is confidently expected that she will open a new era, not only in trade between the two principal islands of the Commonwealth of Australia, but also in the encouragement of touring. She will enable large numbers of people who wish to drive their own cars to travel and to explore and learn more about this country in which we live.

The ship will set very high standards of comfort and pleasure in travel, and is a great tribute to her designers, the Australian Shipbuilding Board.

We trust that she will prove a most valuable addition to the fleet of her owners, the Australian National Line, and that she will have many years of successful service for Australia and will add lustre to the line which she will join.

She has been named an *Empress* to-day — long may she reign as *Queen* of the seas.

Ladies and gentlemen, I give you this toast:—

"*Empress of Australia*, coupled with the name of her sponsor, the Honourable Catherine Sidney."



REPLY TO TOAST — "THE BUILDERS"

By Captain R. G. Parker, Managing Director, Cockatoo Dock & Engineering Company Pty. Ltd.

Your Excellency,
Honourable Ministers of State,
Mr. Chairman,
Ladies and Gentlemen.

As our Chairman has said, the Honourable Catherine Sidney has paid us a great compliment in coming to Cockatoo to-day, and we sincerely thank her and congratulate her for so graciously naming and launching the *Empress of Australia*.

We are further greatly honoured by the presence of His Excellency, the Governor-General, Lord De L'Isle, and by the fact that he has proposed the toast of "The Builders".

As the builders, we are very proud indeed to have constructed such an important ship. The *Empress* is the largest passenger

vessel to be built in Australia to date, and, I believe, the largest ship of its type as a passenger/vehicular ferry to be built in the world. This is the 53rd vessel we have built at Cockatoo over the past 50 years, and all of us here think that this latest ship to go down the slipway is a very worthy successor to any of her predecessors.

Those of us who have been connected with the sea and ships are often asked why a ship is referred to as "She". There are many reasons for this, which I think you will agree are appropriate:—

"A ship is called 'She' because there is always a great of bustle around her.

There is usually a gang of men about.

She has a waist and stays. It takes a lot of paint to keep her good-looking.

It is not the initial expense that breaks you, it's the upkeep.

She can be all decked out. It takes an experienced man to handle her correctly.

She generally has elegant top-sides and shows nice lines. When coming into port, she always looks for the buoys."

The building of the *Empress* has been a unique undertaking for us. For many years now our ship construction has mainly been the building of fighting ships for the Royal Australian Navy. Our last merchant ship was as long ago as 1943, although we carried out several large conversions as passenger vessels a little later.

A modern passenger vessel such as the *Empress* is most complex compared with the large cargo ship, and the construction presents many difficulties, which have to be over-

come. This present project has been a great challenge to us all at Cockatoo, and we have found the job a most interesting and stimulating one.

I would also like to pay a tribute to the Design and Inspecting Staffs of the Australian Shipbuilding Board. The encouragement of the Management right down the line has been most heartening to us all, and we do appreciate it.

I would also like to mention the great help given to us by the other Inspecting Authorities, namely, Lloyds Register of Shipping, and the Commonwealth Department of Shipping and Transport. All their officers have been most co-operative and understanding in the many problems which have been encountered. I must mention the ship owners, the Australian National Line. We have continually received the utmost co-operation and friendly assistance from their officers connected with the construction and fitting out of the vessel, which has been much appreciated.

We are indebted, also, to the many sub-contractors and suppliers of material and equipment — not only in the Sydney area, but in other parts of Australia. Although certain major equipment is being imported from overseas, we owe more and more to Australian firms for their enterprise in undertaking some of this special manufacturing work.

Here, now, I must mention the shipbuilders, — the men who have built the ship: the General Manager, the Works Manager, the Superintendents of the Dockyard, the Design Staffs, Office Staffs, Foremen, and other Supervisors of the 1700 men of various trades and callings who

make up this Establishment. They are the men who do the job; the men who have pride in their crafts and who build good ships and send them into service successfully.

It was at a previous launching here some years ago that the then Governor-General, Sir William Slim, said that of all the works fashioned by the brains and hand of man, the building of a ship requires more skills and crafts than any other. I think you will agree this still applies to-day, despite the rapid march of science in every field.

We are pleased indeed to have received recently from the Commonwealth Government the order for a 15,000-ton Escort Maintenance Vessel for the Royal Australian Navy, and we expect to lay the keel within a few months. Preliminary work is already proceeding. This order is of great encouragement to us in being able to keep our shipbuilding team together, and we hope that other orders will follow, either in the Naval or Merchant shipbuilding fields. Of course, we have always been looked upon as a Naval Shipbuilding Yard, as this has been our tradition over a very long period. After to-day, we feel we have re-qualified for the construction of merchant ships again!

In conclusion, we do thank the Governor-General for his remarks, and would say how much we appreciate his coming to Cockatoo to-day and proposing this toast. I am proud indeed to be leader of the team which is covered by the term "The Builders".

We of Cockatoo wish the *Empress of Australia* all good luck and every success in service.

COVER:—

Our cover shows *EMPRESS OF AUSTRALIA* leaving the slipway.

MARCH, 1964

CHAIRMAN'S SPEECH

In reply to Minister's Toast "to the Shipowner" at the launching of the "Empress of Australia" on January 18

The Minister for Shipping and Transport has been most kind in his comments on the progress of the Australian National Line since it was formed seven years ago.

Certainly we have had a great deal of good fortune, which I hope will continue. Meanwhile, under Mr. Frank Mercovich and his staff, the enterprise has been well run, whilst the degree of co-operation extended to us by the Maritime Unions has been a considerable factor in such modest success as the Line has achieved.

The launching of the *Empress* by so gracious a lady is indeed an event — the largest passenger ship yet built in the Commonwealth; the largest commercial vehicle deck vessel in the world, as far as we know; and the flagship of The Australian National Line fleet.

Her coming stems directly from the success of the *Princess of Tasmania* and the *Bass Trader* — both "vehicle deck" or "roll-on-roll-off" vessels which, in terms of regularity of service and cheap freights, have revolutionised sea transport between Tasmania and Victoria.

Now a similar link has been forged between the Island and New South Wales, with the establishment of a passenger service to follow, and after so many years.

As to the future — for a decade or more the carriage of cargo by sea between the Mainland ports on the Eastern seaboard of this Continent has been in decline, with ship after ship sold foreign, and the business passing to road and rail.

Five thousand tons on the road each day each way between Sydney and Melbourne, and not a single ship running between those ports. Two vessels only between Melbourne and Bris-

bane, struggling to make ends meet through containerisation — a pitiable remnant of the fine fleet of general cargo carriers of a few years ago, which brought so much prosperity and employment to the waterfront.

For reasons well enough known, the conventional ship is unable to compete in terms of cost or service, and has met her fate. The roll-on roll-off development is a help, but alone is not enough. The problem is not confined to Australia, and to meet it overseas, shipowners have turned to automation. New types of engines — remote control systems of impressive reliability — labour-saving devices of all kinds, even to automatic mooring — mark the ship of the immediate present — a new and concerted approach by shipowners and builders to produce vessels which can be run in competition with land transport systems.

The Australian National Line, is now examining the prospects of introducing fully automated ships on this coast.

