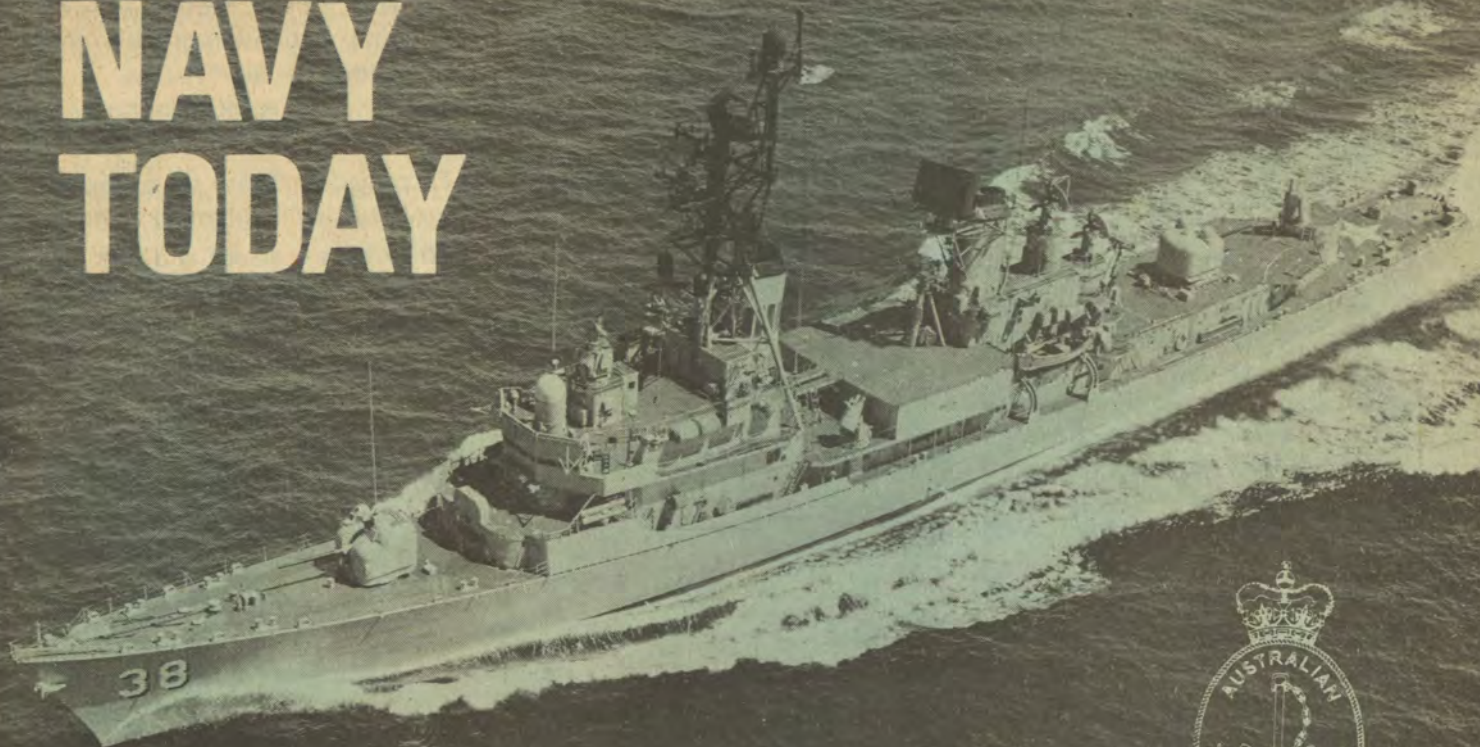


NAVY TODAY



SWADER R.E. T/S PALOMA

The Navy today and its roles

The Royal Australian Navy today has the largest peacetime fleet in its history. More than 50 ships of various types are in service. New and existing ships will give the Navy a balanced fleet, possessing versatility and flexibility and a capacity for rapid deployment in a wide range of situations.

The RAN is being developed to be increasingly self-reliant, with a degree of strategic and tactical mobility.

The roles of the RAN are:-

- * To organise, train and equip naval forces, including naval aircraft, for timely and sustained combat operations at sea.



- * To detect and destroy enemy naval forces and sea commerce.
- * To establish and maintain superiority in areas as necessary for naval operations, including the protection of sea lines of communication.
- * To conduct naval offensive operations against enemy forces and installations.
- * To conduct naval reconnaissance and surveillance, anti-submarine

warfare, the protection of shipping, and hydrographic and oceanographic survey.

- * To provide naval support for land operations.
- * To provide military sea transport for the Australian services; and
- * To provide seaward and harbour defence of ports and anchorages.

The Destroyer escort HMAS DERWENT on task in South-East Asia.

To carry out these tasks, the Royal Australian Navy is equipped with modern ships and aircraft which are capable of fighting above, on and under the sea.

It has a light carrier which carries anti-submarine and strike aircraft, and three guided missile destroyers, six missile-equipped destroyer escorts, three gunship destroyers, four of the latest submarines, and various other ships, including patrol boats, minehunters and minesweepers.

