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Vol. 29 NOVEMBER-DECEMBER-JANUARY, 1967-68 No. 4

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Plus sundry stories and photographs.

Please note that this document is a combination of travel advertisement and magazine content. The travel advertisement highlights a location in Australia, Green Island, offering excellent accommodation, moderate tariffs, full licensing, a variety of attractions, swimming in crystal clear water, and suitable for a holiday of a lifetime. The travel advertisement is not related to the magazine content. The magazine content includes various articles, reviews, and news related to the Navy League of Australia's activities and interests. It is a publication of the Navy League of Australia, registered in Australia for transmission by post as a periodical, and includes articles and reviews on various topics such as Pago Pago, Turkey — The Last Dreadnought, and book reviews. The magazine is published bi-monthly, and the specific issue is from November-December-January 1967-68, No. 4.
THE LAST DREADNOUGHT

An appeal has been made for a body or institution prepared to save the Turkish battle cruiser Yavuz. This historic vessel is the last survivor of the two great fleets of dreadnoughts which confronted each other at the beginning of the first world war. Formerly the German "Goeben", the ship is reported to be still in fairly good condition, but she lies in the Bosphorous awaiting the bids of the scrap dealers.

Not many efforts succeed to save this, that or the other ship of historic interest or representing the last of her type. One can recall the pleas for the preservation of the famous battleship "Warspite", heroine of both the Great Wars, and the frigates "Starling" and "Amethyst", to mention but a few of the notable British warships of all categories which deserved self-memorials, but we in this country are conservative, and we have conserved the self-memorial, H.M.S. "Victory", to the envy of all maritime nations.

But they are more liberal in the United States, where several self-memorials have been created of state pride in the shape of museum battleships. And in Canada "Haida" has gone through to perpetuate the fame of the "Tribal" class destroyers.

Actually there is still one other dreadnought in existence, the U.S.S. "Texas", launched in 1912 and stricken in 1946, which is a State Battleship Memorial. More recent additions to the "Belt" of State battleship memorials are "North Carolina", launched in 1940 and stricken in 1960; "Alabama", launched in 1942 and stricken in 1962, and "Massachusetts", launched in 1941 and stricken in 1962.

The United States had 25 battleships at the end of the second world war, but they were gradually stricken from the Navy list. Most went to the shir-breakers, four are historical relics and museum pieces, and only four remain in the Navy List — "Iowa", "Missouri", "New Jersey" and "Wisconsin", but these have been laid up since 1955-58.

Britain had 15 battleships at the end of the second world war, but not one was preserved, the last, H.M.S. "Vanguard", having been scrapped in 1960. All the other naval powers which had battleships after the second world war — U.S.S.R., France, Italy, Argentina, Brazil and Chile — have scrapped them (France keeps her most recent two as accommodation hulks).

Now Turkey is dispensing with her dreadnought, and one cannot help wondering if, in view of her origin, Germany might acquire her as a museum. But whether she stays in Turkish or German waters she could be a source of income rather than a liability. The Americans run some of their second world war battleships at a profit, with tourists by day and Son et Lumiere by night.

"Yavuz" has a displacement of 22,734 tons with a length of over 610 feet and a beam of 97 feet. Her armament included ten 11-inch guns, ten 5.9-inch guns, eight 3.5-inch guns and two 19.7-inch submerged torpedo tubes; and she was protected by a 101-inch armour belt. Her propelling machinery comprised 24 Schultz-Thornycroft boilers of the German 'Marine' type and Parsons direct-drive turbines turning four shafts and developing 52,000 shaft horse power, equal to a speed of 25 knots. She was built by Blohm & Voss, Hamburg, who launched her in 1911 and completed her in 1912.

The picture, taken in recent years, shows that she is still in good shape. With any luck she might emulate "Haida" which is a floating museum at Toronto, having been purchased by a group of Ontario businessmen for $20,000.
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BOOK REVIEWS

THE OBSERVER'S BASIC BOOK OF AIRCRAFT — CIVIL
AND
THE OBSERVER'S BASIC BOOK OF AIRCRAFT — MILITARY


Without exaggeration, I was delighted to be assigned the task of reviewing these two excellent publications which have recently been released in Australia by Frederick Warne and Co. Pty. Ltd. by their agents, Hicks Smith & Sons Pty. Ltd. If this sounds too much like a paid publicity wrap-up let me hasten to add that an unbiased book reviewer must give credit where credit is due, as well as reprehending those responsible for below-standard work.

It has been the publisher's policy to produce a copy of the Observer's Book of Aircraft each year, containing details of the latest model aircraft which are flying or are about to fly. Now the publishers have decided to supplement this yearly range with a pair of books of basic aircraft, dealing with the various models of aircraft in service at the moment. Thus, old-timers like the Dakota and the Dragon Rapide, the Vampire and the Harvard, all of which went out of production years ago but are still sold on all over the world, appear in company with such comparative newcomers as the DC-9 and the Twin Otter, the Franco-German Transall transport aircraft and the widely discussed F 111 ("the Flying Opera House").

Both books are set out on the admirable principle of making detailed study of the aircraft as convenient as possible. The aircraft are grouped together in classes, so that all the long-range transports are together, as are the Executive transports. Agricultural Aircraft, Fighters, Trainers, Bombers and attack Aircraft, and so on. Within these classes, the individual aircraft are placed in alphabetical order of manufacturer's name, and all this, combined with good tables of contents at the front of each book and a very thorough double-entry index at the back, makes it almost impossible for the reader not to find the aircraft he wants in the shortest possible time.

As far as each individual aircraft is concerned, William Green presents us with an overwhelming mass of information as to the performance, history, equipment and weights as well as truck-loads of other data about all models ever produced or contemplated of this particular aircraft. A good photograph appears of every aircraft, although some pictures of more recent Russian bombers look as if they were taken of the aircraft at their only public showing at Tushino. What is especially praiseworthy is that the photographs now have rather informative captions which adds interest. Three-view silhouettes of the aircraft are the work of Dennis Punnett, and his attention to detail here is most praiseworthy. Even better, additional side-on views are provided to illustrate externally different models. For a quick course in aircraft recognition, the two books are ideal.

Although the books contain masses of technical data, it should not be assumed that they are dry and uninteresting. This classification into classes means that in the first edition for example, we find the Boeing 727, Douglas DC-9 and the 727's British rival the Hawker Siddeley Trident on consecutive pages. In this way we can compare the aircraft that our local airlines are flying with all other aircraft in their class in service all over the world. This should provoke plenty of arguments.

There are all sorts of little bits of information scattered through the books which fascinate me and will delight collectors of trivia. For instance, did you know that the original Boeing 707's used by Qantas were the shortest ever made, being 10 feet shorter than any others? (mini jets? Or was it a problem of parking space?) The Table of international Civil Aircraft markings contains many fascinating facts. I am longing for the day when I will see an aeroplane proudly wearing the XT markings of Upper Volta, or TT, from Chad. If you see a man getting out of a plate labelled VQ-ZA, ask him how things are in the aircraft's homeland of Lesotho. While you have the chance, ask him where the hell Lesotho is.

However, do not believe that these books are entirely without fault. I was enraged to see that, although the Royal Australian Air Force and Navy receive their due credit in the lists of operators of military aircraft, at no place in the military edition is there any indication that the Australian Army owns any aircraft. The section on the Bell Iroquois helicopter states quite correctly that it is operated by the R.A.A.F. and R.A.N., and, in fact, the photograph shows an R.A.A.F. Iroquois, no mention is made of the Army's Iroquois. The Army's aircraft include Bell Sioux and Iroquois helicopters and Cessna T303 fixed-wing aircraft. If the Jordanian and Swiss Armies rate a mention, so does ours.
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THE NAVY
November-December-January, 1967-68

Again, why did Mr. Green abbreviate the title of the South Vietnamese Air Force to “Viet A.F.”? when the correct abbreviation is “V.N.A.F.”? After all, the Indonesian Air Force is correctly referred to as A.U.R.I. To carp a little more, at times Mr. Green apparently forgets what abbreviation he decided on for his own purposes, for the Royal Rhodesian Air Force amongst others, is referred to in the text by several different abbreviations.

These are all minor criticisms. Both books are extremely valuable sources of aircraft information, interesting and attractive in their own right (except for rather gaudy dust jackets). I strongly recommend both these books, and I hope I will be able to review the 1968 Edition of the Observer’s Book of Aircraft, the supplement and these two, when it is released.

THE ARMED FORCES OF CANADA — 1867-1967
EDITED BY LT. COLONEL D. J. GODSPEED, C.D.
Our copy from the Queens Printer, Ottawa, Canada. Reviewed by A.A.A.A.

At first sight it would appear that to expect to cover the Hundred years of History of the Three Services, and also to include briefly, Integration, in a volume of a sparse 289 pages, would necessarily provide a very sketchy record especially when one considers the multiplicity of illustrations, maps and sketches.

However, the contrary is indeed the case, and starting from the Early Militia days and the passing of the Militia Act on May 22, 1868, it is relatively easy to follow the gradual evolution of the Canadian Armed Forces, which were originally literally forced into existence by the British decision in 1869 to withdraw from the grounds of the economy. the majority of their troops then present in Canada the reasons given have a very familiar sound even today. Progress was solid, if not spectacular, and it would come as a surprise to many Australians to learn of the campaigns in which Canadians figured with extreme generosity.

