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In this issue of "The Navy" commences with the current plans afoot in the U.S.A. to re-activate some, or all, of the four Iowa class dreadnoughts.

In the article the author has discussed these ideas, while at the same time reversing back into the pages of history to look briefly at past attempts with hybrid carrier-battleships and other related conversions. With the increasing cost of new construction and the resultant fewer warships joining the ranks of the United States Navy, the cost of conversion will be an obvious factor if, whether or not this grandiose scheme is implemented upon the dreadnoughts.

In another article, "Getting the 'Maritime' Message Across," the Federal President, Geoffrey Evans, illustrates the feeling of most Australians with respect to local defence and maritime defence in particular.

The colour front cover of H.M.A.S. MELBOURNE on the previous issue of "The Navy" was well received (judging by the number of letters written) and shall be continued as a regular feature. As most readers will be aware, the flagship recently celebrated 25 years of service. A commemorative book has just been released and is reviewed in this issue of "The Navy." Other books under scrutiny include "British Cruisers of World War Two", "Battleships of the World (1905-1970)", and "A Century of Ships in Sydney Harbour."

Assistance with this issue of "The Navy" was given by Harry Adlam; The Australian War Memorial; David Diment; Geoffrey Evans; Steve Giver; Ron Hart; Historical Studies Section, Canberra; Vic Jeffries; A. J. Lee; Michael Mellier-Phelps; Navy Public Relations, Sydney and Canberra; Ron Wright; The Royal New Zealand Navy; and Alan Zammitt. Special thanks to Tom Jackson of Command Public Relations for our superb colour photograph of H.M.A.S. FREMANTLE.

The deadline for the next issue will be 9th January, 1981.

ROSS GILLETT

NOTICE TO ADVERTISERS

The Trade Practices Act, 1974 comes into force on October 1, 1974. There are important new provisions in this Act which compel goods and services, or in connection with the supply of goods or services or in connection with the promotion by any means of goods or services, that are unsatisfactory or misleading or deceptive in any way.

(a) Induce a person to buy goods or services that are unsatisfactory or misleading or deceptive in any way.

(b) Misleadingly misrepresent that goods or services are of a particular standard, quality or grade or that goods are of a particular style or model.

(c) Induce a person to buy goods or services that are unsatisfactory or misleading or deceptive in any way.

(d) Induce a person to buy goods or services that are unsatisfactory or misleading or deceptive in any way.

(e) Make false or misleading statements concerning the existence or effect of any warranty or guarantee.

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Before the advent of the steam aircraft catapult and its incorporation into the Fleet Carrier, individual carrier-borne aircraft were severely limited insofar as they had to pull their own fuel-laden weight, plus the weight of their offensive/defensive stores, off the flight deck by the power of their own piston engines. Assisted only by the carrier steaming flat-out into the wind, this was reasonably satisfactory if there was a fair breeze blowing to start with, but was very often very risky, particularly in hot climates, where the prevailing winds were minimal or nil.

The catapult and the advent of the turbojet engine changed all that and new aircraft of unbelievable power and force. By Second World War standards, the norm on ‘conventional’ carriers, such as H.M.A.S. Melbourne at one end of the scale and the U.S.S. Nimitz at the other end. Both these vessels are designed around a flight-deck covering almost the entire upper surface of the vessel and originally catering to aircraft which take off more or less conventionally. Except for isolated but nevertheless violent exchanges, the battleship role in World War II was largely confined (on the Allies side in the Pacific), to either pre-invasion bombardment or to shore-up their sea-borne aircraft capabilities. The 30,000 ton battleships Ise and Hyuga were taken in hand in 1943 for conversion to ‘battleship-carriers.’ In this process two of the six twin 14-inch turrets (‘X’ and ‘Y’) were removed and replaced by large covered structure stretching aft from the mainmast to the stern. This structure, which raised the deck by two levels, formed a hangar large enough to house 22 bomber-seaplanes, the top forming a flight deck from which the aircraft could be manhandled onto the early-type catapults sited to port and starboard, just forward of the flight deck. A lift in the centre of the flight deck performed its usual function. Flight operations were designed to conclude with the aircraft alighting into the sea alongside and being hoisted back onboard by a derrick sited aft on the flight deck.

A daring concept, but, in this instance, doomed to failure. Since by 1941 it was obvious that the Fleet without adequate air cover was in grave peril, these ships, together with the rest of the J.J.N. I., were already at risk due to the sinking of the main carrier units. After their conversion ISE and HYUGA were doubly damned. Their special seaplane fighters and bombers did not become available and even if they had, there were no longer any suitable pilots. Inactive and virtually unused, they were both bombed and sunk in shallow water at the end of the war.

Before the Second World War, the Soviet Union enlisted the advice and technical aid of other nations, particularly Italy and Germany, for the process of building a modern navy. The American naval architect firm of Gibbs and Cox were also approached for aid with capital ship designs. By far the most unusual was “Hybrid Design ‘B,’” which called for four triple 16-inch guns, (two each fore and aft), and a raised flight deck between the turrets amidship and the superstructure, mass and funnel on the starboard side of the flightdeck which was only a horrendous 405 feet 8 inches long by 80 feet 4 inches wide. These dimensions were much smaller than the flight deck of the smallest U.S. escort carrier of World War Two. What’s more, no provision was made for any arresting systems! All aircraft were to have been hauled aft and launched by two catapults on the port and starboard quarters. Luckily this monster never progressed further than the drawing board.

The turbojet-powered aircraft was just beginning to revolutionize carrier operations when the helicopter started to show the world that it was capable of even greater deeds than casual evacuation and liaison duties. It grew in size, power, complexity and variety of roles. It grew into a formidable submarine hunter as well as commando carrier. Hopping
motionless over the water, it can lower a powerful sensor into the water and listen for submarine activity. And so the Royal Navy took in hand two of its latest cruisers, H.M. Ships BLAKE and TIGER and performed on them exactly the same type of structural surgery as was done to ISE and HYUGA, but on much smaller ships. They were then able to carry, (and stow in a hanger), four Sea King anti-submarine helicopters. This conversion worked.

The helicopter can hover and lift off vertically and carry quite large loads. The Soviet Union has gigantic cargo-carrying helicopters with vast carrying and lifting abilities. But even the high-speed Huey Cobra gun-ship choppers are as speedy and deadly as fixed-wing fighters. Enter the Harrier vertical take-off. (VTOL) fighter. This remarkable British-designed aircraft can lift off vertically, progress to very high speed level flight and then slow down and land vertically as well. (Despite Soviet claims, this is the only truly effective VTOL aircraft in the world). It is built in the U.S.A. as well, where it is known as the AV-8 "A" and "B" series.

America ended the Second World War with the four great Iowa class battleships at the head of a distinguished list of capital ships. The Japanese surrender was conducted on the U.S.S. MISSOURI of this class and after the Korean War, in which they participated, they were laid up to rest; only the U.S.S. NEW JERSEY seeing a last gasp of bombardment action during the Vietnam War before the too went back to reserve status.

But now the wheel looks like turning full circle. A proposal is very much afoot in the U.S.A. to put these great battleships back into service as battle-carriers, complete with a possible angled flight deck. This time, however, even though its general concept of the conversion process is almost identical to that of 1943, the vast difference lies with the aircraft and general weapons fit. For aircraft read AV-8's and anti-submarine helicopters. The ship's fixed weapons go straight back to the days of gunnery glory with the retention of the forward two triple 16-inch turrets. This would possibly be backed up by Harpoon anti-ship missiles, and Standard anti-aircraft missiles. Tomahawk cruise missile launchers could also be fitted, together with the Vulcan-Phalanx 20mm Gatling-type ultra fast reaction weapons.

Whether this proposal gets full approval is, at the time of writing, still in the balance, but the Americans have been pursuing the Sea Control concept for some years now and this conversion could well be the answer. If the 'green light' was to be given at this date, then two years should see the first of the converted battleships back in action.