Again — the Minister has referred to the 47,000-ton bulk carriers to be built for us. The vessels will be fitted with the latest in automatic systems, etc., in the hope that, given the co-operation of all involved, running costs may be so reduced as to make it possible at last for ships on the Australian Register to compete in the world freight markets and unsubsidised, to earn profits in overseas trading for this country.

To come back to the present — a handsome ship has gone down the ways to-day. We trust she may be as popular as her elder sister, the *Princess of Tasmania*, and that in time she may look as handsome in the balance-sheet as she now does in the water.

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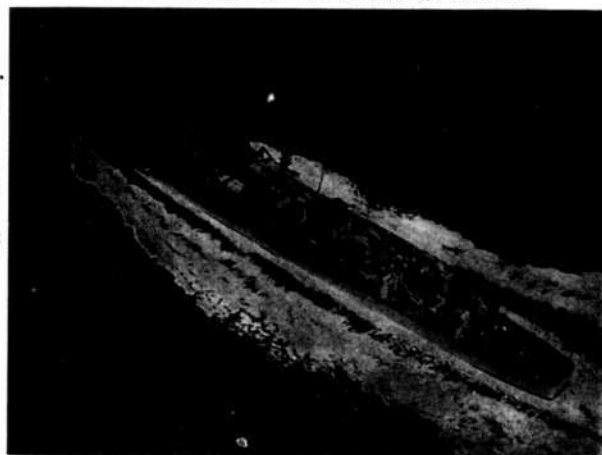
H.M.A.S. SHIPS RETURN FROM FAR EAST

H.M.A. Ships VENDETTA and QUIBERON returned recently from an eight-months' tour of duty with the Commonwealth Strategic Reserve in South East Asia.

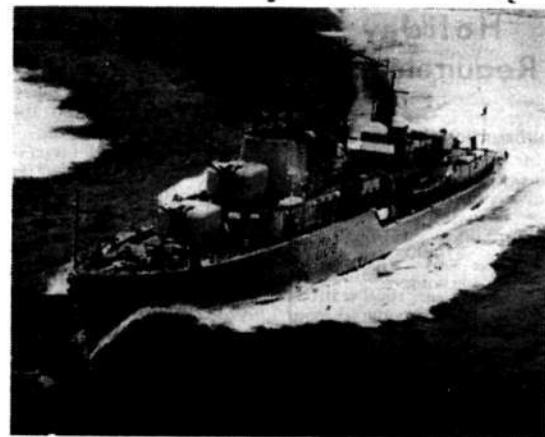
During this period they have steamed a total of 35,000 miles. Operating chiefly from the Royal Navy's base in Singapore, they have formed an integral part of the Far East Fleet. They have worked with the aircraft carriers H.M.S. ARK ROYAL and H.M.S. VICTORIOUS, and have also escorted the Commando carrier, H.M.S. ALBION.

Amongst exercises in which they have participated were the 1963 FOTEX — a combined Commonwealth Naval Exercise in the Malaysian area. They have also operated with the U.S. Navy off Subic Bay, in the Philippines. Ties with the Royal Malayan Navy have been further cemented — thanks to the contacts made by VENDETTA'S First Lieutenant, Lieut. -Cmr.

Below: An aerial view of H.M.A.S. QUIBERON.



MARCH, 1964



Above: H.M.A.S. VENDETTA at high speed during exercises in the Far East.

J. A. Matthews, during his recent two years' exchange service in Kuala Lumpur. A surprise for him, personally, came in the

New Year's Honours List — when he received the M.B.E., in recognition of his services with the Royal Malayan Navy.

In December, 1963, VENDETTA and QUIBERON paid a 10-day Operational visit to Japan — VENDETTA visiting the ports of Osaka and Kure. In addition to the liaison established with Japan's Maritime Self Defence Force, the ships company found time off from their sightseeing to hold two most successful children's parties for Japanese and Australian/Japanese orphans. The success of the R.A.N. Division's visit to Japan can perhaps be best judged by their send-off from Kure, when Vice-Admiral Nagai, Commander-in-Chief of the Japanese Escort Fleet, personally farewelled VENDETTA from his flagship, J.N.S. MAKI-NAMI, whilst his crew manned the side and cheered ship.

Christmas, 1963, for VENDETTA meant Hong Kong and

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all the associated shopping and excitement. However, this year, for the first time, home links were closer — thanks to the co-operation of the Australian Broadcasting Commission in broadcasting personal messages to the families of several of the ship's company. The tapes for this has been produced aboard and flown to Australia. Nor did the lads aboard forget Australian children at Xmas. Their adopted charity, The Handicapped Children's Centre of N.S.W., at Sutherland, had as their Christmas present a cheque for £500 to aid their building appeal. This money is a steady income from canteen profits on board, and also from individual donations.

Aside from the operational aspect of the tour, VENDETTA has been, so to speak, the Navy's guinea-pig in a trial of a new system of sea training for new

recruits. Seventy young lads, with only 12 weeks in the Service, joined the ship before she sailed north last July. Since then, in addition to their primary job of ship maintenance, they have quickly learnt to fit into their respective specialist jobs. They now go to the various shore establishments for further and more detailed specialist training.

Most of these lads had never been outside Australia until they joined VENDETTA, and perhaps one of the best features of the ship's service in the Far East has been the way in which these young men have seen, mingled and made friends with the people of the various countries visited. By their bearing and behaviour, they have added to our overseas goodwill. The training scheme has proved a complete success, and is to be adopted throughout the fleet.

JAPANESE VISIT



Commander P. Rees, captain of H.M.A.S. Quiberon presents a ship's badge to Japanese in repayment of hospitality while Captain J. M. Stephenson, Vendetta, looks on.

NEGOTIATION CORNERSTONE OF BRITISH POLICY

Britain's foreign policy was clear and had been pursued consistently and to the limit of her resources, said Lord Carrington, Government Leader of the House of Lords, in a debate on international affairs (19/2/64).

It was, first, to settle every dispute in which Britain was herself involved by peaceful negotiation, and not by force.

Secondly, it is to contribute her full share — and in recent years more than her share — to uphold the authority and effectiveness and financial capacity of the U.N. in its task of keeping the peace, he added.

Resources and Responsibilities

Lord Carrington referred to the problem of how Britain, with her limited resources, and seemingly almost unlimited responsibilities, could best contribute to the maintenance of peace and political stability in the world's troubled areas.

He went on:—

"It is astonishing that anyone should seriously suggest that, when we respond to the invitation of a Commonwealth government to help them to restore law and order, we are doing so with the ulterior motive of undermining that country's independence and re-establishing our own imperial rule.

"The suggestion could only be entertained by those who are ignorant of our record in transferring a dependent empire into an independent Commonwealth, or those who are determined to be hostile."

Willing to Help Partners

It was precisely because Britain was willing to help her new

partners in the Commonwealth to maintain their independence and to protect them from internal or external threats to their independence, that Britain was prepared to send her troops when asked to do so, and when it appeared that there was no other immediately effective way to deal with the situation.

"It might be more satisfactory if some kind of permanent international force under U.N. command could be relied upon to move swiftly into action and bring about a just and peaceful settlement to disputes which could not be solved by less drastic means.