The enlistment and Transport of some 400 Canadian hostmen to assist General Lord Wolseley, in an attempt to relieve General Gordon from Khartoum, is a most important event in Canadian history, because although the men were civilians, this was the first time, but not the last, that Canada helped Britain in an overseas war.

The North West Campaign and the South African War followed, with Canadians serving with much distinction, and on July 5, 1900, the first V.C. to be awarded to a Canadian was awarded to Sgt. A. H. L. Richardson at Wolse Spruit. The Canadian army was then in being and its progress followed predictably conventional lines—gradually expansion took place and Sig.

The formal formation of the R.C.A.F. took place in 1920, and between the wars there was much interdepartmental strife over the new flying service, and indeed it was not until the late 1920’s that it became a wholly military service.

The R.C.A.F. to Australians.

The history of Defence from 1945-1965 is admirably set out in Chapter IX and is recommended reading for any student of political history for that period. Integration receives less attention than one would have expected, but this is undoubtedly due to the lack of complete appreciation of end results at this time. This, history, splendidly compiled, and superbly illustrated, is a most valuable contribution to the Centennial of the Canadian Confederation.

Not the least noteworthy of its features are the excellent appendices and index which supply an easily followed reference either to this volume or to other complementary works.

OUR COVER
THE WONDERFUL WHIRLYBIRD
1-20: U.S. MARINE “Airlift” — Strong man act is a camera illusion — high speed shutter “stopped” the whirling blades of hovering helicopter.
To commemorate the 25th Anniversary of the founding of the Yugoslav Navy I am delighted to prepare this article for reproduction in the magazine, "THE NAVY", published in the far away, yet friendly land of Australia.

Twenty-five years ago, during the storm of World War II, at a time when the heroic Yugoslav people were struggling against fascism and its associated atrocities, the Yugoslav Navy was formed as part of the National Liberation Army.

The first partisan detachment was established under Marshal Tito's direction, on September 10, 1942. It consisted of a number of small armed fishing boats, and from this nucleus, through untold efforts and unseen courage against a numerically and technically superior enemy, the Yugoslav Navy was developed and forged. Its fighting and victories have since woven the pages of our national history.

During the period from September, 1942, when the first naval detachment was formed in Podgora, to May, 1945, when the war concluded, the Yugoslav Navy expanded rapidly, having commenced with two boats and several hundred untrained communists and partisans, into a force of 14,000 officers and men, manning in excess of 200 landing ships and transports as well as boats seized from German and Italian fascists. During four years of war the Yugoslav Navy participated in over ninety-five separate actions on land and sea.

During the postwar period a fleet of warships and auxiliary ships was built in our shipyards, using vast quantities of material and requiring both intellectual and physical efforts. These vessels are now used to defend our territorial waters and to train sailors for peacetime exercises.

The development of our Navy has continued, and is doing so in keeping with the policy of our armed forces, which is one of true peace and peaceful co-existence among all peoples of the world.

The Yugoslav People's Army which comprises all three services of the armed forces — Navy, Army and Air Force — is controlled by the President of the Republic. According to the Constitution, the Commander-in-Chief of the armed forces is the President of the Republic. Using his constitutional right, the Commander-in-Chief appoints the State Secretary for National Defence as Deputy-Commander-in-Chief, thus delegating a considerable proportion of his duties.

All three services serve as a unified force, when necessary, to defeat the common enemy.

Officers of the Navy and Air Force are appointed to the General Staff as representatives of their services. Currently, Admiral Mate Jerkovic is the Commander-in-Chief of the Yugoslav Navy, and he also serves on the State Secretariat for National Defence.

The Navy Command is a skilled and efficient unit of the State Secretariat for National Defence, and initiates all policy matters pertaining to the Navy's peacetime build-up and also its wartime role. The Navy is divided into branches, the principal divisions being: technical branch; material and financial supply; specialist education; regulations and instructions for specialist personnel education; and technical maintenance and repair.

The Navy command co-operates...
with the other defence commands in the erection of Naval Shore Establishments, mobilisation, etc.

Fleet forces are organised in naval squadrons and three naval zones. The Commander of the fleet is responsible to the Assistant State Secretary of the Yugoslav Navy.

The fleet, as a working force, decides all operative tasks when at sea and by co-operating with the land forces organises coastal defence. This is the reason why both these commands are situated in one area, viz. Split, thus assisting them to successfully co-ordinate their work.

Each Naval Squadron comprises various units, e.g. destroyers, rocket and torpedo boats, submarines, patrol boats, minelayers and...
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minelayers. All craft are of modern design and are capable of patrolling the Adriatic Sea.

The North Adriatic — Pula, Middle Adriatic — Sibenik and South Adriatic — Boka Kotorska constitute the three naval zones, comprising the naval units for direct defence of their areas. When necessary, naval zones are strengthened by Squadron units.

The Yugoslav Navy has a developed system of educational institutions — the Naval Technical Academy, Naval Technical schools for officers and seamen, including the Higher Military (Naval) Academy, Engineering School, school for underwater arms, schools for commanding officers and for seamen’s education. With us, these schools have a specific place and role in military education, as our seamen are not a permanent cadre, but enlisted recruits obliged to serve for two years. I want to emphasize that special attention is paid to education in our Navy, and a considerable sum of money is spent on the purchase of the best educational equipment.

The Navy organisation incorporates two well-equipped scientific institutions — the Naval Technical Institute at Zagreb and the Hydrographic Institute at Split. An Institute for Naval Medicine is being developed. All scientific institutions and schools are directly controlled by the Assistant State Secretary for the Navy.

THE FLEET

Destroyers (Razac) — Total 3. One “Split” class — SPLIT R-11 (see photograph).
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Submarine "SAVA" was sunk during 1943 and subsequently salvaged.
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Two ex-British "W" Class —
KOTOR, R-21 and PULA, R-22.
Purchased in 1956, these two vessels were refitted in Yugoslavia and recommissioned in 1959. Their armament, together with other technical characteristics, were not altered during the refit.

Frigates (light destroyer type) —
Total 3.
BIKOVO (Re-52) and TRIGLAV (Re-51).
Both vessels were built in Italy and were completed in 1943. Displacing 1,709 tons full load, vessels of this type are 265 feet in length, having a beam of 271 feet.
In the TRIGLAV, armament comprises three 3.9-inch dual-purpose guns and eleven 20 mm anti-aircraft guns. The "Ex-Italian type" escort destroyers are each fitted with four depth charge throwers and four 18-inch torpedo tubes. Speed, 26 knots.
UCKA, Re-54 (see photograph).
Another former Italian vessel, UCKA's full load displacement is 1,031 tons. She is armed with two 3.9-inch (100 mm - 47 cal) anti-aircraft guns and ten 20 mm (70 cal) anti-aircraft guns. She carries six 18-inch torpedo tubes. Two "Tosi" geared turbines, turning two shafts and developing 22,000 shaft horsepower give her a speed of 31.5 knots.

Submarines — Total 4.
Three "Surjeska" class — SUTJESKA, NERETVA (see photograph) and ULJANIK.
These boats displace 550 tons standard, 700 tons surface and 945 tons submerged, their dimensions being 197 x 21 x 16 feet. Armament comprises six 21-inch (533 mm) tubes. Machinery consists of diesels and electric motors. Surface speed 14 knots, submerged speed, 9 knots.
One "Sava" class — SAVA (see photograph).
This Italian-built submarine was sunk during World War II and subsequently salvaged. Displacing 747 tons standard, 905 tons surface and 1,068 tons submerged, she measures 207 feet in length x 221 x 16 feet. She is fitted with one 3.9-inch gun, two 20 mm anti-aircraft guns and six 21-inch torpedo tubes. Maximum submerged speed is 8 knots, and when surfaced 16 knots.

New Construction:
Recently a new submarine, HEROJ, was launched from one of our shipyards. She was designed to incorporate the most modern tactical and technical requirements.

Rocket Boats — Guided Missile Patrol Boats (see photograph).
The Navy has acquired a number of the Russian "Oska" class of Rocket Boats.
Boats of this class displace 160 tons standard and 200 tons full load, their overall dimensions being: length, 131 feet; beam, 28 feet and depth, 61 feet.
Armament consists of four 25 mm guns (2 twin — 1 forward and 1 aft) and four large hood-type guided missile launchers in two pairs abreast. Missiles fired have a surface-to-surface range of 15 miles. Machinery comprises three diesel motors, providing a speed in excess of 35 knots.

Besides these ships, the fleet comprises other kinds of ships — patrol vessels, minesweepers, motor torpedo boats, minelayers, landing ships, oilers, transports and tugs, each equipped to successfully carry out its task.

Further building and modernisation of the fleet in the Yugoslav Navy will be directed towards reaching new modern types of ships designed specifically for use in the Adriatic Sea.
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THE NAVY

November-December-January, 1967-68
The principal objective of the Navy League of Australia is to stress the vital importance of Sea Power to the Commonwealth of Nations and the important role played by the Royal Australian Navy.

The League, in conjunction with the Commonwealth Naval Board, administers the Australian Sea Cadet Corps, by providing finance and technical sea training for boys who intend to serve in the Naval or Merchant Services, also to those sea-minded boys, who do not intend to follow a sea career, but who given this knowledge will form a valuable reserve for the Naval Service.

We invite you to swell our ranks and so keep up to date with Maritime Affairs to help to build an ever-increasing weight of informed public opinion. The Navy League will then become widely known and exercise an important influence in the life of the Australian Nation.