That two year span might also provide her with a brand new and different class competitor in the form of the approximately 30,000 ton Soviet guided-missile battlecruiser KIROV, which has been under construction for the past five years, and which should enter service in late 1980. Early information indicates that the KIROV will be a spectacularly impressive warship armed with new generations of surface-to-air and surface-to-surface missiles, but, faced with the onset of an equally impressive array of new missile technology from the U.S.A., the real purpose of the KIROV and any subsequent sister ship is not easily discernable.

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The "Grimsby" Class Sloops of the Royal Australian Navy

Between the two World Wars, the R.A.N. found itself very short of vessels capable of sweeping up moored mines, and with the paying off of the three "Flower" class sloops the matter came to a head.

It was decided to replace the latter with a new type that could combine the duties of mine-sweeping with that of convoy escorts. The type chosen was the Royal Navy's "Grimsby" class sloops, a very versatile class indeed. Four ships were ordered, with names taken from the old "River" class destroyers. Some persons in Melbourne must have had some pull with the Naval Board, because in this case history did not repeat itself. When the destroyers were built in 1909-10 the first unit was "PARRAMATTA" and the second, "YARRA". In the new sloop programme the first ship was "YARRA", with "PARRAMATTA" taking a poor third.

Basically the "Grimsby"s" were a twin screw ship with a standard displacement of 1975 tons, and fully loaded ran to about 2500 tons, although there were slight differences between ships. With an overall length of 26 feet and a beam of 36 feet they were quite roomy ships, and very comfortable for the crew. In the scheme of armament they represented two distinct pairs. The first pair, "YARRA" and "SWAN", were given the main armament of three QF Mark V 4 inch guns on HA mountings, sited in A and B positions forward and X position aft.

The first two were laid down in 1934 and 1935 respectively. "YARRA" was built as Ship Number 114 and "SWAN" as Ship Number 115 by Cockatoo Island. "YARRA" was launched on 18th July, 1939. The second pair, "PARRAMATTA" and "WARREGO", were given a main armament of three QF Mark XIX 4 inch guns on X mounting, sited in A position and a single 4 inch Mark XVI on a Mark XIX mounting in X position. In this pair a four barrel 0.5 inch machine gun was placed in B position. Otherwise the ships were identical, the main structural difference being that the blast screen for'ard was omitted from the second pair. During the course of WW2 "SWAN" replaced her old single four inch for twins, and "WARREGO" replaced her after single for a twin. "YARRA" was lost before this modification could be implemented, and "PARRAMATTA" went down with her twin in A position and single in X position.

The situation in 1939 was two ships, "YARRA" and "SWAN", in commission, one ship, "PARRAMATTA", launched and nearing completion, with the fourth unit, "WARREGO" still on the slips. "PARRAMATTA" was commissioned for service on 4th April 1940 by Lt-Cdr J. H. Walker, R.A.N., and was soon despatched to the Red Sea and Mediterranean areas. "YARRA" moved off to the Persia Gulf, leaving "SWAN" to take over duties as Senior Officer of the 20th Mine-sweeping Flotilla.

"WARREGO" was launched on 10th February 1940 and commissioned by Commander R. V. Whear, R.A.N., on 21st August 1940. The order was now complete, all four ships being on active war service.

"WARREGO" joined "SWAN" in the 20th Flotilla, and settled down to the dull and often boring task of sweeping for mines, mainly in the Bass Strait area. That mines had been laid in that region was quite evident, merchant ships had been sunk by these grim weapons of war. On the other side of the world "YARRA" was making quite a name for herself in the Persian Gulf, where she joined a mixed force of British sloops and the Australian man of war H.M.S. "KANIMBLA" in neutralising the Persian Navy. "PARRAMATTA" entered the Mediterranean and established a very healthy reputation as an escort, her gunnery efficiency being second to none. This little sloop came to an untimely end on 27th November 1941, when she was torpedoed by U559 off the Libyan coast.

The "Grimsby" Class Sloops

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Loss of life in "PARRAMATTA" case was very heavy. 118 missing, presumed dead. The first loss of the R.A.N. "C.R.I.T. by a hit was the 286-ton sloop "SWAN", which was employed in some very difficult operations. Her work in surveying the landings has become a part of Australian tradition.

The Dutch East Indies convoys were sent from Darwin and in one particular convoy to Koepping the two sloops were part of the screen for four transports. The main ship in the escort was the U.S. cruiser "HOUSTON" backed up by the old four-stack destroyers "PEARY" and the two Australian sloops. The convoy left Darwin just before 0300 on 15th February, 1942, and headed for Timor. This was an important re-inforcement and the Japanese soon became aware of it. At 0915 on the 16th the convoy was taken over by a Japanese flying boat, which kept the force in sight until an attack squadron arrived two hours later. Thirty six bombers and nine flying boats commenced a very heavy bombing attack but were not really successful. The escorts put up a very well directed AA barrage. The net result for the Japanese was that no ship received a direct hit, and only one ship was reduced. "WARREGO" turned her attentions for herself in February 1942 when the port was attacked by six bombers and nine flying boats. The ship was refuelled and got under way again to Timor, but "SWAN" was concerned it was just another job well done. The Royal Navy did not give her name to a new vessel's ability to steer with all this extra weight, but the little ship managed to make port and deliver her cargo. However, "YARRA" was running short on fuel on the 3rd March, 1942. "YARRA" fought a gallant action against three heavy cruisers and two destroyers, an action which outshone the famous "JERVIS BAY". The Dutch East Indies convoy was impossible for a small sloop armed with only three 4-inch guns to do any damage at all, but "YARRA" was game. She fought back as hard as she could in an attempt to get into Darwin, and when the convoy she was escorting began to make port she was her best to do so. The end was never in doubt, and when "YARRA" went down she took 188 with her. Like her sister "PARRAMATTA", "YARRA" was tough out in combat.

The war with Japan saw "SWAN" and "WARREGO" engaged in convoy and general duties in the northern area, and both ships gave good accounts of themselves. In the attempt to strengthen the Dutch East Indies convoys were sent from Darwin and in one particular convoy to Koepping the two sloops were part of the screen for four transports. The main ship in the escort was the U.S. cruiser "HOUSTON" backed up by the old four-stack destroyers "PEARY" and the two Australian sloops. The convoy left Darwin just before 0300 on 15th February, 1942, and headed for Timor. This was an important re-inforcement and the Japanese soon became aware of it. At 0915 on the 16th the convoy was taken over by a Japanese flying boat, which kept the force in sight until an attack squadron arrived two hours later. Thirty six bombers and nine flying boats commenced a very heavy bombing attack but were not really successful. The escorts put up a very well directed AA barrage. The net result for the Japanese was that no ship received a direct hit, and only one ship was reduced. "WARREGO" turned her attentions for herself in February 1942 when the port was attacked by six bombers and nine flying boats. The ship was refuelled and got under way again to Timor, but "SWAN" was concerned it was just another job well done. The Royal Navy did not give her name to a new vessel's ability to steer with all this extra weight, but the little ship managed to make port and deliver her cargo. However, "YARRA" was running short on fuel on the 3rd March, 1942. "YARRA" fought a gallant action against three heavy cruisers and two destroyers, an action which outshone the famous "JERVIS BAY". The Dutch East Indies convoy was impossible for a small sloop armed with only three 4-inch guns to do any damage at all, but "YARRA" was game. She fought back as hard as she could in an attempt to get into Darwin, and when the convoy she was escorting began to make port she was her best to do so. The end was never in doubt, and when "YARRA" went down she took 188 with her. Like her sister "PARRAMATTA", "YARRA" was tough out in combat.

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THE NAVY
January, 1981

YOUTH TRAINING SHIP “TRITON”

It was midday when the ship anchored a mile off the desolate Far North Queensland shore where the jungle covered mountains right down to the sea. Soon the deserted beach was distributed by some twenty figures emerging from the bordering undergrowth and after a short while their activity resolved itself into a series of yellow rubber dinghies padding against the stiff on-shore breeze and lively surf, to reach the ship.