Supporting the fleet are an oiler and a destroyer tender. A troop transport provides support to the Australian Army.

As well as maintaining a strong fighting force, the RAN has the scientific task of discovering more about the huge areas of coastline and sea around Australia.

It has two hydrographic ships almost constantly charting the oceans to open safe routes for bigger ships, and an oceanographic ship helping to delve into the secrets of the oceans.

The flagship of the Royal Australian Navy, HMAS MELBOURNE, with Skyhawk, Tracker and Wessex aircraft on her flight deck.



New ships have been added to the Fleet recently, including two destroyer escorts, and a submarine. Two destroyers are to be modernised while some minesweepers have been, or will be, converted to minehunters.

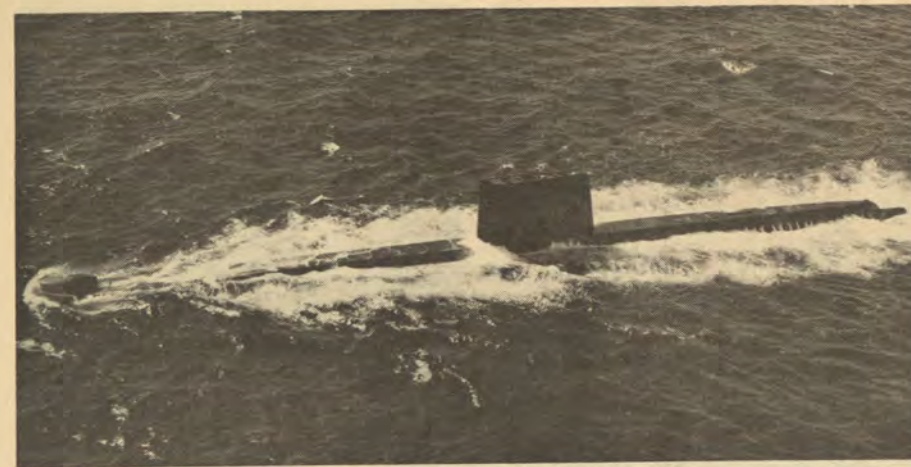
A number of new ships, aircraft and other important equipment are planned.

The preliminary design study for a light destroyer has begun and approval has been given for the detailed design of this class of ship.

Other future projects for which approval was given in 1969-70 include:-

- * A fast combat support ship to supply to combatant ships either

Wessex helicopters from HMAS MELBOURNE hover in formation prior to embarking on an anti-submarine exercise.



The Oberon-class submarine HMAS OXLEY slices through the Tasman Sea during exercises off the Australian East Coast.

at sea or in harbour a variety of fuels, ammunition, victuals and other stores.

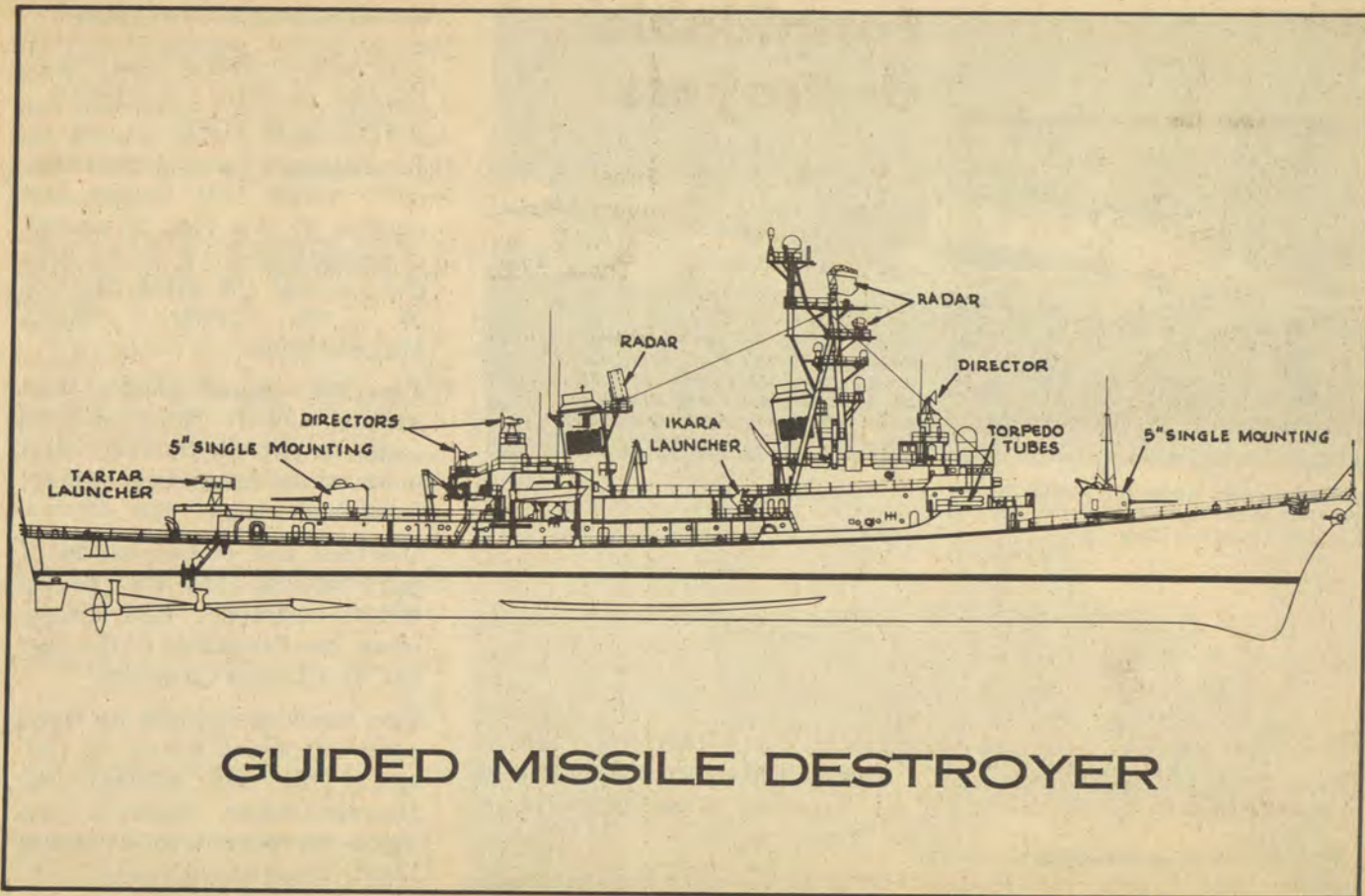
- * A specialised oceanographic ship which will replace the ageing