The League consists of Fellows and Associates. All British subjects who support the objectives of the League are eligible for membership. Members receive copies of the League’s magazine “The Navy”.

DIVISIONS
Victoria — Room 8, 8th Floor, 528 Collins Street, Melbourne, 3000.
Queensland — Box 376E, G.P.O., Brisbane, 4001.
Tasmania — 11 Quorn Street, Sandy Bay, 7005.
South Australia — 30 Pirie Street, Adelaide, 5000.
Western Australia — 182 Coode Street, Como, 6152.
Australian Capital Territory — 60 Limestone Avenue, Ainslie, 2602.
Northern Territory — C/- H.M.A.S. Melville, Darwin, 5790.
The first, a cruiser of the Chatham class, of 5,400 tons, mounting eight 6-inch guns, was 458 feet long with beam of 48 feet and was commissioned in England. She was one of the ships which steamed into Sydney harbour on 4th October, 1913, an event that marked the beginning of the R.A.N. which was established in 1911.

When the First World War broke out SYDNEY was assigned to convoy operations in the Indian Ocean where, on 9th November, 1914, she sank the German cruiser EMDEN. By 1917 SYDNEY was in the North Sea with the Grand Fleet, and was present at the surrender of the German Fleet at Scapa Flow in 1918. She returned to Australia the next year. The first SYDNEY was paid off on 8th May, 1928, and was sold and broken up the following year.

The second ship to bear the name was also a cruiser originally planned for the Royal Navy as H.M.S. PHAETON, but was acquired by the R.A.N. in 1934, renamed SYDNEY and launched on 22nd September, 1934, from the yards of Swan Hunter, Wallsend. SYDNEY had a displacement of 6,830 tons, mounting eight, 6 inch and eight, 4 inch A.A. guns. With an overall length of 555 feet her top speed was 32 knots.

For the most part of 1939 SYDNEY was based at Fremantle, Western Australia, and carried out patrols across the Indian Ocean until December 1939, when she proceeded to Sydney for a refit, thence to England, via Port Said.

The most colourful phase of SYDNEY's career in the Second World War began when she entered the Mediterranean in May, 1940. It is sufficient to state that on 19th July, 1940, SYDNEY, in company with four Royal Navy destroyers, encountered the Italian cruiser BARTOLOMEO COLLEONI, sending the Italian ship to the bottom. After a brisk fight, returning to Australia in January, 1941, to a heroes' welcome at the City of Sydney.

SYDNEY then commenced duties in Australian waters with periods of duty in the Indian Ocean. It was on one of these occasions that the career of this ship came to a tragic end when she encountered the German raider KORMORAN (Stiermark) on 19th November, 1941, about 300 miles off the Western Australian coast. Both ships were sunk in the following battle. Thus perished SYDNEY and her gallant ship's company of 645 men.

The third ship to carry the name
Queen Elizabeth II, arriving on 5th May, and later was present at the Spithead Review.

From November of that year to May, 1954, SYDNEY again saw active service in Korean waters. With the pending arrival of H.M.A.S. MELBOURNE with her second generation of Naval aircraft (Sea Venom Fighter and Gannet anti-submarine aircraft) SYDNEY was placed in training status in April, 1955, in which she continued until (MELBOURNE becoming the Flagship of the R.A.N.) being paid off into reserve in Sydney on 22nd January, 1958.

On 7th August, 1962, SYDNEY was recommissioned to serve in a completely different role, that of a fast troop transport, followed by a ten day cruise, in which she carried approximately 300 troops and more than 100 trucks and other Army equipment on her deck. In 1963 she took part in "Exercise Carbine", landing a large number of troops and vehicles at Hervey Bay, Queensland.

Sydney, in her operational role transported the 1st Battalion, Royal Australian Regiment to South Vietnam, since then she has made many trips to that country.
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Mr. Malcolm Cooper Executive Marine Operations Asia, Gamlen Chemical Co. (Asia) Pty. Ltd.

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Mr. Malcolm Cooper has been appointed Executive Marine Operations Australasia with headquarters at A.D.C. House, 77 Pacific Highway, North Sydney.

The new office will operate completely separately from Gamlen’s Industrial departments but will retain the success of the Company’s Research and Development Division and will be devoted entirely to the requirements of the Mercantile Marine and Naval vessels in Australia, New Zealand, Fiji, India, Indonesia, Malaysia and Singapore.

There are the Gamlen Marine Operations branches in every major port in Australia: Auckland and Wellington N.Z., Calcutta and Bombay India, and Singapore and Agents in Rockhampton, Mackay Townsville and Cairns, Queensland. Darwin N.T., Bunbury and Albany W.A., and Fiji.
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Flying Squadron's Visit a Gay Affair

By JACK MILLAR

Arrival in the port of Hobart in December 1965 of the fleet radar picket and guided missile frigate H.M.S. Barrosa — a product of today's modernised and up-to-date Royal Navy — passed almost unnoticed. A few idlers and passers by silently watched the sleek ship slide effortlessly into its berth. No gay crowds thronged the waterfront to greet our visitor.

It was not always so — like the visit of a former H.M.S. Barrosa, along with five other ships of the Royal Navy, in the second half of last century.

Ninety-five years ago life in Hobart progressed at a much more leisurely pace than it does today. It was the period of the horse and buggy. Steam was in its infancy, and the modern forms of transport as we know them today were unknown.

People were content with simple forms of pleasure. The arrival of a ship or ships from England created unusual interest in those days — it meant letters from home, new and exciting goods to buy in the stores and the chance to gather on the waterfront and exchange pleasantries.

The arrival in the port early in 1870 of six warships from England was indeed a gala event — one which was remembered and talked about long after they had gone.

It was the famed Flying Squadron, under the command of Rear-Admiral Geoffrey Phillips Hornby, flying his flag in H.M.S. Liverpool, a frigate of 2,665 tons with a 600 h.p. engine driving a single screw. She carried an armament of 30 guns as well as a number of subsidiary nine and twelve pounders and field pieces, all Armstrong's. Others in the squadron were the frigates H.M. Ships Lifely, Endymion and Phoebie, and the corvettes Barrosa and Scylla.

With the exception of Scylla (1,467 tons), all were of somewhat similar tonnage to the Liverpool. These wooden ships carried a total complement of 2,550, comprising 1,763 officers and men, 416 boys and 371 marines.

The Lifely, built in 1855, was the first man-of-war built to take engines: all the others to that time having been converted to take auxiliary power.

Endymion was the ship intended for His Royal Highness the Duke of Edinburgh, the first Royal visitor to Australia a few years previously, but the Duke, having a choice, preferred the Galatea.

Phoebie had a V.C. winner as Commander. Captain John Bythese won the coveted award when serving as a Lieutenant on H.M.S. Arrogant in action against Russia in 1854. Disguised as fishermen, he landed with two men on one of the Aland Islands in the Baltic, resulting in the capture of important despatches.

The Barrosa was a beautiful vessel, and the youngest of the fleet, having been built at Woolwich in 1862. She was also a sister ship to the ill-fated Orpheus, totally lost with heavy loss of life at Manukau, N.Z., and the Rattlesnake, which also saw service in the Pacific.

Although the youngest, she was a battle veteran, having been sent to Japan with a squadron in 1864. Action was encountered at Simodenkei, Nagasaki and Hokodobi, where armed bluejackets landed and captured a number of forts in hand to hand action. Armament consisted of only one tier of guns — 17 in number.

Her Commander, Captain H. Hands, previously served as Lieutenant in command of H.M.S. Oberon when in the slave trade squadron off the American coast.

The name Barrosa came into the Royal Navy in 1811 to commemorate the victory won by General Graham over Marshall Victor in the Peninsula.

The Barrosa of the Flying Squadron was the second to bear the name (she was broken up in 1877). The first being a 5th rate ship
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Page Thirty

THE NAVY

November-December-January, 1967-68

The Phebe of the Flying Squadron, being the smallest, also had the least armament, 16 guns in one tier.

The squadron was dispatched by the British Government on a tour of the world to show the flag, with the idea of awakening naval consciousness in the colonies, developing in them the urge to establish large naval forces of their own, much to the relief of the British Exchequer, who would be able to recall many ships on foreign stations.

Results did not turn out as intended regarding colonial naval expansion but socially and politically the tour was a gigantic success.

The opportunity was taken to include in the ships companies several hundred young officers and men of the Royal Naval Reserve for training with the fleet. It was also a test of the capabilities of steam war vessels to make lengthy and expeditious voyages under sail alone.

Sailing from Spithead on June 1, 1869, the Flying Squadron paid visits to the Azores, Brazil, South Africa, Australia, New Zealand, Japan, Canada and Hawaii before returning to England late the following year.

In Japan her place being taken by another ship from that Squadron the Barossa was detached to join the China Squadron. In Australia the capital cities of Melbourne, Sydney and Hobart were visited in that order.

Hobart gave them a tumultuous welcome, as did Melbourne and Sydney.

Mt. Nelson signal station sighted the squadron off Cape Raoul early on the morning of Sunday, January 2, 1870. As soon as their impending arrival was signalled from the Battery Point Flagstaff crowds flocked to vantage points on St. George's Hill, the Esplanade and wharf area. The vagaries of the Tasmanian weather then took a hand and the squadron lay becalmed in Storm Bay for some hours. When it was realised the fleet would not be in until the afternoon the crowd thinned somewhat to attend church services, resuming their place on completion.