"But the conditions for establishing such a force do not exist

"It is simply no use saying 'send for the United Nations' every time fighting breaks out. Some people seem to think there is some special magic in going to the U.N. and that the very act of dumping your troubles in U Thant's lap automatically solves them. It is, alas, not so."

Lord Carrington said one had to be sure that one of the permanent Security Council members was not going to veto the operation, and even if one went to the General Assembly there remained the problem of paying for a peace-keeping force.

"Until all the members of the U.N. are prepared to live up to the Charter, and to renounce the use of force, or the threat of force, or the exploitation of force to further their own national interest, we shall have to go on dealing piecemeal as best we can with each international crisis which arises."

The Cyprus Problem

On Cyprus, Lord Carrington said that in common with the other countries of the West — and, indeed, of the free world as a whole — Britain had a strong interest in the maintenance of peace and security in the eastern Mediterranean, and, above all, in the solidarity of the Western Alliance.

What was at stake in Cyprus for the West was that two members of the Alliance might be involuntarily drawn into conflict. Britain had no individual axe to grind, for her rights over the sovereign base areas in Cyprus had not been challenged.

Referring to criticisms of the British initiative in the setting up of a peace-keeping force under British command, Lord Carrington declared:—

"The Government would have been totally irresponsible if they had not offered the services of British troops. We could not stand idly aside and watch the massacres while British troops were available in the island."

Troops' Patience and Courage

It was largely due to the patience and courage of the British troops that the situation had been held so long, but Britain had always made it clear that she could not reasonably be expected to carry the burden alone.

Peace in the area was of international concern, and a broadly-based force would be better able to maintain peace.

Lord Carrington rejected as absurd suggestions that Britain had been trying to float some sort of N.A.T.O. invasion of Cyprus.

The allied force suggested had obtained the agreement of

Greece, Turkey, and the Turkish-Cypriot Vice-President, Dr. Kutchuk, and it was only President Makarios who felt unable to accept it.

Lord Carrington said the problem of Cyprus was one of

major concern to the countries of the West.

"There have been criticisms that we did not immediately go to the United Nations, but we have all along borne our obligations under the U.N.

Charter fully in mind, and our actions have been entirely consistent with the provisions of that Charter."

Lord Carrington said he would not like to minimise the difficulties of taking the Cyprus issue to the U.N.

Peace — The British Interest

"It cannot be assumed that all members of U.N. would be as interested as we have been in the maintenance of peace, and would be prepared to look with equal impartiality for a just solution," he added. It had always been clear that Britain could not continue to keep the peace in Cyprus alone. In view of the dangerous situation in the island, it remained essential to get the peace-keeping force going quickly.

Lord Carrington declared:—"Our interests, which are at one with those of the people

of Cyprus themselves, of Greece and Turkey and of the West, may be summed up in one word — peace.

"There is no selfish interest, and we have never sought and do not wish to seek to try to impose any solution on anybody. We have not, and will not, attempt to prejudice the issue."

Malaysian Obligation

On the subject of Malaysia, Lord Carrington said the British role was limited to the provision of military assistance at the request of the Malaysian Government, an obligation which Britain would continue to honour.

The fact that Indonesian guerrillas were still on Malaysian territory, despite the cease-fire agreement, inevitably cast doubt on the good faith of the Indonesian Government," and the sincerity of their professed desire to reach a negotiated settlement."

Earlier in the debate, Lord Henderson, Opposition spokesman on foreign affairs, said Malaysia was being denied recognition as a sovereign and independent state by Indonesia.

"The British Government is right to stand firmly against aggression by Dr. Sukarno and his government. We fully support the decision of the British Government and its action to defend Malaysia."

Easy Slogans

Lord Henderson said easy slogans could be dangerous weapons, and that of "neo-colonialism" was one.

"Malaysia has as much right to expect to be independent and secure as has Indonesia itself, and Dr. Sukarno will delude himself if he thinks he can influence Britain to desert this new member of the Commonwealth."

THE SEVENTH FLEET

The "Washington Post" recently had this to say regarding the U.S. Seventh Fleet in the Indian Ocean.

The decision to send elements of the U.S. Seventh Fleet into the Indian Ocean has provoked in the Indian press and Parliament of storm of criticism and reproach.

The *Times of India* has stated editorially that it "has been fairly widely known on an unofficial basis that the U.S. Navy was nourishing ambitions of establishing a presence in the Indian Ocean." It is not worried about a single cruise but concerned over "what is likely to develop from an American Naval presence." And it fears that this is the "entering wedge" by which we mean to "take-over" the Indian Ocean as a successor to the British Navy. The whole project is, according to the *Times*, "politically motivated. And it concludes: "All references to defending India or adding to its security can therefore be dismissed as so much poppycock that has hardly added lustre to the American image in South East Asia."

In the Rajya Sabha, members have said that "America had no business to send ships to a region 7000 miles away from its shores."

The Prime Minister has not joined in this criticism. He sees no threat to Indian freedom or the country's policy of non-alignment. But he emphasises that "there is no question of any foreign ships, troops or aircraft participating in the actual defence of the country."

This leaves the American presence without any explanation. We are there, as press and Parliament allege, for the bad purpose of taking over from British imperialism; nor for the good purpose of defending India. This might leave American taxpayers wondering why we are there at all. They will be dis-

appointed if they try to decipher American policy in terms of the mirror held up to it by unofficial or official explanations in India.

India's requirements, dictated by the urgencies of its military predicaments and the myths of the Congress Party, are somewhat complicated. Aid must be total, massive and enormous enough to match Chinese power, without putting India under any economic, political or moral obligations. This requires India's friends to assume, at the same time, that the menace is imminent, and real; that the military forces India has to meet it are altogether inadequate; that India can be defended adequately by its own brave defence establishment; that India is reluctant and opposed to any foreign assistance, and that any assistance she nevertheless accepts is to be put down as a sinister effort to subvert the religion of India — which is "non-alignment."

A real solution to the military problems of South East Asia would be a collective defence of the region, whose many nations, acting together, might well assemble a total power equal to the threat of Chinese aggression. Such an entity could accept military aid, wherever available, without being overshadowed by external foreign powers. But that solution seems, for the present, altogether unattainable. As a stop-gap device, the presence of an American power, not allied with or based upon any of the countries involved, looks very good. The presence of the Seventh Fleet will attract no praise or acknowledgment in India, and it will get us, instead, a lot of abuse. If its very presence restrains the Chinese, that will never be acknowledged in

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NEW FRIGATE PASSES TRIALS

Australia's newest anti-submarine frigate, H.M.A.S. DERWENT, has successfully completed her contractor's sea trials in Melbourne, and will join the Fleet later this year.

The Minister for the Navy, Dr. Forbes, said that Williamstown Naval Dockyard would spend the next three months putting the finishing touches to the warship, which would commission on the 30th April.

Dr. Forbes said the series of trials, conducted by the builders to ensure the correct functioning of all major parts of the ship, had been particularly successful. No significant troubles had been encountered, and some of the sea trials were completed ahead of schedule.

Precautions were taken on two occasions during the six days of trials when there were signs of possible faults developing. However, the troubles were proved to be of a minor nature, and were corrected on return to the Dockyard. The builder's trials were, in fact, notable for the comparative absence of machinery faults.