HMAS DIAMANTINA to be named HMAS COOK. This ship is expected to be completed in 1974.

- * A small hydrographic ship which

will replace HMAS PALUMA.

- * Two Oberon-class submarines to increase Australia's submarine strength to six vessels.
- * Ten Skyhawk fighter-bomber aircraft which will double the number of this type of aircraft in service with the Fleet Air Arm and increase the strike capacity of the carrier HMAS MELBOURNE.
- * Two twin-engined support and training aircraft which will be used for aircrew training, communications duties, fleet requirements and trials.
- * Overhaul and modernisation of gun mounts for the guided missile destroyers. This will increase the fire power of the fleet and its offensive capability.
- * New receiving facilities for Naval communications station at Darwin. This will enhance our communications facilities necessary for the control of operations in areas to the north.



Formidable destroyers

The RAN has three modern guided missile destroyers, HMAS PERTH, HMAS HOBART and HMAS BRISBANE. These U.S.-

Opposite page - Line drawing of guided missile destroyer showing armament and electronic aids. The guided missile destroyer HMAS HOBART (left) churns up the water during a fast turn. Below - Sister ship HMAS BRISBANE.



built ships have all seen service in Vietnam since joining the Australian Fleet. There they have operated with ships of the US Navy and have been highly praised for their efficiency and professionalism.

Their principal armaments are five-inch automatic rapid-fire guns, mounted fore and aft. They also are fitted with anti-aircraft Tartar missiles and the Australian-designed anti-submarine Ikara missile system. Six torpedo tubes are mounted forward and the ships also have lighter armament.

The design of this class of destroyer is particularly versatile. Their main role is anti-war warfare - the defence of the Fleet - but they also have formidable anti-submarine and surface gunnery capabilities.

The ships are 437 ft. long, with a beam of 41 ft. and a displacement of 4,500 tons.

Each carries a ship's company of 333 officers and sailors.

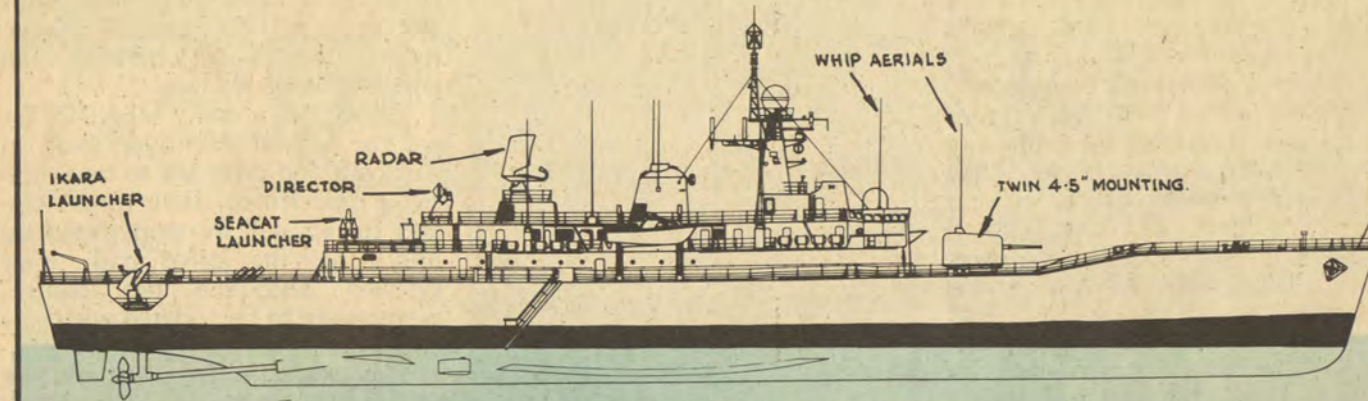
Escorts are versatile

With the addition of the destroyer escort HMAS TORRENS to the fleet, there will be six of this type of ship in service. TORRENS and HMAS SWAN are the latest versions of this versatile escort.