About noon His Excellency, Governor Du Cane, and party drove to Broom's River to find out if the squadron's whereabouts. Having caught the sea breeze, they were then entering the Derwent, and the Governor had to return at a rapid pace to be on hand for the official welcome.

The Liffey and Endymion, although only 100 yards astern of the others, did not catch the sea breeze at the same time and lay becalmed for about two hours.

Shortly after 2 p.m., the Rear-Admiral's frigate, Liverpool, rounded Sandy Bay Point, followed at short distances by the Barossa, Phebe and Scylla. A fine sight it was! The paddle steamer Monarch was pressed into service, taking large numbers to the various ships. Firemen of the fair sex were somewhat marked.

The sailors were granted 24 hours leave in turn. As sailors will, many patronised the many different public houses, causing a few amusing incidents. More than one missed his footing and fell into the water when returning to his ship.

Their conduct, however, was described as in the main very good. A grand promenade concert was given on the Monday night in the Theatre Royal under the patronage of His Excellency. Rear-Admiral Hornby and many of his officers attended.

The concert, conducted by Signor Gagliardi, had as the "piece de resistance" that ever popular "Black-eyed Susan." On the Tuesday evening a ball was given for the officers at Government House. Under the glittering chandeliers many a young belle's heart was carried away as she whirled to the gracious dances of the time on the arms of a handsome escort. It was said that never was a more numerous or gayer company at Government House than graced it by their presence at the ball.
This was the last of the Barrosa and her crew were to see of Hobart. Orders had been given for her to proceed under steam to Melbourne at day light on the 5th, take on board a number of deserters and rejoin the fleet in New Zealand. So enjoyable did the crew find Melbourne that there were no less than 158 ratings of all ranks missing at sailing time. Barrosa, on returning, managed to get only four of this number.

On Wednesday, a gala picnic for the fleet was held at Rosny Point, the vehicular paddle steamer Kangaroo being used to convey the large crowd across the Derwent. To the immense amusement of spectators, the scientific game of duckstone was played. All went well until one bearded and decorated captain did not duck far enough, receiving a cut eye at the hands of an impetuous and rather reckless young midshipman.

In the evening a benefit night was given at the Theatre Royal by an amateur theatrical company of officers of the squadron, with the band from the Endymion supplying the music. It was a huge success.

The "Royal" was crowded from pit to ceiling, with standing room only being obtained with great difficulty in the lobbies and passages.

Thursday was cricket day, at which the local Southern Tasmanian Cricket Association played a combined squadron side on the Domain ground. A huge crowd attended, Mr. Cowburn, of the Jolly Hatters, doing a roaring trade with his liquor booth.

The S.T.C.A. were led by the Governor, while the squadron side were led by Rear-Admiral Hornby. In their first innings the squadron scored 116 to the Association 147, Whitesides with 34. As time permitted, the squadron batted a second time, scoring 80. Endymion's band provided music.

In the evening the Colonists Ball was held at the Town Hall, at which His Excellency the Governor, Mrs. Du Cane and Premier Wilson attended. This, too, was a glittering success, dancing continuing till dawn.

Throughout the week the Customs House, other public buildings and some private businesses closed at 1 p.m. to enable their staffs to see more of the Flying Squadron.

Friday, of course, was a public holiday for the Regatta. Crowds flocked early to the Domain, where it was estimated at least 15,000 people attended. Flaps flew gaily from every building and the five squadron ships. The Hobart-owned whaling barque Flying Childd, all prettified up for the occasion, was anchored in the middle of the river as regatta flagship.

The seven successful liquor tenners, the licencees of the Sir George Arthur, Royal Squadron Inn, Florence Nightingale Inn, Union Hotel, Hit and Miss Tavern, Turkish Bath Hotel and Battery Arms, did a roaring trade with their tent booths throughout the day. So did Mr. Cowburn, of the Jolly Hatters, with his special committee booth.

Children were not forgotten. Special cordial, cake, fruit and toy booths, plus numerous merry-go-rounds catered for the small fry.

On shore, the Scylla's band played popular numbers. About the Monarch and Kangaroo, each with a brass band, plied the harbour crammed with passengers. Sixteen aquatic events — rowing and sailing — were provided for fleet and local enthusiasts. All in all, the regatta was voted a tremendous success.

Saturday was the day of Mrs. Du Cane's garden party at Government House. This, too, was a huge success.

On Sunday, large crowds visited the ships, especially the Liverpool, where divine service was held during the morning.

Keeping the ships in first class working trim required plenty of spit and polish on the part of the sailors. It was a full-time job, Sunday included.

The story allegedly goes that one local resident, amused at the clean and tidy looking ship, tapped a sailor on the shoulder and said: 'Spose, Jack, you gets a let-up of a Sunday?' "Well," replied the bluejacket, "we do an' we don't, if you gets what I mean. We get Sunday Routine. They calls the 'ands at 5 a.m. — 'Show a leg, show a leg,' screams the bourn's mate. 'Lash up and stew hard.'" Then they pipes 'Ands to cocoa.' At 0530 is piped "Ands to quarters and wash upper deck.' At 0700, "Ands to quarters, clean guns;" 0730, the bugle sounds of 'Cook's.' At 0800, "Ands to berques and clean deck fast.' At 0830, "Ands clear up decks' is piped, and at 0900 "Ands to cocoa and clean for divisions No. 1 dress.'

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Throughout the week the Cust-
sails set simultaneously — a fine sight. Anchors were then tripped as the ships got under way. The tiny breeze then dropped and the ships began to drift, Liverpool going sternwards towards Macquarie Point. When only 200 yards from the rocks the anchor was dropped. Phoebe, to avoid colliding with Liverpool, also dropped anchor. The crowd on shore flocked to the water's edge for a close look. The Southern Cross, further down the river, was signalled to return and take the Liverpool in tow. A hawser was passed and the slow tow began. The band on the Southern Cross struck up "Auld Lang Syne". "The Girl I Left Behind Me" and "Goodbye Sweetheart" — a very moving scene.

When in the middle of the river Liverpool caught a slight breeze which had sprung up and the tow was cast off. At this time the Monarch hove into sight, returning from her regular run to New Norfolk. The crowd on shore, anxious to farewell the ships, hurried to the jetty. He quickly decided to run an excursion at five shillings per head. In next to no time the crowded Monarch put out to join the Southern Cross.

By noon the ships had progressed only a few miles. A weak sea breeze, meeting a slight northerly off Sandy Bay, caused confused sailing for the ships in the confined waters.

The Scylla, on a port tack, tried to pass to windward of Liffey but failed to make it. Both vessels slackened off head sheets and attempted to go about. When it was seen this would not avert a collision, Liffey dropped anchor but, gathering way, closed with the Scylla, her jib boom being carried away and the fore yard going through Scylla's fore topsail. The bugle was immediately sounded, calling all hands to quarters to clear the wreck and repair damage. Liffey's sails were quickly furled, whereby the Scylla slowly gathered way to sail clear. She had sustained only a hole in the fore topsail and carried away the main topsail near the beech. New sails were soon bent.

Two men were injured aboard the Liffey, which was more severely damaged. She lay at anchor for two hours repairing damage before getting under way. As she did, horrified watchers on shore saw a sailor fall from the fore topsail yard to the deck below. He was severely injured. Throughout the day there was little wind, and by nightfall the squadron had progressed only as far as Brown's River. Here it was decided to anchor for the night.

The Southern Cross, still with the fleet, was signalled to close the Liverpool and take off the Governor and his party. While this was being effected, the bands of both ships played popular airs. Three hearty cheers were then exchanged as the Southern Cross steamed back to Hobart. It was not until daylight the following morning that the squadron got under way again and finally cleared Tasmania's shore. Hobart then returned to normal.
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CAN YOU HELP YOUR EDITOR?

I have received many requests from readers, asking me to include more articles in “The Navy” concerning:

1) The foundation, history and early personalities of the Royal Australian Navy, and
2) Warship advancement 1900 to date (all navies).

Naturally, I will be delighted to research these subjects, however, my handicap is lack of reference material. I would therefore be appreciative if any readers possessing any works of reference (books, photographs, magazines, etc.) and who would be willing to donate some, kindly forward this material to:

The Editor
“The Navy” Magazine,
Box C178, Clarence Street Post Office,
SYDNEY, N.S.W. 2000. AUSTRALIA

Persons interested in writing for the magazine (in an honorary capacity), on the above subjects, are invited to forward manuscripts for consideration. All material received will be acknowledged in future editions of “The Navy”.

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Sea Cadet Corps News

New South Wales Division

Report of Activities and Training Undertaken by the New South Wales Division for the Quarter Ending September 30, 1967.

No periods of continuous training were carried out during the period under review.

Harbour and weekend training took place in the following ships and establishments:
- H.M.A.S. Penguin, 21 to 23 July
- H.M.A.S. Watson, 21 to 23 July
- H.M.A.S. Creswell, 14 to 16 July
- H.M.A.S. Albatross, 14 to 16 July
- H.M.A.S. Perth, 28 to 30 July
- H.M.A.S. Stuart, 28 to 30 July
- H.M.A.S. Moreby, 11 to 13 August
- H.M.A.S. Moreby, 18 to 20 August
- H.M.A.S. Penguin, 18 to 20 August
- H.M.A.S. Watson, 18 to 20 August
- H.M.A.S. Melbourne, 25 to 27 August
- H.M.A.S. Supply, 25 to 27 August
- H.M.A.S. Moreby, 8 to 10 September
- H.M.A.S. Melbourne, 8 to 10 September
- H.M.A.S. Penguin, 15 to 17 September
- H.M.A.S. Watson, 15 to 17 September

Examinations for advancement in rank were held for Cadets in H.M.A.S. Penguin during the weekend 22-23 July. A satisfactory number of passes was achieved.