Among the final work to be carried out on the new frigate is the completion of the "Seacat" guided missile system. This is a close-range anti-aircraft weapon, and will make DERWENT the first ship in the Combat Fleet with an operational missile system.

DERWENT is also being equipped with an important new sonar device that greatly increases detection of submarines in all conditions. She is designed to accommodate the new anti-submarine missile system, 'Ikara', at present being developed in Australia.

DERWENT, of 2500 tons, is the forty-fifth ship built by the Williamstown Dockyard in Melbourne. She is the last of four "Type 12" frigates built in Australia during the past four years.

The DERWENT sea trials were directed by the General Manager of Williamstown Naval Dockyard, Captain G. P. Hood.

SEVENTH FLEET

India. If the Chinese ground forces ever attack, and the fleets presence keeps them from using air power, it will not be admitted in India. If in a desperate situation, the might of the Seventh Fleet actually engages the enemies of India, after the enemy has been routed, members of the Congress Party will prove, in Parliament, that the American intervention was not needed and was only undertaken to advance American imperialism.

No matter how true this all may be, the interest of this country requires only that India be free and independent. It does not require that all of India's politicians be grateful, gracious or lovable (as some of them are). So we can take comfort from the formidable presence of the Seventh Fleet in an area where free countries have not yet put together sufficient strength to defend themselves.

Cause Of Flooding In H.M.A.S. SUPPLY

The flooding in Sydney recently of the engine-room of the Fleet tanker, H.M.A.S. SUPPLY, was caused by a combination of circumstances, including the mal-operation of the main discharge valve of the circulating system.

The Minister for the Navy, Dr. Forbes, said that the Naval Board had studied the report of the Board of Enquiry which investigated the incident.

The water had entered the engine-room through an open section of the main circulating system, which was open for repairs. This occurred because the main discharge valve was not fully closed. The valve had been lashed in what was thought to be the fully closed position, to prevent any possible entry of water during the repair work. When the valve was shut the outlet pipe was above the waterline. However, during the night

of the 21st of January, H.M.A.S. SUPPLY embarked 150 tons of fresh water. This changed the trim of the tanker, and lowered the output pipe below the waterline. With the valve not fully closed, the water entered the engine-room.

Dr. Forbes said the valve is turned off by hand. After the flooding it was found that by applying considerable force, some further turns of the valve were possible.

Periodical inspections of the engine-room discovered the entry of the water within the hour, when action was immediately taken to correct the situation.

Dr. Forbes said action was being taken on certain technical recommendations put forward by the Board of Enquiry as possible means of avoiding a repetition of this type of accident.

NAVY - C.S.I.R.O. RESEARCH AIDS FISHING INDUSTRY

The Australian fishing industry benefited from three oceanographic surveys carried out by the Navy and the C.S.I.R.O. during the last few months.

The surveys were conducted by the two R.A.N. training and oceanography frigates, H.M.A. Ships GASCOYNE and DIAMANTINA, both of which are fitted with special laboratories. The research staff was provided by the C.S.I.R.O.

H.M.A.S. GASCOYNE, on the first cruise, investigated the sea current off the east Australian coast. The information obtained was of importance both to navigation and to the fishing industry.

The current, which influenced the movement of fish on to the N.S.W. coast, particularly tuna and salmon, was not a normal flow. Instead, it consisted of eddies that caused isolated belts of water. This occurred mostly off the southern coast, and GASCOYNE would attempt to pinpoint these isolated influences.

The C.S.I.R.O. has designed a new electronic instrument to carry out this research. The device traced the water movements by a continuous recording of depth, temperatures, and salinity.

Later, GASCOYNE will make a survey in South Australian waters. This is a continuation of the research off the east Aus-

tralian coast, providing comprehensive information on Australia's two main tuna fishing grounds. The South Australian survey started from Adelaide on the 20th February, and includes Port Lincoln and Spencer Gulf, and waters to the south and west.

In Western Australia, DIAMANTINA would conduct a survey in March to find out whether the crayfish industry had reached its limit. The warship would tow nets to catch very small crays. The catch, together with oceanographic research and data on sea movements, would indicate the concentration of crays and provide guidance on the future potential of the crayfishing industry.

OCEANOGRAPHY

THE PART IT PLAYS IN THE BIOLOGICAL SCIENCES

Extracts from an article in the UNESCO COURIER by N. M. SISSAKIAN

Just as life itself depends on biological exchange for its normal development, so science needs the exchange of ideas, methods and principles for its own enrichment and to strengthen the control of man over nature. Perhaps nowhere does the need for scientific co-operation on an international basis emerge with such clarity as in the field of biology, or, putting it more broadly, in the field of life sciences.

This co-operation is all the more indispensable as, within present-day natural sciences, the biological sciences are progressively assuming an ever-larger place; the part they play in the promotion of welfare for all mankind is becoming more and more influential. If we consider the matter in its broadest perspective, mankind is faced with a number of vitally important problems, which we cannot afford to ignore.

With steadily widening economic, scientific and cultural contacts between peoples, I believe the foremost obligation of scientists is the unification of creative efforts for the successful elaboration of the following scientific problems:—

- Assurance of unlimited resources of energy for the use of mankind;
- Enlargement of food resources to meet the needs of all peoples of the globe in foods of full nutritive value;
- Elimination of all infectious diseases and the creation of material and hygienic conditions for longevity, along with conservation of vigour, capacity for work, and

Novik Martirosovich Sissakian is Vice-President of the U.S.S.R. Academy of Sciences and Chief of its Biology Branch. A leading Soviet biochemist, he has carried out research on enzymes in the metabolism of organisms and in the cell structure of plants. He is a member of the Executive Board of UNESCO.

physiological activity at a sufficiently high level;

- Exploration of other worlds of the universe, the understanding of their laws and the utilization of these for the welfare of all mankind.

These problems of science, which concern all humanity, inspire the scientists of the whole world — those true scientists for whom the great power of science must serve exclusively the interests of peace, friendship and happiness of all people. These ideas and problems must and should, I believe, serve as a basis for the organization of international scientific co-operation.

In this respect, we have positive experience to work on. The co-operation of scientists in the programme of the International Geographical Year, the creative work of scientists from several countries in the Antarctic, the beginning of large-scale research on marine life within the framework of UNESCO, the experience gained as a result of mutual agreements on scientific co-operation among many countries in the world — all this represents an important contribution to mutual understanding and co-operation between peoples.

International scientific co-operation may be realized in various ways and at various levels. In particular, the organization of international symposiums and widely representative scientific meetings can do much in this respect. For example, the International Biochemical Congress held in Moscow in August, 1961, proved to be a magnificent forum for the biochemists of the world.

If the problems of securing permanently available energy resources for all of mankind must be solved by the efforts of physicists and power specialists, the other problems which I have listed will have to be dealt with by representatives of an intricate complex of biological sciences.

A number of important problems may be cited which, in my view, serve as a basis for international co-operation:—

- The study of forms of life, of laws of reproduction and the increase in biological productivity of the world's oceans;
- Elucidation of the nature of photosynthesis as a basis to reproduce this truly cosmic process otherwise than in chlorophyllous plant life;
- The multi-disciplinary study of the brain.

The study and the utilization of the world's oceans, like meteorological and geophysical research, is the most appropriate and the most necessary form of international scientific co-operation.