The ship was the “Triton” owned and operated by the Cairns Branch of the Navy League. The Youth Training Ship “Triton” was built in Cairns 50 yards downstream from the Barron River Bridge during the Second World War. She was built by the milling firm of J. M. Johnston for carrying timber from the Bloomfield River to Cairns. However, before launching she was commandeered by the American Armed Forces, named “The General MacArthur” and sailed into the Pacific war zone as an Allied supply ship. She carried both cargo and passengers for the Department of Native Affairs. After becoming the most familiar sight for a long period of time in the northern region she was pensioned off in 1974 and replaced with a steel vessel also named “Melbidir”. The ship was acquired by the Navy League Cairns, Territorial Branch for development as a youth training vessel to be run by Sea Cadets crews under the guidance of professional master mariners and ocean going marine engineers. As the hand over, the ship was in an unserviceable condition and an enormous amount of work with exceptional assistance from the North Queensland Engineers and Agents brought the ship to a fully operational condition in a period of three years. The amount of volunteer labour and donated materials has been quite staggering for a venture of this magnitude.

The Outward Bound off-shore courses are the highlights of the annual youth training programme involving the “Triton” and her volunteer Navy League crew for a period of two weeks at sea. They are the only water based Outward Bound Courses in the world. The basic youth training programme involves weekend voyages to the reef and its islands with such groups as the Naval Reserve Cadets, the Rangers, school diving clubs and similar bodies.

It is now intended to increase the 30 berth accommodation to some 70 berths and in the longer term, with an anticipated life expectancy of at least a further twenty years, to offer “Triton’s” unique Youth training facility to groups from other parts of the country.

The Triton relies entirely on volunteer labour and on the generosity of Businesses, Boards, Associations and individuals who can appreciate the significance of the project and who have an understanding of the needs of our youth.
Dear Sir,

I am writing to you in regard to the August edition of "The Navy", magazine. I have been a regular reader of your publication since its inception. In the August issue, I noticed an article on Naval Field Guns and was particularly interested in the section on the Hobart Gun.

I would like to express my appreciation for the detailed information provided in the article. It was evident that a lot of research went into compiling the material, and I commend the author for his efforts. I also appreciate the photographs that were included, as they provided a visual representation of the subject matter.

I would like to correspond with the author of the article, Mr. M. J. Storrs, to discuss further details about the Hobart Gun and its history. I am interested in learning more about the technical aspects of the gun and its role in naval operations. I would also like to inquire about the availability of any additional resources or publications on the topic.

Thank you for considering my request. I look forward to hearing from you.

Yours faithfully,

Harry Adlam

---

The Author Replies

Dear Sir,

Thank you for your interest in the article on Naval Field Guns. I am glad to hear that you found it informative. I would be happy to correspond with you to discuss the Hobart Gun in more detail.

Regarding the availability of additional resources, I can recommend the following publications:

- "Naval Field Gun, T.S. TAMAR, Launceston" by A. J. Lee
- "The Tsars Other Ships" by Arnold Green

I hope you will find these resources useful. If you have any further questions or comments, please do not hesitate to contact me.

Sincerely,

Arnold Green

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Naval field gun, T.S. TAMAR, Launceston. (Photo — A. J. Lee)

Dear Mr. Gillet:

I am trying to locate a copy of the book that was reviewed in your last issue, "U.S.S. Monitor" by Miller. I have checked our State Reference Library, but they only have the ISBN number and publisher's name, no address. The local technical book-sellers are no help either. I'd be most appreciative if you could advise where your reviewer obtained his copy, or the publisher's address from the book itself.

Sincerely,

Charles J. Welch

---

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DONT ARGUE

---

Dear Mr. Storrs:

I was impressed by your letter to Tom Strasser regarding the ANGARA story. It was a pleasure to read about the ANGARA's historical significance and the efforts to preserve its legacy.

I would like to follow up on the sequel to "The Tsars Other Ships" that you mentioned. I am particularly interested in the naval history of the Battle of Tsu-Shima, and I would appreciate any additional information or resources you might have on the topic.

Thank you for sharing your knowledge and insights. I look forward to hearing more about your work on "The Tsars Other Ships" sequel.

Sincerely,

A. J. Lee

---

The 1900 Torsio cruiser ASKOLD, in dry dock. (Photo — M. Mellor-Phelps)

Page Fourteen
With 250 men sleeping below decks fresh air supply meant more than leaving a porthole open.

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Super Powers Get Together

A tiny 120 ton American submarine is dwarfed by the huge bulk of the 12,700 ton Ussari battleship R1 1/1. Seen, built in America for the farmer. It is highly unlikely that present-day navies of the U.S.A. and U.S.S.R. would find themselves sharing a common dock. (Photo: M. Willian Phelps)
Getting the “Maritime” Message Across
Commander Geoffrey Evans

ONE of the most surprising things about present-day Australia is the insular and land-locked thinking of so many of its people.

In pre-World War 2 days this was understandable — the products of the land provided the country’s wealth, communication with other countries was limited and slow, comparatively few Australians travelled abroad, immigration was of modest proportions; in military matters, the legends of the past were upheld, and the whole exercise revolved around local issues; even the public conception of such a force however serious as an important domestic matter.

In the last ten years or so we seem to have been in the doldrums, even to have reverted to a kind of tribal society with the tribes taking the form of self-interest groups which scarcely spare a thought for each other let alone for the country as a whole or in relation with other countries.

The 1980 Federal election campaign has been made to what might be termed some way to go before complete acceptance; the public conception of such a force however serious as an important domestic matter is still an 80% or 90% dependency upon overseas supplies.

In the foregoing paragraphs reference has been made to what might be termed the “hardcore” or the “natives” of maritime activity require concerted effort and those who support maritime activity should be internationally minded; travel and the need to understand what people are about is part of everyday life.

Other groups of course also develop this understanding but the maritime community is by far the largest and most extensive. Navy Leagues are a part of this community and have been for a very long time — in fact since the first Navy League was established in Britain nearly a century ago.

The principal objective of all Navy Leagues is to develop in the wider communities wherein they exist an interest in “matters pertaining to the sea”. In practice their work ranges from supporting the sea cadet movement to involvement in national security issues. In Australia the task of the League has never been easy due to the communities attitudes referred to in the opening paragraph. Nevertheless some progress has been made and the need for a maritime defence force seems to have been accepted; the public conception of such a force however varies enormously and ranges from a patrol-boat navy to a more appropriate maritime nation.

The small bulk-cement carrier GOILLA TH (photo 13th March, 1979) represents part of Australia’s merchant shipbuilding industry. (Photo — R. Gillett)

In other areas, the Australian merchant fleet is miniscule when related to the country’s dependence upon overseas trade, and closer to home our fishing industry has been dreadfully neglected by a country claiming a fishing estate — it simply recognises that it has some way to go before complete satisfaction is achieved!

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The Fleet Review of 1920
by David Diment

"In the perfect beauty of the crisp autumn afternoon, the Prince of Wales made his triumphant entry to the homeland of the Anzacs in the Australian destroyer that bore their names."

With these words, the Melbourne newspaper, "THE ARGUS," announced the arrival of H.M.S. PRINCE OF WALES (later king Edward VIII) in Melbourne on Thursday, May 27, 1920.

Melbourne was a part of call on the Prince's tour of Australia, New Zealand and the West Indies. The Prince, accompanied amongst others by the man who was to become Earl of Mountbatten of Burma, spent almost three months in Australia visiting every state and capital city.

However, the Prince nearly didn't make it to Melbourne. Rather, the RENOWN nearly didn't make it because of the heavy fog which greeted the battleship at the heads of Port Phillip. By 0700, the fog had engulfed RENOWN. It was virtually impossible for a ship of her size to pass through the narrow and shallow entrance of the bay except at slack water and with clear visibility. The RENOWN, in the fog, "stepped steam ing and began screaming". She "screamed" with her siren and called by wireless to Melbourne to request Australian destroyers to come and collect the Prince.