On Saturday, 12 August, the Director of Naval Reserves inspected T.S. Torbruk, the "most efficient" Unit in New South Wales, for the purpose of eventually selecting out the "most efficient" Unit in each Division the No. 1 Unit in Australia. A .22 rifle shooting competition was held for all Units in H.M.A.S. Watson on Saturday, 19 August, and the new perpetual trophy presented by the Divisional Staff Officer (Training) for the highest point score was won by a team from T.S. Sydney. This competition was the forerunner of what is to be an annual event. The invaluable assistance given by H.M.A.S. Watson to make the day a successful one was much appreciated.

On Saturday, 9 September, an "At Home" was held by the Senior Officer and Officers of the Division in the presence of the Flag Officer in-charge East Australian Area. It was gratifying that so many senior P.N.F. Officers accepted an invitation to attend this social function. The Royal Motor Yacht Club of N.S.W. asked for 30 Cadets to carry out duties associated with their Opening Day on Saturday, 9 September, and these personnel were supplied by T.S. Parramatta.

The Annual Athletics Meeting was held on Sunday, 17 September, at Cahill Park, Arncliffe and the major trophy for the Unit gaining the most points went to T.S. Torbruk (Newcastle Unit).

(Sgd.) L. Mackay-Cruise, Lieut.-Commander R.A.N.R., Senior Officer.

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"AT HOME"

Australian Sea Cadet Corps — New South Wales Division

The Australian Sea Cadets’ “At Home” was held at the Hotel Manly on Saturday, September 9. The Senior Officer, Lieutenant Commander L. Mackay-Cruise, R.A.N.R., and officers of the Corps were hosts and received the 250 guests in the Corroboree Room.

Guests of Honour at this cocktail party were Rear Admiral T. K. Morrison, C.B., C.B.E., D.S.C., Flag Officer in Charge, East Australia Area and Mrs. Morrison.

A most pleasant evening was enjoyed by all present and the consensus of opinion expressed by nearly every guest, was that the 1967 “At Home” was the best ever.

A selection of photographs snapped by the R.A.N. Photographer.

Lt Ian Pirie, with both arms full! To the left of this photograph, Miss Patricia Morrison, and to the right Miss Rosemary Morrison.

Sub-Lieutenant Garry Richards and Miss Marcia Street posed for this photograph with the model of H.M.A.S. Perth, which was on show for the first time since completion by members of the Sea Cadet Corps.

Left to right: Captain J. L. W. Merson, R.A.N., Commanding Officer of H.M.A.S. Watson; Mrs. Merson; Mrs. Andrews; Lt. Cmdr. A. A. Andrews, M.B.E., Federal Secretary of the Navy League of Australia.

November-December-January, 1967-68
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WESTERN AUSTRALIAN DIVISION

Relic of H.M.A.S. Perth For Memorial Hall

CONTRIBUTED BY MICHAEL WORNER

One-legged South Australian diver Dave Burchell, made a trip to Western Australia to present a relic of H.M.A.S. PERTH — sunk in the Sunda Straits in 1942 — to Sea Cadets of the T.S. PERTH unit. He is pictured handing over a porthole frame to Lieutenant I. Bishop, Commanding Officer of the Unit.

Mr. Burchell, who located H.M.A.S. PERTH and made more than 25 dives on the cruiser, told the assembled Sea Cadets to remember the significance of what they might regard as "just an old piece of metal".

The 6,800 ton cruiser was commissioned in the Royal Australian Navy on June 29, 1939, and was lost in action against Japanese forces near Java. There were 471 casualties.

The relics that were brought up by Mr. Burchell have been on display in State capitals. Most of them will be kept permanently in the Canberra War Museum.

To commemorate H.M.A.S. PERTH, the Western Australian Division of the Navy League decided to raise funds totalling $30,000 for a centre.

Mr. Dave Burchell presents a porthole frame retrieved by him from the old cruiser, H.M.A.S. PERTH, to Lieutenant I. Bishop, A.S.C.C., Commanding Officer of the Sea Cadet training ship, PERTH. Survivors of H.M.A.S. PERTH are in the background.

ANNUAL EFFICIENCY TROPHY

Upon completion of inspections of the most efficient unit in each State of the Commonwealth, Captain M. A. Bourke, R.A.N., Director of Naval Reserves, stated that he had selected T.S. TOBRUK for the award of the Navy League of Australia Annual Efficiency Trophy which is presented annually to the most efficient unit in the Commonwealth of Australia.

T.S. TOBRUK (Lieutenant V. C. Williams, A.S.C.C.) is a Frigate Class Unit with headquarters at Newcastle, New South Wales, and was recognised by the Naval Board in April, 1952.

The following units which are not listed in any order of merit, were judged to be the best in their respective States and are congratulated on achieving a commendable standard of efficiency:

T.S. GAYUNDAH, Queensland.

T.S. ADELAIDE, South Australia.

T.S. BARWON, Victoria.

T.S. PERTH, Western Australia.

T.S. LEVEN, Tasmania.
JOIN THE
AUSTRALIAN SEA CADET CORPS

If you are between the ages of 13 and 18 years

The Australian Sea Cadet Corps is a voluntary organisation administered by the Commonwealth Naval Board and The Navy League of Australia.

The aim of the Australian Sea Cadet Corps is to provide for the spiritual, social and educational welfare of boys and to develop in them character, a sense of patriotism, self-reliance, citizenship and discipline.

Uniforms are supplied free of charge.

Cadets are not required to undergo any medical examination and are fully insured against accident while on duty.

Parades are held on Saturday afternoons and certain Units hold an additional parade one night a week.

The interesting syllabus of training covers a wide sphere and includes seamanship, handling of boats under sail and power, navigation, physical training, rifle shooting, signalling, splicing of wire and ropes, general sporting activities and other varied subjects.

Instructional camps are arranged for Sea Cadets in Naval Establishments, and they are also given opportunities, whenever possible, to undertake training at sea in ships of the Royal Australian Navy.

Cadets, if considering a sea career, are given every assistance to join the Royal Australian Navy, the Mercantile Marine or the Royal Australian Naval Reserve, but there is no compulsion to join these Services.

For further information please contact the Divisional Senior Officer in your State, using the Form provided below.

Senior Officers, Australian Sea Cadet Corps
NEW SOUTH WALES: "El Abrigo", 4 Rangers Ave., Cremorne, 2090.
QUEENSLAND: C/- Box 376E, G.P.O., Brisbane, 4001.
SOUTH AUSTRALIA: C/- 30 Pirie Street, Adelaide, 5000.
TASMANIA: C/- 11 Quorn Street, Sandy Bay, 7005.

VICTORIA: C/- Room 8, 8th Floor, 528 Collins St., Melbourne, 3000.
WESTERN AUSTRALIA: C/- 182 Coode St., Como, 6152.
AUSTRALIAN CAPITAL TERRITORY: Industry House, National Circuit, Barton, 2600.
NORTHERN TERRITORY: Box 444, P.O., Darwin, 5794.

TO: The Senior Officer,
Australian Sea Cadet Corps

I am interested in joining the Australian Sea Cadet Corps and would be pleased to receive further information.

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Please address your envelope to the Senior Officer in your State or Territory—see list of addresses above.

November-December-January, 1967-68 THE NAVY
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The pilot's forward-facing windscreens on the Harrier are of glass-plastic construction; "English Electric" is supplying the inner plastic laminate for evaluation.

The HSA design is a major advance in windscreen technology combining high weapon-aiming optical standards and bird impact resistance. Among civil projects, the BAC-Sud Concorde SST is another advanced aircraft for which "English Electric's" Engineering and Heating Systems Division is supplying specially developed transparencies — in this case heat-resistant windows in a polyester material for the retractable cockpit visor.

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But, Sir — That's Not a Bowling you've Tried Well; I Could've Made a Hitch in It?
The Royal Australian Navy continues its programme of expansion. By the end of 1967-68 the RAN will have in its fleet an increasing number of ships equipped with the most effective anti-submarine and anti-aircraft missiles obtainable, modern replacement aircraft to operate from the carrier HMAS MELBOURNE, the first of its modern submarines, a new destroyer tender and new patrol boats. This equipment will provide a balanced strength and is the realisation of planning which began several years ago.

The results of this planning will continue to be seen in the next two years as further ships, already begun, are completed. In firepower and mobility, the RAN is nearing the greatest strength it has attained in its 56-year history.

THE RAN'S TASK

The RAN's responsibilities in time of war are to:

1. Provide a contribution to Allied naval forces in our areas of strategic interest.
2. Escort Australian military convoys to operational areas.
3. Protect, in conjunction with the RAAF within the Australian area, shipping carrying essential imports and exports.
4. Co-operate with sister services in general operations, including the defence of the Australian mainland and territories.
5. Carry out offensive operations against the enemy.