The ocean is the largest integral natural object on our

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planet, in which all processes and phenomena are inter-dependant and interdetermined. The study of the ocean calls for co-ordinated research in several disciplines, such as physics, chemistry, biology and geology.

The scientific study of the ocean and of the problems of its practical utilization must be treated as a single coherent entity. There must be no schism whatsoever between theoretical investigation and practical problems.

Studies of the physical processes in the watery mass of the ocean and the interaction between it and the atmosphere will bring solutions to many problems concerning navigation, climatic forecasting and the utilization of the power resources of ocean waters. Chemical and geological studies of the ocean will

lead to the utilization of its mineral resources; the geological findings will also result in important progress in navigation and port-building. Bio-oceanological research is necessary for the full and rational utilization of the vital resources of oceans and for the solution of navigation problems. A fuller knowledge of the ocean will help us to develop rational means of protecting the ocean from pollution, from the deterioration of its biological resources, and from dangers to the health of mankind.

The present rapid development of such studies is explained by the fact that this branch of science and its practical aspects lagged behind others in the past, as well as by the application of many new methods of research and the realization of the tremendous scope and significance, from both theoretical and practical viewpoints, of the perspective of scientific and economic mastery of the global ocean.

In working out an international programme for biological investigation of the ocean, the international study of the Indian Ocean which started in 1959 and which should continue for the next three to five years under the joint supervision of SCOR (Scientific Committee for Oceanic Research) and UNESCO must be taken into account because of its great importance. Yet these investigations should in no way impede the development of general international research in oceanography within the programme of the Intergovernmental Oceanographic Commission, one of whose tasks is to determine the character and intensity of biological processes

which take place in various parts of the global ocean — in other words, to elucidate all aspects of the biological structure of the ocean.

Mysteries of Photo-synthesis

The basic task of marine research must be the study of the character and tempo of biological productivity at various latitudes and in various parts of the global ocean, the qualitative and quantitative structure of its plant and animal life, and their biological peculiarities. The process of production undergoes regular changes according to the physical and chemical conditions experienced in the various geographical zones: from pole to pole, from the shores to the central parts of the ocean, and from its surface to its depths, the quantitative changes may vary a hundred-, a thousand-, and a hundred-thousand-fold.

The international programme of biological research must include the study of plant and animal organisms as possible carriers and concentrators of radioactive waste matter, and the phenomena of biocirculation as one way by which such matter may be dispersed in the ocean.

The biological data thus obtained must form the oceanological basis for the recognition and evaluation of fish and other kinds of resources in regions whose resources have so far been rarely used or left completely untouched. Nevertheless, the tremendous amount of information collected by international oceanographic programmes should be kept separate from practical considerations, such as those which affect the fishing industry. In no case should incomplete utilization be permitted of the data obtained in the investigation of the ocean, for such data can be of use to various branches of eco-

nomy, including the fishing industry.

To-day the photosynthesis of plants (in which the plants perform the primary synthesis of organic substances and store the energy from solar radiation) is practically the only primary source of food for all living organisms on earth, including man.

There is no doubt that in the future, too, the decisive role in this area will be played by the natural photosynthesis of plants, for only the cultivation of highly productive plants over tremendous territories can guarantee the abundance of food needed for the world's population, no matter what its size, and can satisfy the needs and tastes of man in respect of the composition and variety of such food supplies.

At present, the green plants of the globe create through photosynthesis hundreds of times more organic substances than are needed as food by the population of the Earth. Even so, the problem of food resources is one of the most acute problems of contemporary mankind. This problem has social and biological-technical aspects.

For example, more than 90 per cent. of photosynthetic production occurs in the plants of seas and oceans and of forests and prairies, yet the percentage of this production used for food is extremely low (about 0.02). Cultivated plants produce only 10 per cent. of the total photosynthetic production, but the proportion of utilization of this production for food is high: the cultivated food and fodder plants yield not less than 80 per cent. of the food used by human beings.

Nevertheless, this production does not fully satisfy the food requirements of mankind. Furthermore, to the problem of assuring food supplies of the

requisite nutritive value for present generations must be added that of providing for the constant growth of the population. For, after all, it is the potential products of photosynthesis and the extent to which mankind can utilize these products for food that will determine the population potential of the globe, and its standard of living.

For this reason, the photosynthesis of plants, the increase of photosynthetic production and the control of plant photosynthesis as a source of food are among the most important problems of mankind.

The adequate, rapid and most advantageous solution of the problem of photosynthesis in the above context depends to a large degree on the co-ordination of research on an international scale. Let us consider the following examples:—

- According to contemporary calculations — which, however, are neither precise nor final — about 80 per cent. of the total photosynthetic production of plants of the globe is carried out by the photosynthesizing organisms of seas and oceans (mainly unicellular seaweeds).

Exploring the Workings of the Brain

But this production is used by man as food almost exclusively through industrial fish and other animals, by way of complicated and often circuitous food chains.

As a result the coefficient of utilization of the photosynthetic production of seas and oceans for food for man is so small as to be almost negligible. This situation is made worse by the total absence of attempts to regulate the photosynthetic activity of photoplankton of seas and oceans, the lack of serious attempts to reconstruct and improve the food chains, and also, above all, by the primitive

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methods used to bring in the harvest of fish and animals, which are both insufficient and often predatory in character.

Finally, it is important to determine the extent and possibilities of regulating and utilizing the photosynthetic production of oceanic vegetation. This potentially tremendous source of food and of other valuable material for man must no longer remain neglected, as it has done in the past.

• As to plants on the earth's surface, especially cultivated food and fodder plants which in the future, too, will constitute the main supplies of food for men, the basic factor determining their possible and final production in solar radiation energy, the principal force of the process of photosynthesis. In fact, all agriculture constitutes a system of processes, the object of which is the utilization of solar radiation energy to form organic substances with the help of photosynthesis.

Our knowledge concerning the solar radiation energy which can be used for photosynthesis in various zones of the globe and on the globe as a whole is far from complete and certainly insufficient.

In the final analysis wide-ranging and well co-ordinated studies in photosynthesis and in the optimum use of solar radiation energy for this purpose, will open up for mankind unlimited possibilities for the solution, on any scale desired, of the most important biological and technical problems. Complete, rapid and radical solutions to these problems will only come through unified efforts of scientists within a broad framework of international co-operation.

The exceptional significance of cerebral activity in the history of man, in his productive efforts, his cultural life, his education

and in so many other fields, is drawing more and more scientists to study of the workings of the human brain.

No matter how successfully we try to "relieve" the human brain by such means as the automation of industrial processes and the use of computing machines, no matter how much we improve conditions of life, the growth of science and technology makes more and greater demands on the activity of the human brain.

In this respect, special recognition is now being given to the new field of neuropsychopharmacology — or psychopharmacology as it is called — which has developed as a result of successful studies concerning the functions of separate brain centres, their interrelationship, their reaction to drugs as well as of specific metabolic processes in various parts of the brain.

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NEW SENIOR MEDICAL OFFICER

SURGEON-CAPTAIN
R. M. COPLANS

Surgeon-Captain Robert Michael Coplans, before his appointment to the Navy's top medical post, was serving in Sydney as Medical Officer-in-Charge of the Balmoral Naval Hospital and as Command Medical Officer (East Australia Area).