All have been built in Australia. They are armed with 4.5-in. guns which are controlled by digital fire control radar and computer. They provide fire power against air and surface targets, and can be used equally as well in shore bombardment. Close-range air and surface defence is provided by a Seacat missile system which is controlled by another radar and computer.

The submarine can be met by using either the Ikara anti-submarine missile system which is Australian designed and built, or the triple-barelled mortars. Both these weapon systems operate from computerised data.

The destroyer escort HMAS PARRAMATTA. Opposite page — Line drawing of later-year sister ship, showing main armament.



LATEST VERSION OF RIVER-CLASS ESCORT

All-purpose Darings

There are three Daring-class destroyers in the RAN, HMA Ships VENDETTA, VAMPIRE and DUCHESS. These all-purpose ships are equipped for surface engagements, anti-aircraft defence and anti-submarine warfare.

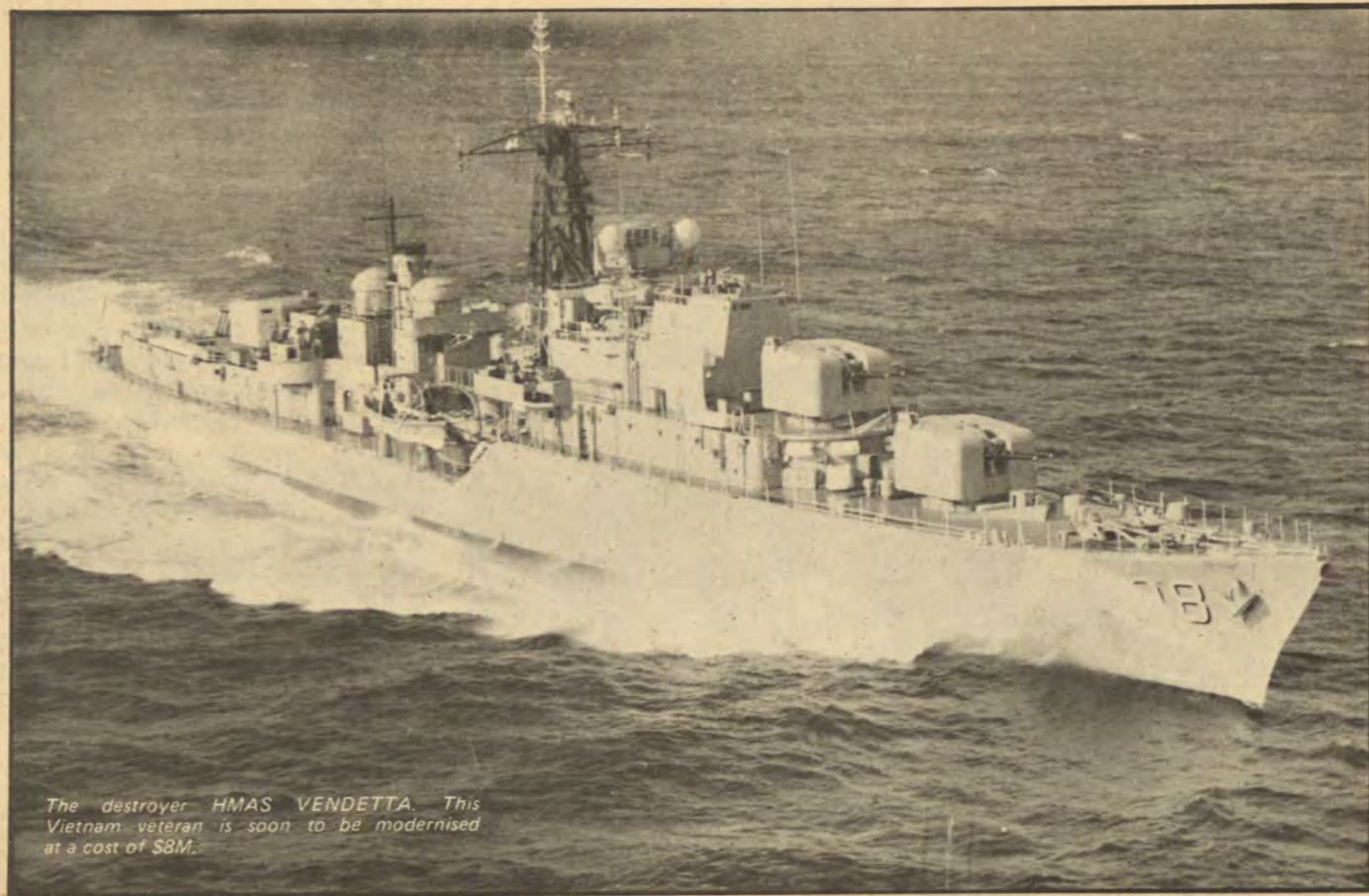
VAMPIRE and VENDETTA are the biggest destroyers built in Australia and both are to be extensively modernised. Their three twin-gun turrets will be modernised by improving the drive and other systems and the fire control systems are to be updated with new computers and new radars.