The mobility, flexibility and state of preparedness of the RAN make it capable of quick reaction to any threat which might develop in Australia's area of strategic interest. The recent and the planned future additions to the Australian Fleet will increase this capability.

THE FLEET

1. Aircraft Carrier: HMAS MELBOURNE (Flagship)
2. Guided missile destroyers:
   - HMA Ships PERTH and VICTOR
3. Daring Class destroyers:
4. Type 12 escort ships:
5. Coastal mine-sweepers:
6. Submarines:
   - HMA Ships PERTH and VICTOR
   - HMA Ships VAMPIRE, VENDETTA and DUCHESS
   - HMA Ships YARRA, PARRAMATTA, STUART and DERWENT
   - HMA Ships IBIS and TEAL
   - HMAS OXLEY, HMAS TABARD and HMAS TRUMP (TABARD and TRUMP are operated by RAN on loan from RN.)

HMAS MORESBY

The R.A.N.'s first specially designed survey ship (commissioned on 6th March, 1964). She is fitted with the most modern hydrographic equipment, and she carries a "Westland Scout" helicopter.

MORESBY's full load displacement is 2,500 tons. She is 154 feet in length and has a beam of 43 feet.
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single ast). Double reduction
gearless turbines give her a shaft
horsepower of 15,000 equal to 17
knots. Her complement consists of
13 officers and 120 sailors.

Training Ships:
1 Type 15 frigate:
HMAS QUEENBOROUGH
In Reserve:
1 Battle Class
destroyer:
HMAS ANZAC
2 Type 15 frigates:
HMAS QUICKMATCH
and QUIRERON
1 Battle Class
destroyer:
HMAS TOBRUK
4 Coastal
Minesweepers:
HMAS Ships HAWK, GULL, CURLEW and SNIPE

THE FUTURE

HMA Ships OVENS and ON-
SLOW (one due for delivery
in 1968-69 and one in
1969-70).
2 Type 12 escort
ships:
HMAS Ships SWAN and TUR-
RENS (due for completion
1969).
9 Patrol boats:
HMAS Ships ADROIT,
ARROW, ARDEN, BARRI-
CADE, BARBETTE,
BOMBARD, BUCANEER,
RANDOLIER and RAYON-
ET (to be delivered pro-
gressively by end-1969).

THE FLEET AIR ARM
723 Squadron:
Helicopter pilot training and
search and rescue duties.

DELIVERY IN 1967-68
1 Destroyer tender:
HMAS STALWART
1 Guided missile
destroyer:
HMAS BRISBANE
1 Oberon Class
submarine:
HMAS OTWAY
11 Patrol boats:
HMAS Ships ATTACK, AT-
APE, SAMARAI, AD-
VANCE, ACUTE, AWARE,
LAE, MADANG, LADAYA,
ARCHER and ASSAIL
14 S-2E Tracker aircraft
10 A-4G Skyhawk fighter-bomber aircraft
The RAN's commitment in Vietnam will be increased further when eight helicopter pilots and a supporting staff of thirty-seven joined a US Helicopter Unit in South Vietnam in October, 1967. The RAN personnel will augment the efforts of the US Helicopter Unit which is stationed in the area of the Australian Task Force to provide helicopter support to the Allied forces, including the Australian Task Force, in Phuoc Tuy Province.

Strategic Reserve

The RAN's commitment to provide two destroyers or escorts to the British Commonwealth Strategic Reserve, based on Singapore, continues.

Exercises

Seven RAN ships and five major RN warships including the aircraft carrier HMS VICTORIOUS and County class guided missile destroyers, HMS HAMPSHIRE and KENT, took part in the Australian maritime exercise which began in the Bismark Sea and ended in Sydney in October, 1966. Units of the USN, RNZN, RAF and RAAF also took part. The exercise was the largest ever to be held in Australian waters, and during part of it, Navy forces operated with Australian Army units in the Army exercise 'Barra Winga'.

In March 1967, HMAS VAMPIRE took part in the SFATO exercise Siyasat near the Philippines, and in July 1967, HMAS MELBOURNE, SUPPLY, VAMPIRE and DERWENT took part in Exercise 'Sea Dog' in the South China Sea with ships and aircraft of the Royal Navy, USN, the Philippines, New Zealand and Thailand navies. The exercise was jointly sponsored by Australia and the US and was directed

---

**Operational Activities**

**Vietnam**

The RAN's guided missile destroyer HMAS HOBART commenced operations in the Vietnam area, as a unit of the US Seventh Fleet, in March, 1967. A few weeks earlier an RAN clearance divers team was attached to US Naval forces in Vietnam. HOBART has been employed on shore bombardment, escort duties, and interdiction of coastal traffic. This commitment in Vietnamese waters continues with HMAS PERTH replacing HMAS HOBART in September, 1967.

The transport HMAS SYDNEY made two trips to Vietnam during 1966-67, carrying replacement troops to the area and bringing back to Australia soldiers who had completed their tour of duty in the area.

In March the RAN commissioned the Australian National Line cargo ship BOONAROO to sail her to Point Wilson, Victoria, to load a cargo of military supplies for Vietnam. Under the command of RAN officers and fully manned by RAN personnel, HMAS BOONAROO made one round trip to Vietnam before being decommissioned and handed back to her civilian owners. Eight days after BOONAROO was commissioned in the RAN, a party of RAN sailors replaced eighteen Seaman's Union members of the crew of the cargo ship JEPARIT, which is also owned by the Australian National Line. The remaining members of the ship's crew expressed their willingness to sail the ship alongside men of the Royal Australian Navy. This arrangement continues to operate satisfactorily.

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GROWING STRENGTH

New Construction

The RAN's third guided missile destroyer, HMAS BRISBANE, will commission in December, 1967, and will arrive in Australia about 8 months later, after trials and working up off the US coast.

The destroyer tender, HMAS STALWART, building at Cockatoo Island Dockyard, Sydney, will also be commissioned in December 1967, and will assist considerably in the maintenance of Fleet units.

Two new Type 12 escort ships, HMA Ships SWAN and TORRENS, are progressing satisfactorily and will be launched during the current financial year.

Eleven of the twenty patrol boats being built by the consortium of Queensland firms (Evans, Deakin & Co. Pty. Ltd., of Brisbane, and Walkers Ltd., of Maryborough) will be completed and entered into service progressively during 1967-68, and the remaining nine by mid-1969.

Submarine Service

The RAN's first Oberon-class submarine, HMAS OXLEY, commissioned on 21 March, 1967, and three

Photographed on the flight ramp at the Douglas Aircraft Company, Santa Monica, California, are two of the R.A.N.'s new Skyhawk fighter-bombers. The aircraft on the left is an A-4G, single-seat, jet powered combat aircraft. The machine on the right is a TA-4G, two-seater training version of the A-4G. The R.A.N. has purchased eight A-4Gs and two TA-4Gs by the Flag Officer Commanding HM Australian Fleet.

SURVEYING AND RESEARCH

Considerable areas of offshore waters have been surveyed in the past year.

The hydrographic surveying ship HMAS MOORESBY surveyed in the Broome area of W.A. from June to December 1966, and worked on the north coast of New Guinea during the first half of 1967. The smaller HMAS PALUMA worked first in both north and south Barrier Reef areas before moving to the Torres and Gоchen Strait areas and the Howick group of islands near Cooktown, Queensland. In Torres Strait, PALUMA was assisted by the minesweepers HMAS ships IRIS and TEAL.

Further off shore, HMAS DIAMANTINA carried out scientific cruises in the South China Sea from Vogue to November 1966, and in 1967 carried out a seismic survey off Western Australia and made scientific cruises in the Great Australian Bight and south-western Pacific.

HMAS KIMBIA carried CSIRO scientists on research cruises as well as making seismic surveys in the Cape York and Torres Strait areas off Queensland for other Government departments.

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other, HMA Submarines OTWAY, OVENS and ONSLOW, are expected to commission at yearly intervals, beginning with OTWAY in 1968. HMAS PLATYPUS, the new submarine base at Neutral Bay, Sydney, commissioned on August 18, the same date as OXLEY arrived in Sydney. PLATYPUS will develop to full capacity during the time the other RAN submarines are building. The commissioning of HMAS PLATYPUS marked the formal establishment of the RAN Fourth Submarine Squadron, replacing the RN's Fourth Submarine Division which has been based in Australia since 1949. The RN submarines TRUMP and TABBARD will continue to serve in Australia for the time being under RAN operational control.

Conversions

The previous plan for half-life modernisation of the two Daring-class destroyers, VAMPIRE and VENDETTA, which was to have begun in mid-1968 and continue through to mid-1971, involved removal of one of the three 4.5-in. turrets from each ship to allow for the installation of Ikara. In view of changed strategic requirements and recent operational experience, and the fact that all the other Fleet escorts will have Ikara fitted, it has been decided that a better balance of weapon systems in the Fleet will be achieved by improving the capability of the two Darings as gunships. Accordingly, Ikara will not now be installed in VAMPIRE and VENDETTA, but their three 4.5-in. turrets and associated fire control systems will be retained and considerably improved. Work on the two ships will commence in the latter half of 1969, and will take about 2 years, compared with three under the previous plan.