He began his career in the Royal Navy and entered the Royal Australian Navy in 1948 as a Surgeon Lieutenant Commander. He served in England during 1948 and took up duty at H.M.A.S. LONSDALE early in 1949.

From March, 1949, until April, 1955, he served at H.M.A.S. ALBATROSS, the Naval Air Station at Nowra, N.S.W., and from April, 1955, to October, 1955, he served aboard H.M.A.S. VENGEANCE.

In October, 1955, he was appointed to the Australian flag-ship, H.M.A.S. MELBOURNE, as specialist in Hygiene and Aviation medicine and as Fleet Medical Officer.

He was appointed Senior Medical Officer and Officer-in-Charge of the School of Aviation Medicine and as specialist in Hygiene and Aviation Medicine at H.M.A.S. ALBATROSS, in September, 1956.

In October, 1956, he was made honorary physician to His Excellency the Governor General, and in July, 1958, was appointed Medical Officer - in - Charge H.M.A.S. CERBERUS.

W.R.A.N.S. JOIN H.M.A.S. ALBATROSS



Naval Airman Robert Watts, of Tweed Heads, found congenial company when the W.R.A.N.S. made an inspection of their new surroundings at the Naval Air Station, Nowra. Pictured with him from the left are: W.R.A.N. Gwen Hodge, C.P.O. Leonora Maiden, Second Officer J. Mullin and W.R.A.N. Margaret Whedon.



Cadet Third Officer W.R.A.N.s learn how to fight fire during a course at the Atomic Biological Chemical Defence School at H.M.A.S. Penguin, Sydney.

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Cadet Third Officer W.R.A.N.s learn how to fight fire during a course at the Atomic Biological Chemical Defence School at H.M.A.S. Penguin, Sydney.

GEORGE CROSS FOR BOMB DISPOSAL

Dangerous torpedoes, activated by an explosion, were hissing and hot to the touch when a 32-year-old Scot, Lieut. (S.D.) Kenneth Douglas Kemsell, of the Royal Navy, supervised their demolition. The award of the George Medal for "his great skill and courage" has been announced in the "London Gazette".

When an explosion occurred in a torpedo store at the R.A.F. Station, Kinloss, on August 15th, killing two men and severely damaging the building, the reinforced roof brought down the stock of torpedoes and war-heads. These were crushed, and at least 10 batteries were activated, so that the whole was in an extremely dangerous condition.

The citation reads: "It was judged too dangerous to try and remove the torpedoes and war-heads from the debris, and on August 16th, Lieut. Kemsell led the team which placed 16 demolition charges against the battery compartments of the torpedoes, some of which by this time were hissing and bubbling and were hot to the touch. Great difficulty was experienced in gaining access to the battery compartments of many of the torpedoes, and considerable ingenuity was necessary to get the demolition charges correctly spaced. Lieut. Kemsell did his work with great skill and courage, and his efforts resulted in a most effective demolition operation."

At the time, Lieut. Kemsell was serving as Bomb and Mine Disposal Officer in H.M.S. LOCHINVAR, the Naval base at Port Edgar. He is now serving in H.M.S. VERNON, the torpedo and anti-submarine establishment at Portsmouth.

100 YEARS OF NAVAL TRAINING AT DARTMOUTH

The completion in the town of a century of training of future officers for the Royal Navy was marked recently by the presentation of a silver plate to the Britannia Royal Naval College by the Mayor, Aldermen and burgesses of Dartmouth.

Church bells were ringing, and the narrow streets of the little Devon port were flag-decked on September 30, 1863, when the old 120-gun ship, BRITANNIA, already used for four years for the instruction of "seamen novices" and cadets, came into sight, after being towed from Portland. An historical link was forged when she secured at a berth in the Dart, protected by the hills and a sudden bend in the river.

The principle of giving preliminary training afloat to cadets had been accepted by the Admiralty 10 years before, when the two-decker, ILLUSTRIOUS, was selected and adapted for the purpose, the first young entrants being given alternate days of seamanship and book-work. When more accommodation became necessary, the BRITANNIA, a fully-rigged three-decker launched at Plymouth in 1820, replaced the ILLUSTRIOUS. Her first mooring in Haslar Creek proved unhealthy and inconvenient, and in 1862 she was moved to Portland. The anchorage there, however, was found to be too exposed, and particularly unsuitable for boat work, and it was accordingly agreed that the ship should be moved to Dartmouth, once one of the main ports of the country, and at the time still the centre of a flourishing trade with Newfoundland.

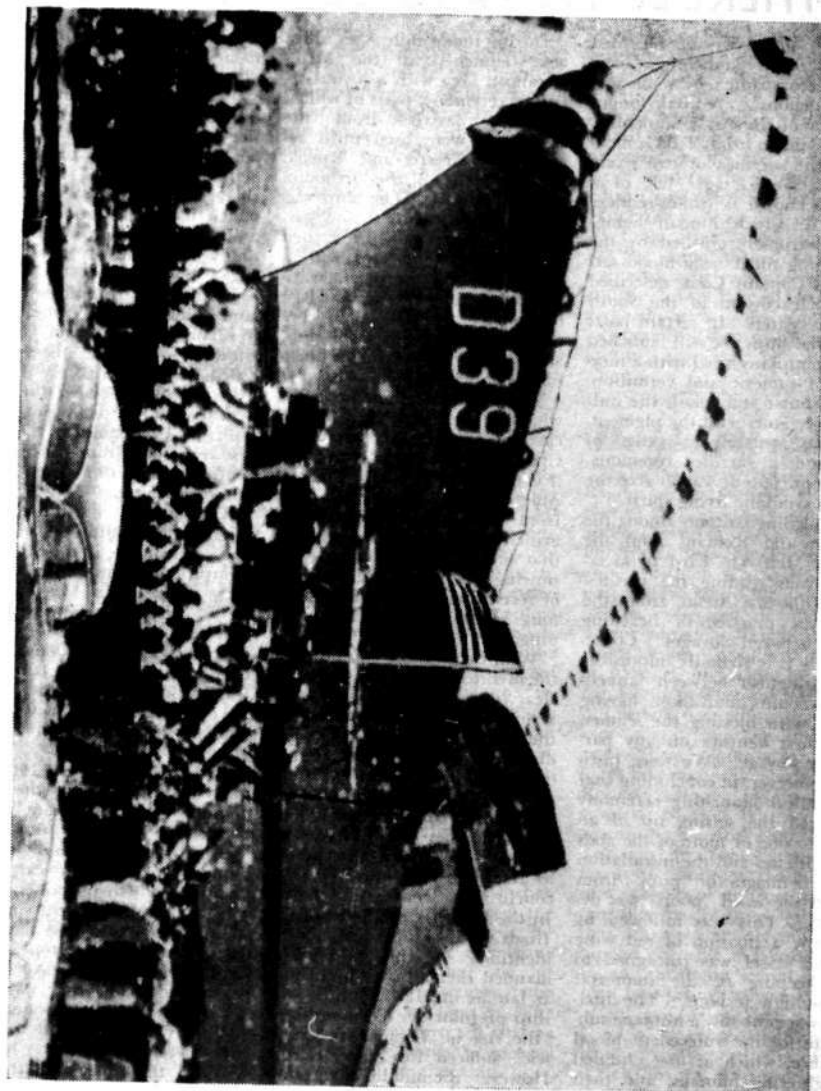
Since that time, generation after generation of Naval officers have learned much of their profession on the sheltered waters of the Dart River. The original BRITANNIA was superseded by a larger ship, given the same name, in 1869, and in 1905 the training functions of the old ships were moved ashore, when the present buildings of the Royal Naval College were opened. Except, however, for a short period at the end of the last war, when the College had to be evacuated because of bombing, Dartmouth has remained ever since the location for the training of young Naval officers.