The new Australian "S" class destroyers, STALWART, SUCCESS, SWORNSMAN, TASMANIA and TATTOO and the Markman class destroyer leader ANZAC, formed up in a single line ahead at 10 to 15 knots and, once outside the heads, spent close upon two hours searching for the RENOWN. There was a near collision between SUCCESS and TASMANIA but, finally, the Prince of Wales and the official party transferred to ANZAC at 1300. The other destroyers took up their escort stations and increased speed to 27 knots to bring the Prince to Melbourne.

"It was a thrilling run up the bay and produced a magnificent spectacle" — presumably for those spectators lucky enough to get it through the fog. Indeed, aboard the destroyers, this moment of high speed was looked forward to with eagerness and delight, not only to impress the Prince, but also because the "speed capacities of these magnificent oil-burning destroyers had not been as yet properly tested."

If the dash into Melbourne had produced a "magnificent sea-scape" as the next day's onlookers would witness, the Prince was "once our pride as a torpedocr" and now "in her old age, seeming to shrink smaller and smaller."

Admiral Sir William Roose Cromwell, just recently retired as First Naval Member on the Board of the Royal Australian Navy and justly recognised as "Father of the R.A.N.", had a kind eye for the PROTECTOR when she was the pride of the South Australian Navy and had taken her to help Royal Naval forces in the Bexar Rebellion of 1900. PROTECTOR, although only of 800 tons, had a huge armament for her size and had been kept busy on patrol duties in World War I. The Prince and PROTECTOR were to become "good ships" and "the Australian Navy's most famous namesake."

"She was only "so much iron now.""

The review was, in the words of the press, "wonderfully yet quietly impressive" with the sailors from each ship cheering the Prince as he passed. The Prince of Wales stated how much he appreciated being given "the opportunity of being present at the first review of the R.A.N."

Indeed, considering that the R.A.N. had only officially been in existence for less than 10 years, the review was an amazing achievement with 1 battle cruiser, 4 light cruisers, 12 destroyers, 4 submarines and 4 sloops in addition to 2 auxiliary vessels.

However, 28th May, 1920 marked the high-point of the R.A.N. for quite a few years. Wartime had brought rapid expansion but the 1920s and 1930s were to bring an equally rapid contraction in the level of manpower and forces. AUSTRALIA, the cruisers and the 6 older destroyers were to be scrapped and the rest of the ships were kept either in reserve or in port. By 1931, only 4 ships were retained in commission because of the economic ravages of the Depression.

Nevertheless, the "new generation" of the R.A.N. bounced back from this low point with the approach of World War II and expanded during the war years to a unprecedented level of skill, manpower and ships. The 1920 Review, while marking the climax of the early years of the R.A.N., was a foretaste of what was possible in terms of spirit and strength by the R.A.N. The newer namesakes of many of the ships present at the review were to bring fame and glory to the R.A.N. and Australia as a nation.
A Century Of Ships In Sydney Harbour

By: ROSS GILLETT and MIKE MELLAR-PHELPS
Published by: RIGBY LTD.

Reviewed by: HARRY ADLAM

BOOK REVIEWS

I t is only fair to state that I personally know the co-authors of A Century Of Ships In Sydney Harbour, but this being the case I know that I can be critical without (I hope) bringing on a law suit.

I have often told people that there is always something happening on Sydney Harbour, and if this book does nothing else it proves this point. The book is a pictorial depicting the harbour scene as it was and as it is. The selection of photographs are excellent, and apart from depicting the ships, they also depict the growth of the harbour for shores themselves. For many people it will be hard to imagine some of the places shown, take for example McMahon's Point. The younger generation who are used to the green grassed park and the large block of home units will probably not be able to picture the scene when a cluster of steam ferries were always in attendance taking on fuel. I am pleased to see that this live of activity is shown in all its glory. We can also see the growth of Circular Quay, a place that today is nothing like circular. The photo on page 13 showing Sydney Cove as it was in the 1870's bears no resemblance to the Circular Quay as it is today.

On page 24 is a photo of the raising of "AUSTRAL" in Neutral Bay in 1881, and as one can see, the skyline bears only minimal likeness to the Neutral Bay area of the present time. The work involved in getting "AUSTRAL" afloat was a great credit to the port ninety seven years ago.

Sydney Harbour has always been a popular resort for warships, and over the years naval vessels from every nation have paid visits, and in this book many of these visits are recorded. One of the very fine shots of the Great White Fleet's visit in 1908. This was quite an event for Sydney Harbour, and as was the 1925 visit. The photos used to illustrate these occasions are excellent, recalling the pride of incident the likes of which we shall probably never see again.

The names of famous passenger liners appear together with some of the less well known cargo carriers. We see all types from the graceful class of sail to the ugly, but functional, container ships of today. We see the ferries and the tugs, we see floating cranes and floating drydocks. We see the various types of naval craft of the Royal Navy and Royal Australian Navy. We see some unusual shots of old sailing warships in drydock at Cockatoo Island, and we see warships tied up in reserve in the days when Garden Island was an island. The authors have gone to no end of research when working out their captions, and so I was not a bit upset when I read the caption on page 64. The scene is "rotten row" behind Garden Island, and the author mention the ship seen "...and behind her a S class destroyer HMAS ANZAC". If you look closely you will see that there are two, not one. 5 boats alongside ANZAC. I know this is a minor error, but an error none the same.

One photo that did upset me was the shot of the second "WARREGO" being broken up in Blackwattle Bay. No one likes to see his old ship in this suit.

In general, the authors have been able to reach a happy medium with the illustrations, both naval and merchant ships are covered, and each photograph is well covered. Both types have played an important part in the scene on Sydney Harbour and in this book they are shown to their best ability, doing great justice to the harbour itself. The harbour is one of world renown, and indeed it is a beautiful one. It has changed over the years, and photos like the ones of the old Glebe Island Bridge and the one that vanishes today are classical examples of this fact.

In reviewing a book such as this I usually take a liking to one or two photographs more than the rest. In this case all shots were good, and not one ship was ruined by the spine of the book. Where a photo was spread over two pages the ship was on one side of the other, but the spine never cut the ship. This is something that should be done more often, as many good shots have been ruined by not following this method. The harbour can be peaceful, and it can be angry. Both moods are shown and my selection of photos and the shot of the paddle steamer "Warrego" on the Lane Cove River, beauty sheer and unadorned, and that grand old lady "DEE WHY" rolling her way across the Heads, showing the angry mood.

I like this book, and I am sure you will too. What better present can you give to a loved one or friend than "A CENTURY OF SHIPS IN SYDNEY HARBOUR".

The 15 inch turrets of H.M.S. QUEEN ELIZABETH, 1915. (Photo — Conway Maritime Press)

"BATTLESHIPS OF THE WORLD 1905-1970"

B. SIGFRID BREYER
Published by: CONWAY MARITIME PRESS
Reviewed By: ROSS GILLETT

IN 1973, Sigfrid Breyer published "Battleships & Battle Cruisers 1905-1970". That volume, now a standard reference book in its own right, provided a comprehensive coverage of the world's modern dreadnought type capital ships through text and an extensive series of scale line drawings.

The only drawback with the first volume was the lack of any photographs. In the years since publication, many people voiced the feelings that they would appreciate a series of selected photographs of the vessels to complement the hundreds of line drawings in the aforementioned volume.

With the publication of "Battleships of the World 1905-1970", this requirement has now been met, and this book contains 570 photographs and 44 line drawings, including a number of significant battleships. Most of the former were obtained from theStaniag Library of Contemporary History and as such are mostly unavailable to the English-speaking reader.

The ships are arranged by nationality and sub-grouped into respective classes.

The Royal Australian Navy's battleship H.M.A.S. AUSTRALIA is depicted in two views, one taken by H.M.S. NEW ZEALAND and H.M.M. INDOMITABLE and the second in her final moments of scuttling on 12th April, 1924.

The illustrations appearing in "Battleships of the World 1905-1970" have reproduced very well, although some vessels have lost either the bow or stern through careless guillotining. Each ship is photographed at various stages of its career, including a number of views at the breakers' yard. Many battleships and battle cruisers were converted to new configurations and all are fully illustrated and discussed through each caption.