The aircraft carrier HMAS MELBOURNE will commence an extended refit in January 1968, during which an essential up-dating of facilities and equipment will be undertaken, including alterations necessary to operate the carrier's new Tracker and Skyhawk aircraft. During the refit, aircraft and maintenance personnel will undergo the necessary conversion and operational training on the new types of aircraft. Some pilots, observers and maintenance personnel have already been trained in the United States on the new aircraft and will act as instructors during conversion training. The aircraft will be used for operational exercises with Fleet units, and this will assist aircrews to become proficient in the use of the new and sophisticated aircraft equipments. The Wessex anti-submarine helicopters will be operated from the fast transport HMAS SYDNEY as appropriate.

MISSILES

The Australian anti-submarine torpedo carrying missile Ikara has been successfully fired against submarine targets as well as instrumented static targets. The installation of this weapons system in ships has proceeded satisfactorily. It is now operational at sea in the four Type 12 escorts in commission — HMA Ships STUART, PARRAMATTA, YARRA and DERWENT, and the guided missile destroyer PERTH. It will be fitted to HMA Ships HOBART and BRISBANE, at suitable opportunities during refits, and to HMA Ships SWAN and TORMENT during building. The introduction of this system has increased greatly the anti-submarine capability of the Fleet.

The surface to air missile firing range using Jindivik pilotless aircraft for Tartar firings in the Jervis Bay area is operational. Practice firings of the Seacat short-range surface-to-air missile installed in Type 12 escort ships continue to prove the suitability of the system for close range anti-aircraft defence of ships.

PERSONNEL

A total of 15,893 officers, sailors and WRANS was serving in the Permanent Naval Forces on June 30, 1967. The estimated strength on June 30, 1968 is 16,980.
November-December-January, 1967-68

THE NAVY

A large number of R.A.N. personnel continues to train overseas on various specialised courses, for submarines, guided missile destroyers and Tracker and Skyhawk aircraft operation and maintenance. A total of 160 officers and 176 sailors are in Britain, and 88 officers and 140 sailors in the U.S. To these will be added the bulk of H.M.A.S. BRISBANE's ships company of 332 officers and men towards the end of 1967, when the ship commissions.

The R.A.N. College at Jervis Bay has been accredited as a tertiary college by the University of N.S.W. for first-year studies in science and engineering. The first R.A.N.C. students to begin degree courses with the university will be the matriculation group of cadets in 1968. On successful completion of first-year studies at the college, selected cadets will undergo degree courses at the University before completing sea training and professional courses.

The officer strength of the R.A.N. was 1,755 on June 30, 1967. The estimated number on June 30, 1968 is 1,849.

The R.A.N. continues to provide nine officers and a small number of sailors on loan to the Royal Malaysian Navy, and trains R.M.N. personnel in Australia.

Naval Reserve Forces

Citizen Naval Forces and the R.A.N. Emergency Reserve continue to expand and the total reserve strength stood at 1,253 officers and 3,471 sailors on June 30, 1967. In addition, 187 Reserve personnel are providing full time service in the Permanent Naval Forces.

The general purpose vessels, H.M.A. Ships BASS and BANKS, have been provided for Reserve training in Hobart and Adelaide respectively and patrol boats will also be allocated for Reserve training in Melbourne, Brisbane and Fremantle.

Papua-New Guinea Division

The first four officers to form the nucleus of the Papua-New Guinea Division began cadet training at H.M.A.S. Tarangau, Manus Island, in 1967. Two of these cadets were selected from sailors under training at Tarangau and the others entered as cadets. All have reached a senior high school standard of education. On passing academic and practical tests they will begin professional training at H.M.A.S. Cerberus, Victoria, in March, 1968, joining with R.A.N. supplementary list cadet midshipmen.

A further fifty-three recruits entered the P.N.G. Division during 1966-67, bringing the number of sailors under training to 128. Thirteen sailors have completed their initial training at H.M.A.S. Tarangau and have seen sea service in ships of the R.A.N. Fleet.

Civil Personnel

The number of civilians employed by the Department of the Navy at June 30, 1967, was 10,134. Approximately half of the civilian employees work at the Garden Island and Williamstown dockyards.

BUILDINGS, WORKS AND HOUSING

Expenditure on buildings and works during 1966-67 was $7,073m, an increase of $0.762m on the previous year. In addition $0.889m was advanced to the States under the Commonwealth/States Housing Agreement towards the cost of 168 houses and flats for Naval personnel.

Projects begun during the year include facilities for patrol craft at several locations, new boiler installations at Garden Island Dockyard to provide steam for guided missile destroyers under went, a four-storey office building at Garden Island for electronic data processing facilities and other dockyard functions, a science block at the R.A.N. College, proof testing...
facilities at Port Wakefield, S.A. and W.R.A.N.’s quarters at Darwin. 

Provision is made in 1967-68 for an estimated expenditure of $57.530m on capital works. Some of the major projects are the provision of technical and other facilities at Garden Island Dockyard (50.629m), a maritime engineering demonstration building at the apprentice training establishment, H.M.A.S. Nirimba (50.460m), further development works at the Kingswood Armament Depot, Sydney (50.337m), new boilers for the pumps at Alfred Dock, Williamstown Naval Dockyard (50.110m), and additional domestic accommodation at H.M.A.S. Kurralba, Sydney (50.100m), H.M.A.S. Penguin, Sydney (50.215m). H.M.A.S. Nirimba, N.S.W. (51.375m) and H.M.A.S. Leven, Fremantle (51.650m).

At June 30, 1967, 2,566 houses throughout Australia and New Guinea were occupied by married R.A.N. personnel and their families with an additional 170 in process of completion. Provision has been made in 1967-68 for 50.729m to be advanced to the States under the Commonwealth/State Housing Agreement towards the cost of 150 houses for rental by Naval personnel.

FINANCE

The Navy Estimate for 1967-68 is $232.687m. This amount comprises the appropriation of $193.132m together with an estimated amount of $39.553m to be spent in the U.S. on equipment and stores under the Logistics Credit Arrangement.

The estimate exceeds last year’s expenditure by $30.080m. The increased spending can be attributed to additional expenditure on new aircraft being financed from United States Credits; personnel increases to cope with the expansion; and to the obtaining of new maintenance stores and capital equipment.

The chart below shows the major categories of proposed expenditure for the Navy in 1967-68 compared with actual expenditure in the previous financial year.

**NAVY EXPENDITURE**

<table>
<thead>
<tr>
<th></th>
<th>Estimated 1967-68</th>
<th>Actual 1966-67</th>
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</thead>
<tbody>
<tr>
<td>Service Pay and Allowances</td>
<td>$48,341</td>
<td>$44,136</td>
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<tr>
<td>Civil Salaries</td>
<td>$26,929</td>
<td>$23,468</td>
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<tr>
<td>General Expenses</td>
<td>$11,574</td>
<td>$11,571</td>
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<tr>
<td>Maintenance Stores</td>
<td>$23,906</td>
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<tr>
<td>Maintenance of Equipment</td>
<td>$9,232</td>
<td>$6,932</td>
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<tr>
<td>Maintenance of Buildings and Works</td>
<td>$2,900</td>
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<td>Naval Construction</td>
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<tr>
<td>Aircraft Purchase</td>
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<td>Capital Equipment</td>
<td>$11,841</td>
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<tr>
<td>Buildings, Works, Sites and Housing</td>
<td>$8,262</td>
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<tr>
<td></td>
<td>$193,132</td>
<td>$183,074</td>
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<tr>
<td>Outlays from United States Credits</td>
<td>$39,555</td>
<td>$19,533</td>
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<tr>
<td></td>
<td>$232,687</td>
<td>$202,607</td>
</tr>
</tbody>
</table>

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Pre-fabrication and production line techniques are being used on the construction of 20 patrol boats for the R.A.N., the first of which began trials during October.

This type of construction, made possible by the size of the order, is unusual in naval ship construction and has resulted in economies through the adoption of "mass production" methods.

The 100 ton, 107ft patrol boats are being built by a consortium including Evans Deakin & Co. Pty. Ltd., of Brisbane, Walkers Ltd., of Maryborough and Commonwealth Engineering (Qld.) Pty. Ltd., of Brisbane.

The steel hulls of each vessel, made in six separate sections by Commonwealth Engineering, were transhipped to the two shipbuilders, each of which is building ten patrol boats, for assembly (refer pictures this and subsequent pages).

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(M108-13) The section is swung into place on the building slip.

(M108-16) The starboard section is mated with its portside counterpart. A pre-fabricated bow will be welded forward of these two sections (note completed hull stern).
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November-December-January, 1967-8
EGYPT

What now for the Navy?

There is some speculation in naval circles as to the future size and role of the Egyptian Navy which did not play a very newsworthy part in the recent short and decisive war in the Near East, nor was any great part called for.

After the Suez conflict in 1956 the Egyptian Navy seemed to fall gently into decay as far as the ships with which she had started operations were concerned. At the time of Suez nearly all the ships in the Egyptian Navy were former British warships which had been discarded or sold as surplus to future naval requirements during the run down after the second world war.

In 1956 the Egyptian Navy took delivery of a couple of destroyers of the SKORI class from the U.S.S.R. and these were supported by four fleet minesweepers of the former Soviet T43 type and a dozen motor torpedo boats of the P6 type from the Russian Navy.

From time to time an even greater variety of escort and minesweeper craft were acquired from the U.S.S.R., spread over the next few years. Great play was made with the prospect of acquiring cruisers of the SVERDLOV class from the U.S.S.R. In 1961 it was reported that Egypt was hoping to purchase two cruisers in the near future. But they never materialised.