The ships' sonar will also be improved and they will be fitted with a new air-warning radar and new navigation/surface search radar.

Main specifications of the Darings are:-

Displacement	3,600 tons full load;
Length	366 ft.;
Beam	43 ft.;
Surface guns	6 4.5 in twin turrets;
Anti-aircraft guns	6 40mm;
Anti-submarine weapons	1 3-barrel mortar;
Ship's company	327.

The destroyer escort HMAS PARRAMATTA. Her anti-submarine mortar and Ikara missile system can be seen on the quarter deck.



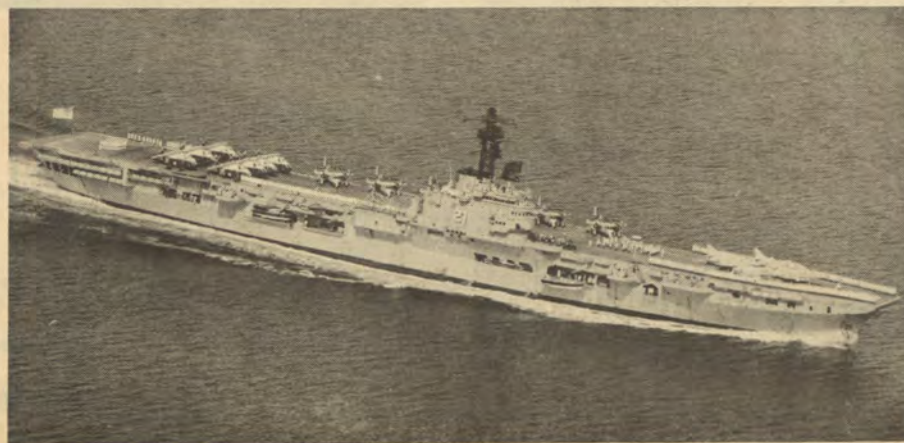
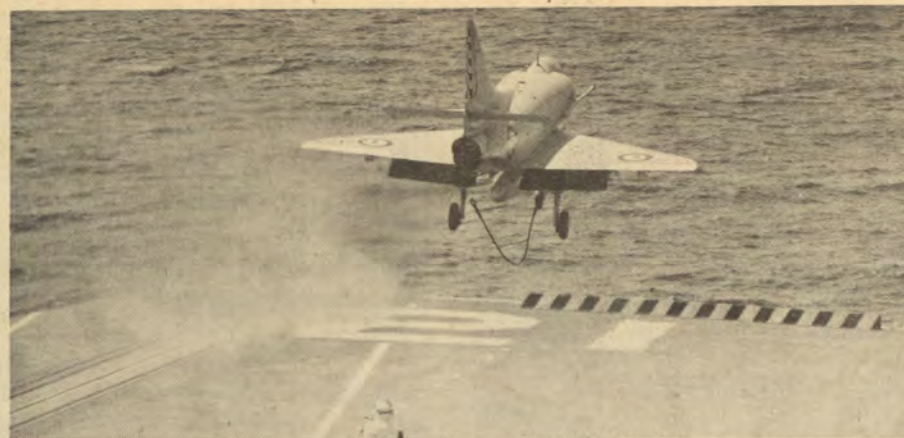
The destroyer HMAS VENDETTA. This Vietnam veteran is soon to be modernised at a cost of \$8M.



Skyhawk is in front line

The Douglas A4-G Skyhawk is the Navy's front-line fighter-bomber. This transonic aircraft is ideal for high payload-radius operations in tactical air support. Equipped with air-to-air missiles it has a considerable capability for air defence. Pratt & Whitney J52-P-8A axial flow turbo-jet engine, with sea level thrust of 9,000 lb. Wingspan, 27 feet 6 inches; overall length 39 feet 8½ inches; weight (empty), 9,800 lb.; maximum all-up weight, 24,500 lb. Armament includes air-to-air missiles, bombs up to 1,000 lb. each, 20 mm cannon, air-to-surface rockets.

Skyhawk fighter-bomber ready at first light for takeoff during exercises in the South China Sea. Opposite page — Skyhawk being launched from HMAS MELBOURNE; HMAS MELBOURNE; Skyhawk pilot.