Two of the most interesting photographs comprise one of the smallest sections. The Navy is Chile and the battleship is, of course, the former H.M.S. CANADA or ALMIRANTE LATORRE. The views depict the dreadnought at Yokohama at the end of her last voyage to the scrap yard. Her condition unbelievable good after more than forty years in commission.

A number of appendices follow the last nation. Turkey, with No. 4—Capital Shipbuilding in the Soviet Union 1918-1950—providing an extensive insight into this relatively unknown area of naval activity. One of many designs planned for the Soviet was a hybrid Battleship-Carrier armed with eight 18 inch, twenty-eight 5 inch, twenty-four 1 inch and anti-carrier guns, as well as 16 wheeled aircraft, four floatplanes and 2 catapults. Most of the Soviet's grandiose schemes, including the aforementioned, cannot be built; although all are fascinating.

Illustrations in this work are first class. In all there are 150 of them, including 8 pages in full colour. The present MELBOURNE is the second ship of the R.A.N. to carry the name, and for completeness there are a number of pages devoted to the first of the name, the "Town" class cruiser that was commissioned in 1913, and paid off in 1929. The remainder of the 130 pages are then devoted to the career of the present ship.

This book will I feel, become a very much sought after conversation piece by former MELBOURNE crew members and ship lovers alike. It is not often that a book is published about a warship when that ship is still in commission, usually books of this type are written after the vessel has been reduced to razor blades.

Of the many illustrations used, the colour photos for the dust jacket are possibly two of the best seen of the ship so far. Both are aerial views of the ship leaping out of the water in the Great Australian Bight, but then I liked all the other photos too. The front cover shows the ship from the port bow, whilst the back cover shows her from the stern at sunset. Both are aerial views.

This book was produced at the request of the R.A.N.'s flagship to commemorate the anniversary of her commissioning twenty five years ago.

"WARSHIP No.14"

Edited by: John Roberts
Price: $5.00

Reviewed by "Paluma"

NOW in its fourth year of publication is the quarterly journal "WARSHIP".

The first issue reviewed here included eight separate articles, covering such subjects as: "German Human Torpedo and Minelayers", "Newfoundland's 120th anniversary", "The last table appearing is a summary of all the capital ships mentioned in the volume, giving the years of construction, full load displacement, speed, main and secondary armament and armour protection details. In the foreword to the book, the author suggests that if his next work provided a full set of new information to the warship enthusiast it will have fulfilled its purpose. As far as this reviewer is concerned the author has succeeded admirably in his objective. "Battleships of the World 1905-1970" is the type of book for most naval enthusiasts, combining as it does, superb photographs accompanied by detailed view of man ships, well written captions and by an acknowledged naval historian.

In brief "WARSHIP" again provides excellent reading.

January, 1981

BRITISH CRUISERS OF WORLD WAR TWO

By: Alan Raven and John Roberts
Published By: Arms & Armour Press

Reviewed By: GAYNUHDA

This book was released in late 1980 as a companion volume to "British Battleships of World War Two".

However, out of the latter covered twenty-two capital ships of the 1905-1914 era in 456 pages, the new publication describes 121 cruisers in a 444 page book. To ensure the correct historical background, the first cruiser actually covered is the 1912 vintage ARETHUSA, though to the law of the conventional, all gun ships, the Tiger Class of the 1950's, are covered; the reason for the exclusion of ADELAIDE being that her design, a development from the original Town Class was prior to the Arethusa Class of 1912.

However, it seems rather odd that where the Arethusa and Early C Class of the Royal Navy, which saw actual service in World War Two, are covered, the Australian ship, which remained in commission to 1945 is ignored completely.

Despite the lack of any reference to ADELAIDE, the book contains very well illustrated. Some very fine views of CANBERRA show the ship in her final stages of fitting-out in 1927 with the original short funnels in place. The three light cruisers form their own chapter, including a double-spread outstanding profile and deck plan of SYDNEY. Lists of all ships particular are included together at the rear of the book. The authors of "British Cruisers of World War Two", Alan Raven and John Roberts, have produced another first-class reference work with the publication of this book.

Although the price will be high, it is recommended reading to all those with an interest in the Royal Navy.

M.I.A.S. MELBOURNE — 25 YEARS

B. ROSS GILLETT
Published By: NAUTICAL PRESS
Reviewed By: HARRY ADLAM

This book was produced at the request of the R.A.N.'s flagship to commemorate the anniversary of her commissioning twenty five years ago.

A quarter century is a long time for any ship to be in constant commission and MELBOURNE's twenty five years is a lot has happened. This book gives you a day by day insight to those moments. Illustrations in this work are first class. In all there are 150 of them, including 8 pages in full colour. The present MELBOURNE is the second ship of the R.A.N. to carry the name, and for completeness there are a number of pages devoted to the first of the name, the "Town" class cruiser that was commissioned in 1913, and paid off in 1929. The remainder of the 130 pages are then devoted to the career of the present ship.

This book will I feel, become a very much sought after conversation piece by former MELBOURNE crew members and ship lovers alike. It is not often that a book is published about a warship when that ship is still in commission, usually books of this type are written after the vessel has been reduced to razor blades.

Of the many illustrations used, the colour photos for the dust jacket are possibly two of the best seen of the ship so far. The front cover shows the ship from the port bow, whilst the back cover shows her from the stern at sunset. Both are aerial views.

In brief, M.I.A.S. MELBOURNE — 25 YEARS is a must for all enthusiasts, and indeed all those with a love for Australia as a nation. The book is available direct from the publishers, Nautical Press, P.O. Box 323, Rockdale, N.S.W. 2216 for $3.50 per copy, plus postage of $1.20 per copy.
THE FORGOTTEN FLEET

THE commissioning of the Navy’s new support facility, H.M.A.S. Stirling, on 28th July, 1978, heralded the Royal Australian Navy’s return to Garden Island.

Between 1947 and 1957 there were as many as eleven R.A.N. warships laid up in the sheltered waters of Careening Bay, the present site of H.M.A.S. Stirling. Surprisingly the Navy holds little records of this in W.A. and most serving personnel do not know that the R.A.N. employed this island in the past. With the end of hostilities in 1945, the Navy quickly set about reducing its numbers as men returned to civilian life.

Like all allied navies, Australia had many fine ships surplus to peace-time requirements. Therefore it was decided to place Reserve Fleet detachments at various points around Australia. One was designated to the ideally sheltered Careening Bay. Apart from the River Class frigate, H.M.A.S. LACHLAN, the other ships were minesweepers of the large Bathurst class, of which 56 had been built for the R.A.N., and another four for India. The first to arrive was H.M.A.S. HOBART on 23rd November, 1945, closely followed by H.M.A.S. GLENEAGLE on 13th December. It was another twelve months before the third ship arrived, H.M.A.S. PARKES, on 15th December, 1946. She came across from the south-southeast of Fremantle, where she had been since 18th December.

H.M.A.S. BENALLA was slipped in Fremantle on 8th January, 1947, and proceeded to Garden Island on 16th January. That same day H.M.A.S. TOWNSVILLE was slipped in Fremantle and proceeded to Garden Island on 28th January. One year later on 18th June, 1948, H.M.A.S. Ships DELORaine, ECHUCA, KATOOMBA, LITHGOW and MILDURA were slipped at North Wharf, Fremantle. Three of these vessels were together again after sinking the first Japanese submarine by the R.A.N. This occurred off Darwin on 20th January, 1942, when H.M.A.S. Ships DELORaine, KATOOMBA and LITHGOW successfully depth-charge the large submarine I-124 of 1,142 tons. After docking at Fremantle these five corvettes proceeded to Careening Bay.

The last ship to arrive, H.M.A.S. LACHLAN, berthed at Fremantle from the eastern sector on 22nd September, 1948. She proceeded to Garden Island on 6th December. H.M.A.S. LACHLAN was one of Garden Island for six months, in which time a great deal of effort went into her maintenance with the view, as the officers and men of the detachment, that she was going to be a fine headquarters ship. This was not to be, for she was taken back into Fremantle on 4th May, 1949, and transferred on loan to the Royal New Zealand Navy in June. The LACHLAN was purchased outright by New Zealand in 1962.