Other ex-Soviet warships did, however. In 1962 two more destroyers, two motor minesweepers of the T301 type, three submarine chasers of the 'S.O.L' type, three motor gunboats of the missile launching KOMAR type, and twice the number of motor torpedo boats were taken into Egyptian ports, although it was very uncertain whether they had ever been transferred outright to Egypt, which had been lent, which were being exchanged with former acquisition, and which were merely visiting Soviet warships or vessels on missions with personnel for technical assistance or with engine or weapon spares.

But the whole set-up had become very much a Soviet dominated organisation, and little was heard of the two former British destroyers, four former British frigates, two former British corvettes and half a dozen former British motor torpedo boats and motor launchers.

In recent years however, a real effort was made to modernise the Egyptian Navy. Submarines of the former Soviet 'W' class had been fitting in and out of Egyptian ports since 1957 and by 1962 the number which actually belonged to Egypt was reported to have settled down at eight plus a coastal submarine of the former Soviet SHERSHEN type for training. The two ex-British destroyers EL FATEH (ex-H.M.S. ZENITH) and EL QAHER (ex-H.M.S. MYNGS) were sent back to Britain to be refitted and modernised by J. Samuel White & Co. Ltd., Cowes, in May 1963 to July 1964.

Warship traffic from the U.S.S.R. was stepped up. According to a recent appraisal made by American observers, submarine and small craft strength has increased. Two submarines of the 'R' class from the U.S.S.R. apparently replaced two of the 'W' class which were returned to the Soviet Navy in May 1966. Another boat of the 'R' class was transferred to Egypt in February 1966, and by the end of 1966 five Soviet submarines of the 'R' class had been delivered. So by the middle of next year the time the recent war broke out Egypt had a total of 13 submarines, represented by nine 'W' class and one 'MV' class. The remainder of the assessment reported that these eight KOMAR class motor gunboats delivered by January 1965; ten OSA missile patrol boats acquired in 1966, and at least one of the new big motor torpedo boats of the SHERSHEN class delivered from the U.S.S.R. by February 1967.

According to the consensus of opinion of officers in the various headquarters of NATO, CENTO and U.S.A. in Europe, Egypt had planned the elimination of Israel ever since she recovered from Suez, but had been hiding her time to select the most suitable moment when Britain would be at her weakest in the Mediterranean, the Near East and Aden, when the United States would be most preoccupied with the war in Vietnam and tempted to gradually withdraw ships from the Atlantic and Mediterranean fleets to bolster up her strength in the Far East and when Egypt herself had acquired sufficient warships from the U.S.S.R. to give her sufficient strength to control the waters at both ends of the canal.

But the Soviet augmented Egyptian Navy does not seem to have altered the picture very much.

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**Nautical Notes from All Compass Points**

By SONAR

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FRANCE

Order for The Nord 262

The French Navy's decision to order a number of twin turboprop Nord 262 airliners (rumored to be between 35 and 40) has led to the decision to double the production rate in 1968. The Bourges factory will be turning out two a month by the middle of next year.

Apart from special equipment, the Naval Nord 262 will be standard civil aircraft incorporating the enlarged freight door (39.75 in. by 47.25 in.) which is being introduced as sure load transport and for navigation training. The first Nord 262 to go to the Navy is for familiarisation and is the executive (No. 28)
Underwater Survey Vessel

The keel of the first underwater survey vessel of its kind to be built on Japan has been laid at the Kawasaki Dockyard Co. Ltd., Kobe yard (see photo). Japan's Maritime Safety Agency ordered the vessel following a budgetary appropriation by the Science and Technology Agency. All government agencies concerned will share the vessel, according to their needs.

The underwater ship is currently being built for completion in late 1968 with delivery set for March, 1969. It will navigate at 600 metres below the surface — twice as deep as conventional submersible vessels in Japan.

It will carry a crew of four, including two researchers. It will be

The Nord 262 is now being delivered to the German independent airline LTU. The sectors served are Saarbrucken, Hanover and Bremen out of Dusseldorf. The West German Navy is to be equipped with its first aircraft. And the West German Navy are to be supplied with eight of the Bear Trap which was demonstrated at Le Bourget during the salon. It has already flown 250 hours and is expected to fly a further 100 hours with the service. The low operating costs and simple maintenance are features of the Nord 262 which led to its adoption by the French Navy. Nord-Aviation has now delivered over forty of the aircraft. The first four in service with Air Inter have flown between 3,500 and 4,000 hours each. The type of short-haul schedule for which the 262 was designed militates against high utilisation and the principal operators are only using their aircraft for less than six hours a day. However, Japan Domestic Airlines accumulated 2,300 hours in about a year with its first aircraft. And the West German independent airline LTU (Lufthansa) will now under way at the same shipyard in Akita for the world's largest repairing dock. 450 metres long and 72 metres broad, that can handle super-tankers up to 500,000 tons.

Kawasaki, which had begun building operations at the new dock even before it was completed, "launched" the first ship built at the dock on October 10. The ship is a 124,700 ton oil tanker, the "Kinokawa Maru", ordered by the Kawasaki Kisen, a Japanese shipping firm.

Booked ahead According to Kawasaki's schedule the new building dock is booked to build eight vessels aggregating about 1,300,000 deadweight tons hereafter. Kawasaki added, these included a pair of 250,000 ton oil tankers to be built for a British shipowner, the Blandford Shipping Company Ltd.

At the same time, construction work is now under way at the same shipyard in Akita for the world's largest repairing dock. 450 metres long and 72 metres broad, that can handle super-tankers up to 500,000 tons. The dock is expected to open to traffic by August next year. It will cost about 5,000,000,000 yen to build.

World's biggest dock completed

The world's biggest dock capable of building a ship of 350,000 deadweight tons was completed on October 10 at the Sakaide shipyard of the Kawasaki Dockyard and Engineering Ltd., in Ukimiku, western island of Kyushu. It has a Royal Canadian Navy contract for supply of eight of the Bear Trap devices.

JAPAN

WERNEM GERAMY

Bear Trap

Two air-sea rescue ships of the West German Navy are to be equipped with the Fairey Canada developed Helicopter Haul-Down System, known as "Bear Trap", which permits a 10-ton helicopter to be landed on a small ship-mounted platform, even when the vessel is heaving in gale conditions. West Germany's 21 naval Bell UH-1D helicopters are to be equipped to use the system, under which the approaching helicopter lowers a line for retrieval by a deck crewman and attachment to the haul-down cable. Fairey Canada Ltd. already has a Royal Canadian Navy contract for supply of eight of the Bear Trap devices.

THE NAVY

November-December-January, 1967-68

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THI NAVY
November-December-January, 1967-68
Page Seventy-one
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mally made at ten knots on a ship
or eight knots on a small boat. The
hovercraft also has the ability to
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When permanent recordings are
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can be varied between 10 and 40
inches per hour.

UNITED STATES OF AMERICA
The Mark 48 Torpedo
The Mark 48 Torpedo—Claimed
to be the most advanced anti-sub-
marine weapon under development
by Westinghouse. The Mark 48 tor-
pedo has a self-contained search and
homing system that seeks the tar-
get and is propelled by a pump-jet,
thermal engine that burns liquid
diesel fuel. It will replace the Mark 37,
and can be surface and submarine
launched (see photograph).

AIR CUSHION VEHICLES
Feasibility of constructing and
operating air cushion vehicles up to
4000-5000 tons and with speeds of
more than 80 knots, is to be cov-
ered in a joint USN-Department
of Commerce programme, on which
a memorandum has recently been
signed by both. Applications to both
military and commercial uses will
be checked out in a broad participa-
tion by government laboratories and
industry. Design development of a
small surface-effect ship for test
purposes is already provided for
under a $725,000 contract, and a
further similar contract is reported
under negotiation for studies of a
high speed test ACV of under 100
tons gross weight.

RA-5C VIGILANTE
US Naval Air Systems Com-
mand has awarded North Americans
Columbus Division $5.7m for long-
lead-time effort in reinstating pro-
duction of the RA-5C Vigilante.
Total value of the new production
programme is expected to be in ex-
cess of $150m and production will
follow on completion of current
conversion contracts (A-5As to
RA-5Cs) with initial deliveries be-
inning early 1969 and continuing
into 1971. The final A-5A conver-
sion is scheduled to come off the
Columbus line in January, and
although RA-5C production had,
in fact, terminated, most of the
necessary tooling is still in place
and little new tooling will be re-
quired.

CORSAIR II
Contract definition phase for the
US Navy's A-7E version of the
Ling-Temco-Vought Corsair II was
expected to be completed at the
time of closing for press. The A-7E
will be powered by an advanced
version of the Pratt & Whitney
TF30 engine and will have an iden-
tical avionics system to that of the
USAF's A-7D. US Navy approval

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has been given for the development of an advanced version of the TF30, the TF30-P-18P rated at 15,000 lb st, for yet another version of the Corsair II, the A-7F, which is likely to be a two-seater.

### F-8E CRUSADERS

The US Navy is shortly to begin retrofitting its F-8E Crusaders with boundary layer control. The modified aircraft, which will be designated F-8J, will commence flight testing in January, and is expected to offer a reduction in approach speeds of 15-17 knots. Earlier plans to apply direct lift control to 225 F-8D and F-8E aircraft have been shelved, and only the F-8E will be modified to take boundary layer control equipment.

### RESEARCH SUBMARINE

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