On November 24th, to commemorate the 100 years' association between the Royal Navy and the town, the Mayor of Dartmouth, the borough of Clifton Dartmouth Hardness, presented a silver plate to the College at Sunday Divisions, which was accepted by Captain J. E. L. Martin, D.S.C., R.N., the Commanding Officer. The Mayor of Dartmouth, Councillor E. S. Rimmer, afterwards took the salute at a march-past of Sub-Lieutenants and Cadets, to which the townspeople had been invited as spectators.

H.M.A.S. HOBART LAUNCHED

(See opposite)

H.M.A.S. HOBART, sliding into the water at the Defoe Shipyard. The new £20,000,000 warship was launched by Mrs. David Hay, wife of the Australian Ambassador to the United Nations.



THERE'LL ALWAYS BE A LAUNCH

Since the dawn of recorded history, ship launchings have been accompanied by some sort of ceremony. A Babylonian account of the Ark's launching, handed down from 21 B.C., mentions the sacrifice of two oxen. The Icelandic sagas tell of a custom known as "roller-reddening", in which human beings were purposely crushed by the launching rollers as a blood sacrifice. Captain Cook described a similar custom in the South Pacific Islands. In certain parts of India, ships are still launched over pumpkins filled with a mixture of tumeric and vermillion, which burst and splash the hull and spectators with the pigment. This is probably a vestige of the human sacrifice ceremony, whose purpose it was to give the ship a symbolic living spirit.

Launching customs among the Greeks and Romans (and the North Men) are hard to ascertain from reading the classics. The difficulty stems from the ancients' practice of beaching ships between voyages. Consequently it is virtually impossible to distinguish between launching accounts and those having to do with blessing the seamen and their venture on any particular voyage. We were justified, however, in concluding that the initial launching ceremony involved the setting up of an altar to one or more of the gods or goddesses and the installation of their images (or "pupi", from which the word "poop" was derived). This was followed by pouring a libation of red wine as the vessel was consigned to the keeping of the immortal whose sign it bore. The libation was probably a humane substitute for the antecedent blood sacrifice, which at first entailed slaughtering humans, and then animals, to bless a voyage and insure a safe return.

During the Middle Ages, ships were launched in the Mediterranean area with a joyous religious ceremony, parts of which, probably derived from the Egyptians, were used until recently in Greece and Russia, where the rites of the Orthodox Church prevail. The ship was decked with streamers and garlands of flowers. A priest then went through the ship with a lighted torch anointing its various parts with sulphur and egg to "purify" it. He then consecrated the vessel to some saint, after which the actual launching took place.

We can only speculate as to whether the British launching customs were derived from the Graeco-Roman, or the Norse, but it is clear beyond doubt that the American customs were derived from the British. It is also evident from even a casual study that our present custom of bestowing a name at launching is of recent origin, considering the long history of ships and shipping.

With the possible exception of the mythical "Argo" of Jason, no clear records of actually naming a ship are available until about the 3rd century A.D. Certain disputed passages from Herodotus and Plutarch and the Biblical reference to the ship in which Paul sailed from Melita as having "the sign of Castor and Pollux", have been interpreted as referring to names, but the conclusion seems far-fetched. In the Homeric catalogue of the Iliads' ships they are simply identified by the tribes who manned them. Even in Britain as late as the 12th century "the ship of John de Weymouth" or "the cog of Thomas de Dunewic" sufficed for identification. However, the middle of the 13th century, the custom of naming became general with un-named

British ships the exception. The names were generally secular, rather than religious.

The Roll of Accounts during the reign of Henry V shows that the Bishop of Bangor was paid £5 for his expenses in going to Southampton, July, 1418, to bless the great "Henri Grace a Dieu", which had been launched only a short time before. The ceremony was probably a christening.

Religious christenings of the time did not use wine. Sir William Laird Clowes, in his carefully-prepared history entitled "The Royal Navy", wrote "there is no trace, in the 15th century, of ship-baptism with wine." The name of the ship also reflected a trend during that century toward those with religious significance.

The British warship "Sovereign" was relaunched in 1488 and renamed, after extensive renovation. Henry VII was present, and the ship was blessed by a "mitred prelate with attendant train of priests and choristers, crozier in hand, with candle, book, and bell, and holy water stoup." In countries which have remained Roman Catholic similar ceremonies have continued.

In France during the 18th and early 19th centuries, the ceremonies for merchant ship launchings closely resembled those for the christening of infants. A godfather carried a bouquet, which he presented to the godmother; both sponsors then pronounced the name of the vessel, the priest repeated it, and declared the vessel to be so named. The bow was then sprinkled with holy water, and the service concluded with a benediction.

With the coming of the Reformation, in the reign of Henry VIII, ceremonies in Britain be-

came secularized, and have so continued. We are fortunate in having a description of a typical launching written by Phineas Pett, one of the greatest of English master shipwrights. The vessel was the "Prince Royal", and the launching date September 24, 1610. For ease in reading, we have modernised the spelling.

"The noble Prince, himself, accompanied by the Lord Admiral and the great lords, were on the poop, where the standing great gilt cup was ready filled with wine to name the ship so soon as she had been afloat, according to ancient custom and ceremony performed at such times, and heaving the standing cup overboard. . . His highness then standing upon the poop with a selected company only, besides the trumpeters, with a great deal of expression of princely joy, and with the ceremony of drinking in the standing cup, threw all the wine forwards toward the halfdeck, and solemnly calling her by the name of the "Prince Royal", the trumpets sounding the while, with many gracious words to me, gave the standing cup into my hands."

The practice of presenting the cup to the master shipwright became fairly common by 1664. Samuel Pepys, in his diary under date of October 26, 1664, described the launching of the "Royal Catherine", and stated that, as his request, the King presented the cup to the master of the dockyard, who was another Mr. Pett. It also appears that Pepys bought the cup on behalf of the Admiralty and expected certain favours from Pett in return for this exercise of influence.

The succession of changes in practice during the 17th century have a very modern echo in the cycles of history. At the beginning, the builders supplied the goblet, and after it was

thrown overboard some hardy swimmer recovered it, and usually tried to sell it back to the builder. In an effort to avoid the expense of buying back the cup or having another one made, some wise builder rigged a net around the stern of the ship to catch it. Public sentiment was so strongly aroused that the King ordered the practice stopped. The builders then protested, and Charles II ordered the Crown to provide the Cup.

Between 1610 and 1664, it also ceased to be the custom for the sponsor to ride the ship down the ways, probably due to the possible danger to the eminent personage. Later the christening was deferred until after the vessel was safely afloat. This custom was reverted to in 1943, when certain lend-lease ships built in the U.S. for the British Navy were christened immediately before the commissioning ceremony.