H.M.A.S. MILDURA left Careening Bay after nearly three years in reserve. She was taken to Fremantle where she was re-commissioned as a training ship for national servicemen in the W.A. area, in February, 1951. She went back into reserve on 15th July, 1953, when replaced by H.M.A.S. JUNEEN.

The next ship to leave Garden Island was H.M.A.S. ECHUCA in 1952. On 7th April that year she departed Fremantle under tow by H.M.A.S. RESERVE, a fleet tug, bound for New Zealand where she was transferred to Melbourne on 16th June. It was another thirtysix months before another ship left, this time H.M.A.S. MILDURA, towed by the tug H.M.A.S. SPRIGHTLY, in December, 1954, bound for Melbourne. Then she became a stationary training ship in Brisbane before being broken up in 1955. H.M.A.S. BENALLA followed three months later, when she was taken in tow by H.M.A.S. SPRIGHTLY on 19th March, 1955, bound for Melbourne. BENALLA was sold on 20th February, 1958 and scrapped in Japan. With the departure of BENALLA, seven corvettes remained lying in the serene waters of Careening Bay with small maintenance crews. The only time excitement arose was on 1st April, 1955, when H.M.A.S. HORSHAM and H.M.A.S. GLENELG were towed out by the Dutch tug OOSTZEE, also bound for the yards in Hong Kong. When the Government announced on 2nd May, 1957, that H.M.A. Ships GLENEAGLE, KATOOMBA and PARKES had been sold to the Hong Kong Rolling Mills, it was obvious that the end was near.

On 27th November, 1957, the tug BUSTLER tossed these three ships out for the last time, thus ending another chapter in the history of Garden Island. Today H.M.A.S. Stirling stands on the shores of peaceful Careening Bay — some twenty years after those silent sentinels departed.

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Page Thirty-Two

THE NAVY

January, 1981

Fact File No. 9

By ROSS GILLET

DURING the Second World War, the Royal Australian Navy constructed twenty-two different types of lighters to replenish the fleet at home and abroad. Of this number only four variants were self-propelled, the remainder being dumb lighters. The former were the 120 foot motor refrigerated lighter, the 128 foot motor store lighter, the 85 foot motor store lighter and the 120 foot motor water lighter.

The 120 foot types were all built in local shipyards during 1944 and 1945, and cost approximately £60,000 per vessel. Each measured 120 feet b.p. and 122 feet 3 inches overall. Extreme breadth was 24 feet 6 inches and mean deep draft 8 feet 10 inches (harbour) and 6 feet 10 inches to 7 feet 3 inches (ocean). At maximum revolutions a speed of 9½ knots was obtained, but at 8 knots economical speed a range of 3,000 miles could be achieved. Over twenty tons of diesel oil and 1,070 gallons of fresh water was carried. Cargo capacity was 180 tons in the hold. The 120 foot lighters saw service in New Guinea and the islands as well as Western Australia. Accommodation was provided for 12 in number, comprising the captain, 1st mate, 1st and 2nd engineers and eight seamen. The vessels were fitted to mount one single orlikon on the house top, boat deck aft and a further two, one to port and one to starboard on the foc'sle deck.

Three refrigerated lighters were in use, MRL 251, MRL 252 and MRL 253. As far as refrigerated capacity was concerned, the trio could accommodate 4,755 cubic feet, comprising meat and butter 3,275 c.f., fruit and vegetables 760 c.f. and dairy produce 740 c.f. Gross tonnage for (MRL 253) was 196 and 119 tons. MRL 251 operated with the R.A.N. until 1959 when she was sold. Number 252 was deleted in the mid 1960's after surveying duties in 1958 and renamed PALUMA. She paid off on 30th March, 1973 and was sold on 21st May, 1974. After closing stages of the Second World War, basically each vessel carried only two derricks, although one single derrick post of double channels and plate was also sited amidships.

Summing up the steel motor lighter, it must be said that the craft have proved their value with several still in use in today's navy, some thirty-five years after being launched. Others such as PALUMA, survive in private enterprise. However time and age must eventually catch up and those remaining active will be retired when the four new lighters on order are completed.

The fourth type of self-propelled lighter was the 85 foot motor store lighter. These nine craft were of wooden construction and built in a variety of Australian yards in the closing stages of the Second World War. Basically each vessel displaced 180 tons and measured 85 feet (length) by 21 feet 9 inches (extreme breadth) by 8½ feet 8 inches (mean deep draft). In addition to the navy lighters a number was built for the Australian Army. Top speed was 8½ knots. At this rate endurance was 875 miles or 1,000 miles at 7½ knots. A crew of two officers, two engineers and six seamen was carried. The boats also stored 800 gallons of diesel oil and 400 gallons of fresh water. One 10 foot dinghy was stowed on the hatch.

Most R.A.N. vessels were disposed of by the mid 1960's with the final two, MSL 703 and MSL 707 being laid up in 1970 and disposed of the following year.

M.S.L. 706, one of nine 85 foot motor store lighters. (Photo — Historical Studies Section, Canberra)

199 gross and 88 net tons. A distinctive feature of these steel lighters were their deckhouse posts. Both refrigerated and stores lighters mounted four such appliances of two tons each. The deck was of wooden construction and 28 feet long. The six water lighters carried only two derricks, although one single derrick post of double channels and plate was also sited amidships.

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R.A.N.'s First FFG Successfully Completes Builder's Trials

H.M.A.S. ADELAIDE, the first of four guided missile frigates being built in the United States for the Royal Australian Navy, successfully completed shipbuilder's trials in the United States early in October. At a special ceremony at the Todd Pacific Shipyards, Seattle, the President of the United States Navy Board of Inspection and Survey, Rear Admiral J. D. Bulkeley, U.S.N., presented Todd Pacific Shipyards with two brooms — symbols of a clean sweep in ship presentation and for successfully completing the trials.

H.M.A.S. ADELAIDE was delivered to the Royal Australian Navy on 6th November, and was scheduled to be commissioned on 15th November. The ship would undergo further trials in the United States after commissioning, and is to arrive in Australia about November or December, 1981.

H.M.A.S. CANBERRA, the second FFG, is expected to complete trials in about two months time. The third, H.M.A.S. SYDNEY, is due to be commissioned in January, 1982 and the fourth H.M.A.S. DARWIN, in May, 1984.

New Sea King for Royal Navy

The first two of a new version of the Westland Sea King helicopter were officially handed over to the Royal Navy on 1st October, 1980. A total of 17 Westland Sea King Mark 5 helicopters, with increased anti-submarine capabilities, are being built for the Royal Navy. In addition the Navy is to up-rack its existing Sea King fleet of Mark 2 helicopters to the new standard.

A crew of four will fly the aircraft, with the dunking sonar operator also monitoring the LAPADS equipment at an additional crew position. To make room for the extra equipment, the cabin has been enlarged by moving the rear bulkhead nearly six feet further into the tail.

Future development possibilities for the Mk 5 Sea King include the carriage of more powerful torpedoes, and other anti-submarine sensors. The new Sea King, with an all-up-weight of 21,000 lb, is powered by two Rolls-Royce Gnome engines.

Australian Defence Force Employment Statistics, August, 1980

The total strength of the Permanent Defence Force was 71,806 at the end of August, 1980, compared with 71,758 at the end of July 1980, the Minister for Defence, Mr. D. J. Killen, recently announced.

The strengths of the individual services were: Navy 16,975; Army 32,565; and Air Force 22,266. The overall strength was 785 below the 30th June, 1981, target level of 72,591.

Diamantina's Farewell to Sydney

The former R.A.N. frigate and survey ship H.M.A.S. DIAMANTINA left Garden Island on Wednesday 1st October, for the last time, having been made a gift to the Queensland Maritime Museum Association. The ship paid off in March, 1980, and moved to Ashok Right to await disposal. Later the Prime Minister, Mr. Malcolm Fraser, announced the transfer to the Queensland museum authorities in August.