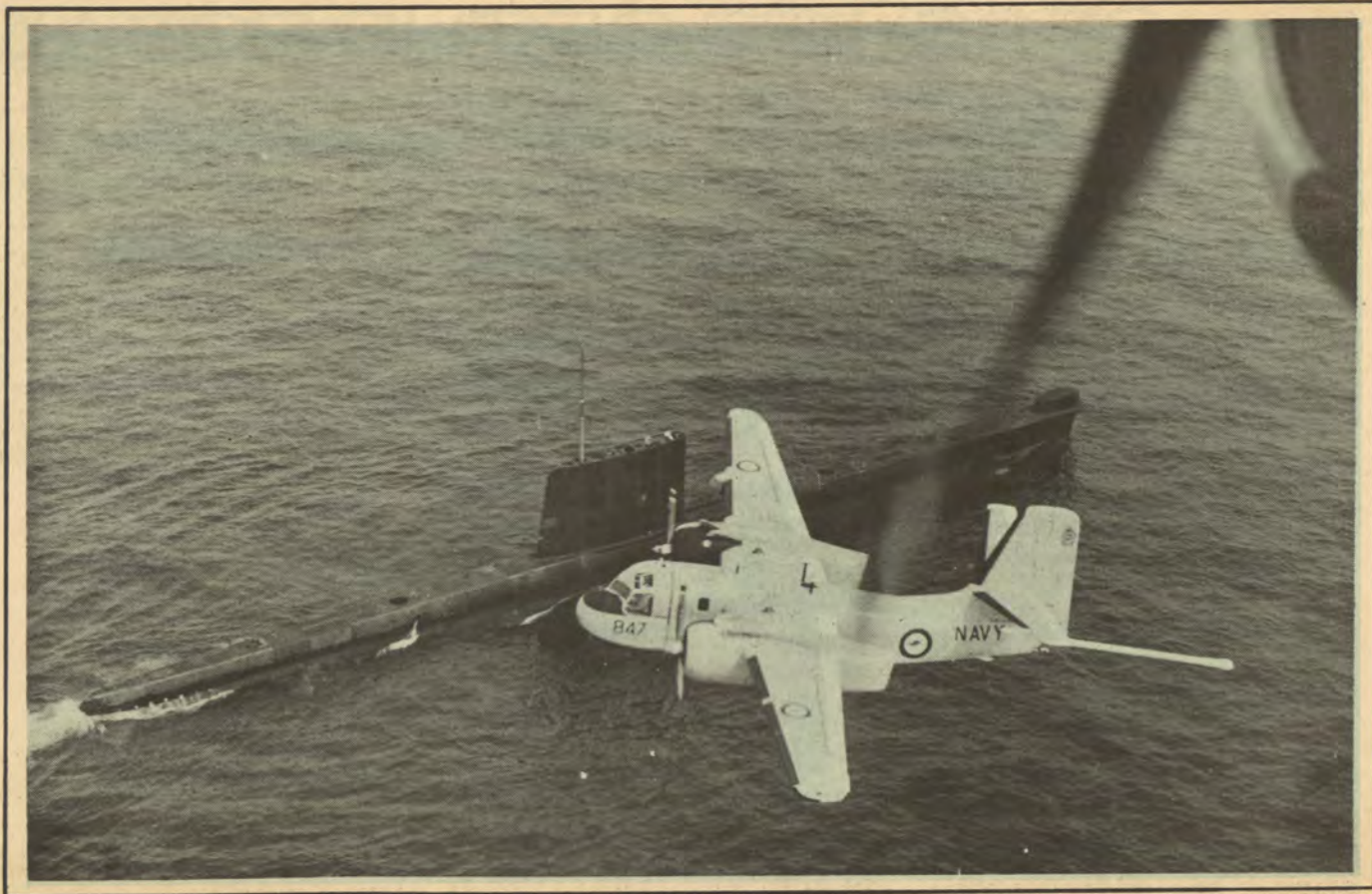
All-weather Trackers

Grumman S2E Tracker aircraft are also carried in HMAS MELBOURNE for anti-submarine patrols. These all-weather, twin-

engined anti-submarine aircraft are fitted with the latest electronic devices for navigation and detection of submarines. They can remain on patrol for up to 10 hours. Crew—two pilots, observer; aircrewman. Two Wright Cyclone piston engines develop 1,520 hp each. Wingspan, 74 feet; overall length, 42 feet; maximum all-up weight, 29,000 lb. Armament, normally anti-submarine torpedoes, anti-submarine rockets and depth charges.

Left — A Tracker anti-submarine aircraft is prepared for takeoff aboard HMAS MELBOURNE while another Tracker flies overhead. Above — Trackers begin aerial search for submarines during exercise.

Opposite page — Tracker, with magnetic detector boom extended, buzzes "hostile" submarine during exercise.