In the interest of further economy, the use of the standing silver cup was discontinued in 1690, a bottle being substituted as the container. It was applied in the modern manner by breaking it over the bow, but the contents were still usually red wine, or sherry. The first record of a British man-of-war so christened was in a newspaper of 1780, which described the launching of H.M.S. "Magnanime" at Deptford.

Christenings were invariably performed by a male member of the Royal Family or by a Dockyard Commissioner. In 1811, however, George IV, then Prince Regent, introduced the first lady sponsor. Again we find a modern note; one lady's aim was so bad that she hit and injured a spectator, who sued for damages. The Admiralty then directed that in the future the bottle be secured to the stem of the ship by a lanyard, the method in use today.

Thus history documents the ritual and fanfare attending a modern launching. When the sponsor hauls back and lets go with the champagne bottle, she is performing a duty deeply set in the traditions and superstitions of the sea. One can almost see Father Neptune, a sly smile on his face, watching for a flaw in the performance, a breach of nautical etiquette, a happenstance frowned upon by all those who follow the sea. By the same token, he must sigh with relief when all is well and the lovely lady slides gently down the ways to the sea, saying to himself, "Good sailings, thou faithful servant."

Book Review

"The Saturday Evening Post Reader of Sea Stories", a collection of 20 stories by well-known authors, edited by Day Edgar. Publisher: Souvenir Press, London. Price in Australia, 26/., post and packing 1/9.

This collection of 20 short stories edited by Day Edgar is, in Mr. Edgar's opinion, the best of 1000 sea stories published by the *Saturday Evening Post*.

There is something here for every taste, from the charming and delicate fantasy of "The Snowflake and the Starfish" by Robert Nathan, to the harsh suspense of Don Waters' "Vengeance Reef", and the "Living Torpedo" by Tom Yates. This last is an almost incredible yarn of a mission of destruction. Incredible, that is, until we realise that the writer served as a human torpedo in World War II, and no doubt served on just such hair-raising missions.

Old favourites, such as Jack London, are represented, and in the hand of the expert teller of tales is felt in the contributions of C. S. Forester and and H. E. Bates.

SUKARNO'S BOAST

From the "Washington Post"

President Sukarno's latest boast is so brash that it is worth noting only as a clew to the thinking — or, perhaps more accurately, the emotional demagogery — behind it.

Addressing a group of radical young nationalists called the "1945 generation", he accused the United States of sending the Seventh Fleet to keep him from carrying out his periodic threats to destroy Malaysia, the new British-protected State to the north of Indonesia.

"I declare," he said, "that even if two, three, four or seven fleets went to deter Indonesia, we will continue to crush Malaysia."

Now, as Sukarno no doubt is aware, the chief reason one unit of the Seventh Fleet is being sent to the Indian Ocean (he calls it the "Indonesian Ocean") is to deter Red China from attacking India. The Indian Ocean is in precisely the opposite direction from Malaysia. He is also aware that if the purpose of the Seventh Fleet were to deter Indo-

nesia, it could do so rather effectively.

The most plausible explanation for his bluster is that he is still plagued by poverty, disorganisation and dissension at home, and hopes to keep himself in power by diverting attention from these domestic problems to alleged foreign threats and to dreams of empire. Not long ago the Dutch in West Papua were the villains; but this red cloth was removed when the United Nations handed the territory over to Sukarno. Next it was the British in Malaysia, and now it is the United States Seventh Fleet.

Whether it made sense was irrelevant. Sukarno had fallen into the pattern of dangerous tyrants everywhere. To divert attention from troubles at home, they must invent foreign threats; and if the threats are not persuasive enough, they must goad them into existence. He thus tauntingly cites the failures of the U.S. foreign policy in Korea, Laos, Vietnam, and Cam-

bodia, and asks, "Why have these failures not become a lesson?"

If there is an answer to this taunt, it lies in calling Sukarno's bluff, just as we called Prince Sihanouk's bluff in Cambodia. If Sukarno doesn't like us, we should simply move out and stop molesting him with our "interference", which has amounted to about 700 million dollars and has, in effect, kept his government afloat. Then he would be left to wallow in his own demagogery; and if Red China begins to look hungrily toward Indonesia, Sukarno himself may be crying for the Seventh Fleet.

R.A.N. JOINS U.S. UNDERWATER FORECASTING SYSTEM

The Royal Australian Navy is to co-operate with the United States Navy in a type of underwater "weather forecasting" that contributes to the efficiency of submarine detection.

Arrangements had been made for the R.A.N. to contribute to the U.S. Navy's Anti-Submarine Warfare Environmental Prediction System.

The service, covering the Pacific area, is operated by the United States Navy from Guam.

Both the United States Navy and the Royal Australian Navy would benefit from the new arrangements. Australian warships would contribute oceanographic information direct to Guam, and in return the R.A.N. would receive the regular forecasts of underwater conditions.

The availability of reliable information on sea temperatures, currents and other factors was of great importance in determining effectiveness of anti-submarine detection equipment.

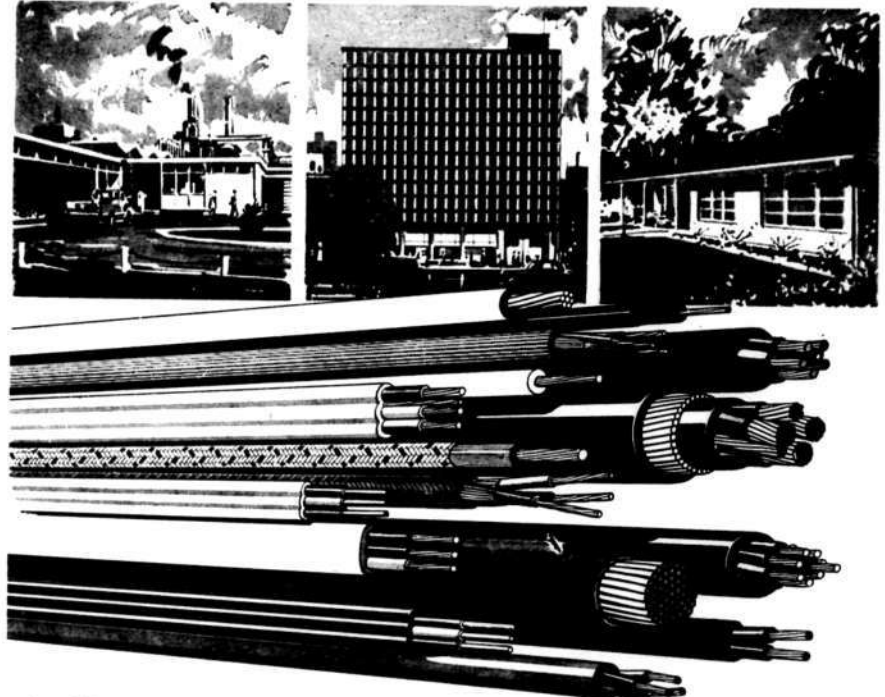
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Who put the cat in the cat-cracker?

This is hardly the right kind of cat for a cat-cracker — a cat-cracker being an important piece of oil refinery plant for making better petrol. The word “cat” is short for catalyst, a material which “cracks” heavy molecules and produces a petrol of high anti-knock quality.

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