The frigate will be installed as a permanently dry-bertthed exhibit within the old graving dock at South Brisbane. At 0945 on Wednesday, 1st October, just before DIAMANTINA sailed, Dr. McLeod of the Queensland Maritime Museum Association presented the last white ensign flown by the ship in the Naval Support Commander, Rear Admiral Andrew J. Robertson, AC, DSC.

Mystery Ship? This vessel has been laid up in Sydney Harbour for a number of years and appears to be a former Valiant B Motor Launch. Reader Brian Alsop sent in this photograph of the vessel in Moris Bay taken in September, 1980. Any readers who can identify the mystery boat are invited to write to the Editor. (Photo — B. Alsop)
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WA DIVISIONAL NOTES
By VIC JEFFERY

The Western Australian Division has proved very active over the past months. On July 9 members of the Executive Council made three presentations at H.M.A.S. Stirling. A suitable framed photograph of the old W.A. based Reserve Fleet Detachment of 11 ships in Canning Cove in 1948 was presented to the Wardroom, Senior NCOs, Men and Junior NCOs' Mess.

This gesture was to honour the R.A.N.'s past involvement with Garden Island in Western Australia and has great historic value as H.M.A.S. Stirling is constructed on the shores of Canning Cove.

The presentations were made by Vice-President, Lieutenant Commander John Johnson, MBE, R.A.N. (Retd), on behalf of the W.A. Division.

Another high successful function held in August was a reception for 30 officers from the visiting R.A.N. ships participating in the maritime exercise Sandgroper '80.

Held in the Navy Club at Fremantle, it was enjoyed by all present.

Special thanks must go to W.A. Executive Secretary and Naval Curator Mrs. Philippa Parmar who contributed a tremendous amount of effort to ensure this event was a great success.

Around the Tasmanian Division
Units of the division were recently successful in applications for Queen's Silver Jubilee Appeal Awards.

T.S. DERWENT received $2,500 to assist in building a caretaker's flat at their H.Q., T.S. TAMAR was granted $800 for decoration and land reclamation in front of their H.Q. and T.S. LEVEN obtained $1,500 to help complete their new H.Q. at the Ulverstone Wharf.

The Divisional Training Officer LCDR. (Cadets) G. Seymour was granted $1,500 to assist in building a new training camp for the Cadet Corps.

Cadets from various units visited American warships in Tasmanian ports during the quarter. Three EMU cadets travelled to Melbourne on the USS MARVIN SHIELDS and then flew home. During the September school holidays T.S. MERSEY held a ten day training camp for 24 cadets.

EMU and LEVEN cadets provided the ground support staff to assist in the running of the Australian Fourth National Simulated Field Championships at the Penguin Gun Club range. LEVEN cadets provided a Guard of Honour for the Governor of Tasmania when he opens the Ulverstone Show.

Recently T.S. YORK travelled to Hobart for the combined training camp with T.S. DERWENT during the November long weekend. The cadets manned H.M.A.S. HUON for Navy Week open day and sold programmes for the benefit of Legacy.
**The New Zealand Division of the Royal Navy**

Until 1913 the naval defence of the Dominion of New Zealand was provided by the Australian Squadron of the Royal Navy with its base in Sydney, but the Naval Defence Act of that year laid the groundwork for an all New Zealand Squadron.

The old 3rd class cruiser "PHILOMEL" was allocated to New Zealand to be utilised as a training ship for locally enlisted personnel. She arrived in 1914, and had just begun operations when the Great War broke out.

"PHILOMEL" was detailed off for duty in the Persian Gulf — Red Sea area, so plans for a New Zealand Navy had to be temporarily postponed.

With the coming of peace, steps were taken to form a separate New Zealand Station with Auckland as its base. In 1920 the light cruiser "CHATHAM" and the sloop "VERONICA" were commissioned for the new station. "VERONICA" arrived at the end of 1920 followed by "CHATHAM" in January 1921. On 1st March, 1921, "PHILOMEL" was commissioned as the static training ship at Auckland, but the Order in Council of 20th June, 1921, really set the ball rolling. This Order committed the Dominion to set up and maintain her own naval force. The title of the new force was to be "The New Zealand Division of the Royal Navy." The letters H.M.S. were to be used with the ship's titles, but personnel were to be enlisted locally. The ships were to be supplied by the Admiralty, who would also supply the officers and ratings required to keep the ships properly manned.

Devonport, Auckland, was to be set up as the main establishment, with the use of the Calliope Drydock shared by the navy and the Auckland Harbour Board. An Admiralty Reserve of 4½ acres adjoined the dock, and this was to be the centre of all operations for many years, and is still in use to the present day. The old reserve proved to be inadequate and had been expanded to meet all the requirements of a modern navy. When the New Zealand Station commenced operations there were no facilities at all. Gradually store sheds...
were erected, and an ammunition magazine established in the emprise gunpits.

The New Zealand establishment was the site of the Auckland Harbour, which was an old Inukshuk, and for transport inside the establishment a horse owned by an A.B. did yeoman service.

This was a time when the wearing of two, or even three hats was quite common. The Captain of "PHILOMEL" doubled up as the NOIC at Devonport, while the captain of "CHATHAM" performed the duties of Commodore Commanding, New Zealand Station, and Naval Advisor to the Government.

In March 1922 a second sloop, "LABURNUM," arrived giving the division an active strength of one cruiser and two sloops. New entries were being trained in "PHILOMEL" and the first initiates were at sea. "CHATHAM" some time on the station expired in 1924 when she was replaced by the more modern "DUNEDIN." In 1925, a second light cruiser was allocated to the station. This ship was "DIOMEDE," and was to be a familiar sight in New Zealand waters for the next eleven years. As both the new cruisers were oil fired, an Admiralty tanker, "NUCALA," was hired to support them. An oil fuel installation had to be provided at the Devonport Base.

A division of the Royal Naval Volunteer Reserve had been formed, and a training ship was acquired to teach the RNVR, New Zealand Division, the "gentle art of seamanship." This vessel was an ex-Royal Navy trawler that had been sold out commercially after the Great War, and was purchased by the New Zealand Government in 1926. Her commissioning date was the 9th of April 1922, but her delivery voyage took eight months due to unforeseen circumstances.

This was the maintained strength of the New Zealand Division practically up to the beginning of the Second World War, two cruisers, two sloops, a va-ge going training ship and a training ship.

Ratings were trained in "PHILOMEL" but advanced courses such as wireless telegraphy and gunnery, were carried out either with the Royal Navy or the Royal Australian Navy. Most New Zealanders did their W.T. courses at the signal school at Flinders Naval Depot. As can be imagined, much of the senior ratings were either Royal Navy men on loan or ex-RN men who decided to settle in New Zealand.

The Naval Base at Devonport was growing, but was still not up to the standard required, mainly due to the troubles of sharing the dockyard facilities. The cruisers had to be sent back to the United Kingdom for repairs, a very prolonged and costly arrangement.

In 1931 it was decided to carry out a refit on one of the cruisers at Devonport, but the results were only moderately successful, and certainly proved that the dockyard machinery was down.

Eventually the navy was to take full control of the establishment and the situation was to greatly improve. In 1931 however, this was still a pipe-dream. Administratively the division was controlled from the Naval Board in Wellington. The Board comprised the First Minister of Defence as chairman, the Commodore Commanding the station, the first naval member and the Chief Staff Officer as the second naval member. This board was constituted by an Order in Council dated 14th March 1921, and remained unchanged until 1928 when a Captain, RN, was appointed to the Second Naval Member. One can see that the board was not an ideal set up, as the First Naval Member also held the sea-going command. It was not until 1936 that a flag captain was appointed to the commodore, so that the latter could effectively carry out all his duties. Even the operation of the board left a lot to be desired. There was no proper Secretariat, the secretary to the commodore acted as naval secretary of the Naval Board, and expenditure was controlled by an officer responsible to the Treasury, by no means a workable affair. Navy Office had begun its life in three small rooms in the Parliament Buildings in Wellington, but in 1938 Navy Office was reconstituted as a separate Department of State. The size of the board was increased, and the Paymaster Captain was added as a member and Naval Secretary. It had been a long hard battle, but a very worthwhile one.