SHIPS OF THE ROYAL

AUSTRALIAN NAVY - 1970



MELBOURNE



SYDNEY



STALWART



MORESBY



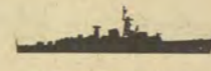
PERTH



YARRA



HAWK



QUEENBOROUGH



SUPPLY



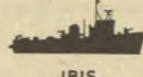
OXLEY



HOBART



PARRAMATTA



IBIS



ANZAC



BASS



BANKS



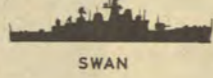
OTWAY



PALUMA



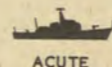
BRISBANE



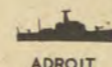
SWAN



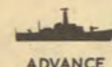
TEAL



ACUTE



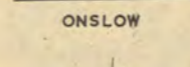
ADROIT



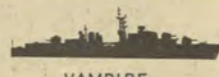
ADVANCE



AITAPE



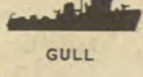
OVENS



VAMPIRE



TORRENS



GULL



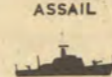
ARCHER



ARDENT



ARROW



ASSAIL



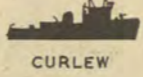
KIMBLA



VENDETTA



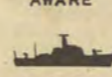
STUART



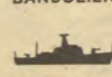
CURLEW



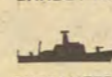
BARRICADE



BAYONET



BANDOLIER



BARBETTE

BUCCANEER



DIAMANTINA



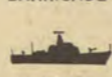
DUCHESS



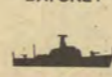
DERWENT



SNIPE



LADAVA



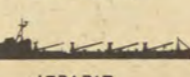
LAE



MADANG

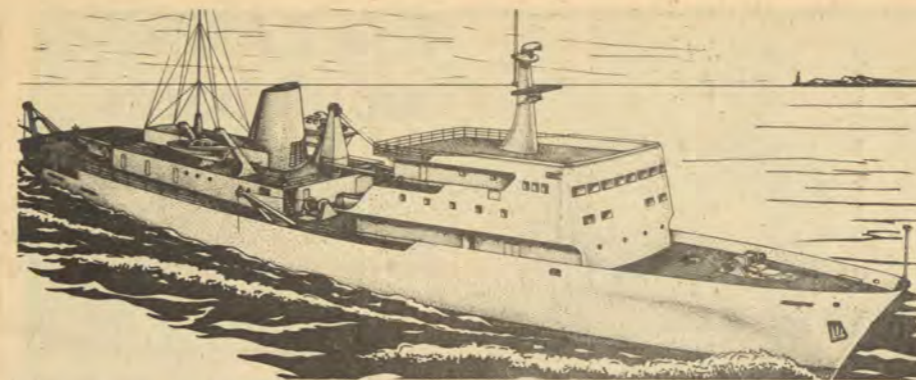
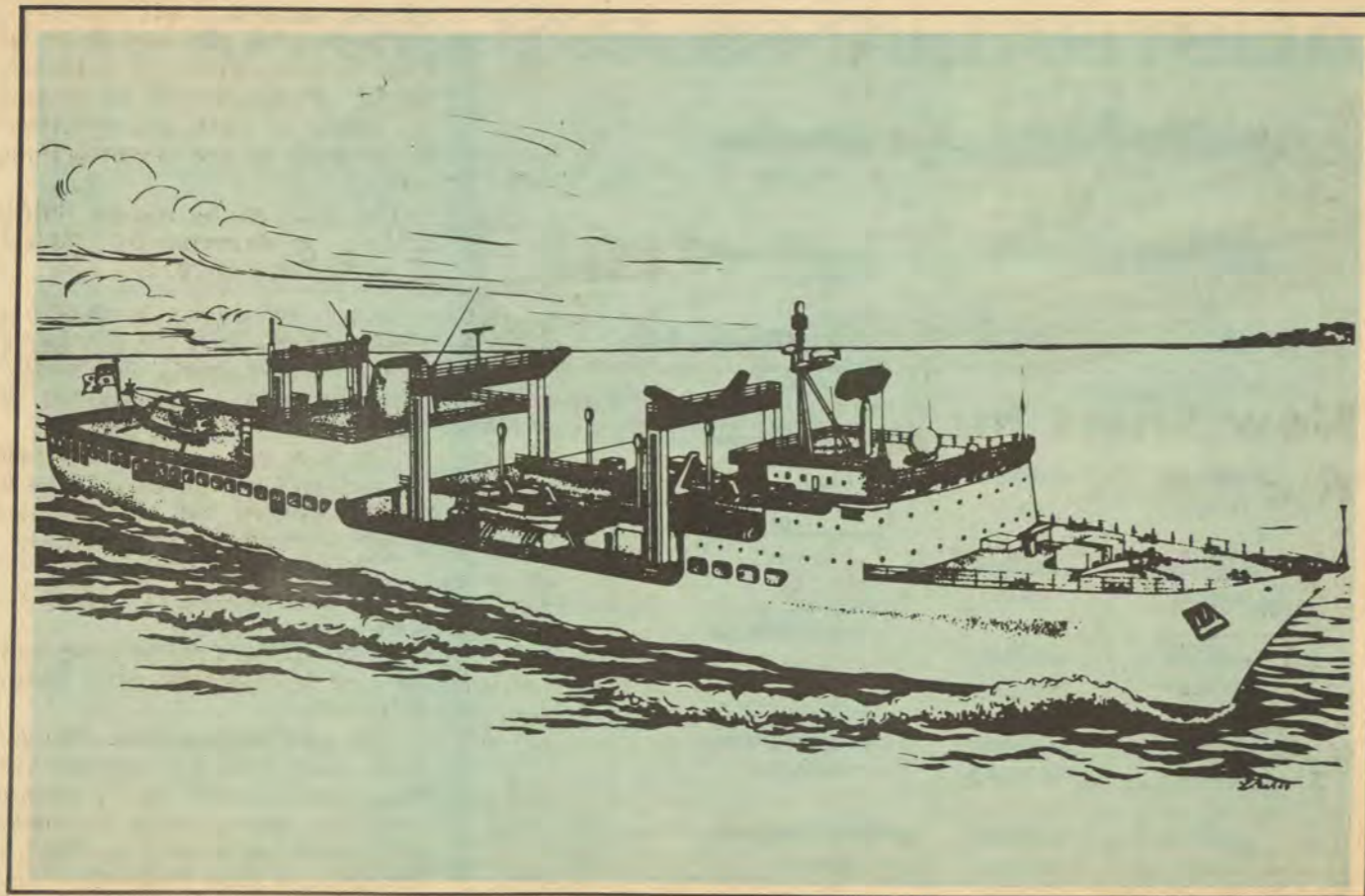