In 1934 the new sloop "WELLINGTON" arrived in Auckland to relieve the old "VERONICA," followed in 1935 by "LEITH," which ship relieved "LABURNUM." At the same time it was thought that it was time to replace the two "DZ" class cruisers with more modern ships. "DIOMEDE" had been reactivated for operational duties on the East Indies Station for the period of the Abyssinian crisis. The ship then returned to the United Kingdom to be paid off on 31st March, 1936, her crew transferring to H.M.S. "ACHILLES," (which ship was to make world headlines several years later.) In 1937 the old "DANCING DUNEDIN" returned to the United Kingdom, her crew taking over the the new "DIOMEDE." The strength was still two cruisers and two sloops, but the ships were brand new.

When the Second World War broke out, the immediate result, as far as New Zealand was concerned was that "WELLINGTON" and "LEITH" once reverted to Admiralty control. However steps were taken to increase the strength of the division by taking up local trade vessels for war service. The trans-Tasman liner "MONOWAI" was converted to an armed merchant cruiser at Devonport, adequately proving that the dockyard which was now under full naval control had been worthwhile developing.

Three "Isles" class trawlers were commissioned in the U.K. and a program was commenced to build "Castle" class trawlers in New Zealand.

"ACHILLES" part in the Battle of the River Plate is too well to describe here, but it is sufficient to say that the locally trained Kiwi "matelots" were every bit as good as their imperial counterparts.

In September 1941 H.M. King George VI approved the title of the Royal New Zealand Navy. The era of the old NZ Division of the R.N. had ended. Only two ships still in commission could hold any title to being originals. "PHILOMEL" had of course been with the division from the time it was formed in 1921. "WAKAKURA" had entered the division slightly later, 1926. The Royal New Zealand Navy was to comprise relatively new ships, backed up by the two old faithfuls.

The growth of the New Zealand Division was slow, but it was not the fault of the New Zealanders. World economics did play a part, and the division was slow, but this was not the fault of the New Zealanders. World economics had played a part, and the division was to be a dedicated group of officers and men who were prepared to put up with the going-on of new ships. They had faith, and that faith was well rewarded.
H.M.A.S. ADELAIDE, November 1980 (Photo — R.A.N.)


H.M.S. TENACITY, July 1980. Flying the paying-off pendant, TENACITY was built in 1973 as a private venture. Her 40mm gun was fitted in 1978. (Photo — Royal Navy)

An artist's impression of the navy's new Minehunter catamaran. Tenders for two prototypes were called for on 1st November. Up to six follow-on vessels may be ordered. (Photo — R.A.N.)

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Soviet Krivak Class guided missile frigate STOROZHEVOY. November 1980. (Photo — R.A.N.)

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Left: The traditional bottle of champagne breaks across the bows of H.M.A.S. WARRAMBOO. (Photo — R.A.N.).

Below: Unlike larger ships, the new patrol boat got underway under her own power immediately after floating clear of her launching cradle. H.M.A.S. ADROIT can be seen to the left. (Photo — R.A.N.).
"AUCKEX 80"

Page Forty-Six

THE R.A.N. units which took part in the multi-nation exercise "AUCKEX 80" conducted off the north coast of New Zealand between October 20th-31st returned to their homeport of Sydney in mid November.

The units, the guided missile destroyer H.M.A.S. BRISBANE and the Destroyer escort H.M.A.S. SWAN with the Oberon class submarine H.M.A.S. ONSLOW formed the Australian task force which combined with New Zealand and American fleet units.

The United States of America was represented by the Spruance class destroyer U.S.S. OLDENDORF and the two Destroyers U.S.S. MARVIN SHIELDS and TURNER-JOY. The host country New Zealand was represented by the two Frigates HMNZS WAIKATO and OTAGO with the training ship HMNZS TARANAKI and the Patrol boat HMNZS ROTOITI and PURAKI with the tug vessel H.M.N.Z.S. ARATAKI.

R.A.A.F. Orions were the air defence force combining with the New Zealand Squadrons of Orions, Skyhawks and Strikemaster aircraft.

The purpose of a multi-nation exercise was to test and evaluate the procedure and operational effectiveness of fleets and air units in a combined company.

Navy Photographer Leading Seaman Mark Lee was embarked in H.M.A.S. Brisbane for the past six weeks and filed this report.

"COMPUTERS PROVE CHECK-MATE IN WAR GAMES"

As the familiar "Orange and Blue" forces took up their positions for the combat confrontation in the multi-nation exercise "AUCKEX 80", it was obvious to the 4000 personnel that the force with the most automated and efficient operations procedures would become the "Cat chasing the Mouse!"

The nerve centre of any warship is always the operations room. Known to some crew members as the ship's "Bat Cave" because of the dim lit appearance and its many glowing and flashing console computers, the operations room is where ships of today's Navy place faith in their safety.

A pre-programmed exercise, due to restrictions on military operational
electrical computers. The Naval force operators, the harder the task of detection complicated the situation for the calculation by the operator and the 333 enemy. It only takes a small mis-

enemy's approach, the computer then displaying distance and speed of the electronic minds of several gunnery, operations room which controls the encounters by R.N.Z.A.F. Skyhawk and Onslow and the low level flying Obcron class submarine H.M.A.S. Brisbane underwent a refit to modernise her computer warfare systems for this type of exercise. The "Naval Combat Data System" is a central computer in the operation room which controls the electronic minds of several gunnery, missile, radar, sonar and electronic warfare computers. Feedback each other with the necessary information on contact aircraft and ships, displaying distance and speed of the enemy's approach, the computer then tells the operator the type of weapon to engage for successful destruction of the enemy. It only takes a small mis-
calculation by the operator and the crew of ship's divers quietly entering the water giving chase to two divers as others began a thorough search of the hull area for suspicious objects.

The two enemy divers were captured and their explosive devices were removed from the ship's hull.

Operations like these required the alertness of many men long into the night. After working a hard, tireless day completing other exercises, it is only a tough professional man who can give more without rest or respite. It is a vitally important exercise as this could happen in earnest, anywhere, anytime.

"AUCKEX 80" demonstrated the effectiveness in which fleets units can work together. The testing of personnel in their individual procedure and operation is a necessity for operational warships, but the personnel who do all the long watch-keeping hours, run the engines and maintain the weapons systems, are the men who are prepared to fight and if necessary, die for their country. It is these men who live day to day, in and about the heart of their floating mistress. It only takes one man to make an error of judgment and his whole country, indeed the world, may be plunged into the holocaust he is training to prevent.

Although the computers took the honours in exercise "AUCKEX 80" with their "Check-Mate" decisions, the human factor, "THE MEN", gained vital experience in a joint exercise preparing them for what might be that terrible day of "True Battle!"

Not all the action is fought in the tiny waters, the exercise still gave the atmosphere of the "Star Wars" movie with the "Goodies pursuing the Badies". H.M.A.S. BRISBANE, Commanded by a communications expert Captain R. M. Baird, was a member of the Naval task force. Of her opponents, one was the four year old "Spruance" class destroyer U.S.S. OLDENDORF. But it was not just a surface to surface war between the big gun and missile ships. Both forces had to withstand attacks from the Australian Oberon class submarine H.M.A.S. Onslow and the low level flying encounters by R.N.Z.A.F. Skyhawk and Strikemaster aircraft.

Between 1977 and 1979 H.M.A.S. Brisbane underwent a refit to modernise her computer warfare systems for this type of exercise. The "Naval Combat Data System" is a central computer in the operation room which controls the electronic minds of several gunnery, missile, radar, sonar and electronic warfare computers. Feedback each other with the necessary information on contact aircraft and ships, displaying distance and speed of the enemy's approach, the computer then tells the operator the type of weapon to engage for successful destruction of the enemy. It only takes a small mis-
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