SAMARAI



JEPARIT

AIRCRAFT CARRIER	HMAS MELBOURNE	Flagship
DESTROYERS:		
Guided Missile	HMAShips BRISBANE PERTH HOBART	
Daring Class	HMAShips VENDETTA VAMPIRE DUCHESS	
Battle Class	HMAS ANZAC Training Ship	
River Class	HMAShips YARRA PARRAMATTA	
Escorts	STUART DERWENT	
	SWAN TORRENS	
	Queenborough Class HMAS QUEENBOROUGH	Training Ship.
SUBMARINES:		
Oberon Class	HMAShips OXLEY OTWAY	
	ONSLOW OVENS	
SUPPORT SHIPS:		
Fast Troop Transport	HMAS SYDNEY	
Oiler	HMAS SUPPLY	
Destroyer Tender	HMAS STALWART	
Survey Ship	HMAS M.ORESBY	
Coastal Survey	HMAS PALUMA	
Oceanographic	HMAS DIAMANTINA	
Research	HMAS KIMBLA	
Mine Sweepers	HMAShips GULL HAWK	
	IBIS TEAL	
Mine Hunters	HMA Ships CURLEW SNIPE	
Patrol Boats	HMAShips ACUTE ASSAIL BUCCANEER	
	ADROIT ATTACK BOMBARD	
	ADVANCE AWARE LADAVA	
	AITAPE BANDOLIER LAE	
	ARCHER BARBETTE MADANG	
	ARDENT BARRICADE SAMARAI	
	ARROW BAYONET	
Auxiliaries:	HMA Ships BASS	
	BANKS	
	JEPARIT	



New Ships for the R.A.N.

A number of new and different types of ships are on the drawing board for the RAN.

They include a new light destroyer of about 3,000 tons, with a high top speed, long range at cruising speed and armed with a variety of weapons.

The construction of a fast combat support ship to provide fuel,

Opposite page — Artist's impression of new fast combat support ship for RAN.

Top — Proposed new oceanographic ship.

stores and ammunition while under way at sea will enable other RAN fleet units to operate for long periods and distances from base facilities.

The new support ship, or AOE (Auxiliary, Oiler, Explosives) will be able to carry several types of liquid fuels including furnace oil, diesel and turbine fuel.

Ships will also be able to obtain from the AOE stores such as clothing and fresh, frozen, chilled and canned foods.

The AOE is expected to displace about 20,000 tons, and have a length of 540 ft. and a beam of 72 ft. She will be built in Australia at

an estimated cost of \$42 million.

Approval has also been given for a new oceanographic ship to replace HMAS DIAMANTINA, a frigate completed in 1945 and converted in 1959-60 to the oceanographic role.

The ship, to be named HMAS COOK, is expected to replace DIAMANTINA in 1974.

It will be similar in design to HMAS MORESBY, the RAN's big modern oceanographic ship built in Australia and commissioned in 1964.

The new ship will accommodate 13 scientists (compared with six in DIAMANTINA) and she will have greatly improved research facilities.

COOK will be designed by the Navy and displace about 2,300 tons.

A replacement is also being built for the hydrographic ship HMAS PALUMA.

The new hydrographic ship will have about a 50 p.c. increase over PALUMA's output mainly because of higher speed, better endurance and better sea-keeping qualities. It will displace about 700 tons.

The minesweeper HMAS TEAL leads HMAS IBIS and the minehunter HMAS CURLEW on return from mine countermeasure operations.



The RAN's 'small boats'

Adding their weight to the Fleet are the "small boats" – the minesweepers, minehunters and patrol boats.

The ships of the First Mine Countermeasures Squadron are small, but important members of the Australian Fleet. Minesweepers and minehunters are used to detect and clear lanes of mines, as well as other obstructions. Four of the six ships in the squadron are fitted for mine sweeping and carry devices to explode acoustic and magnetic as well as contact mines.

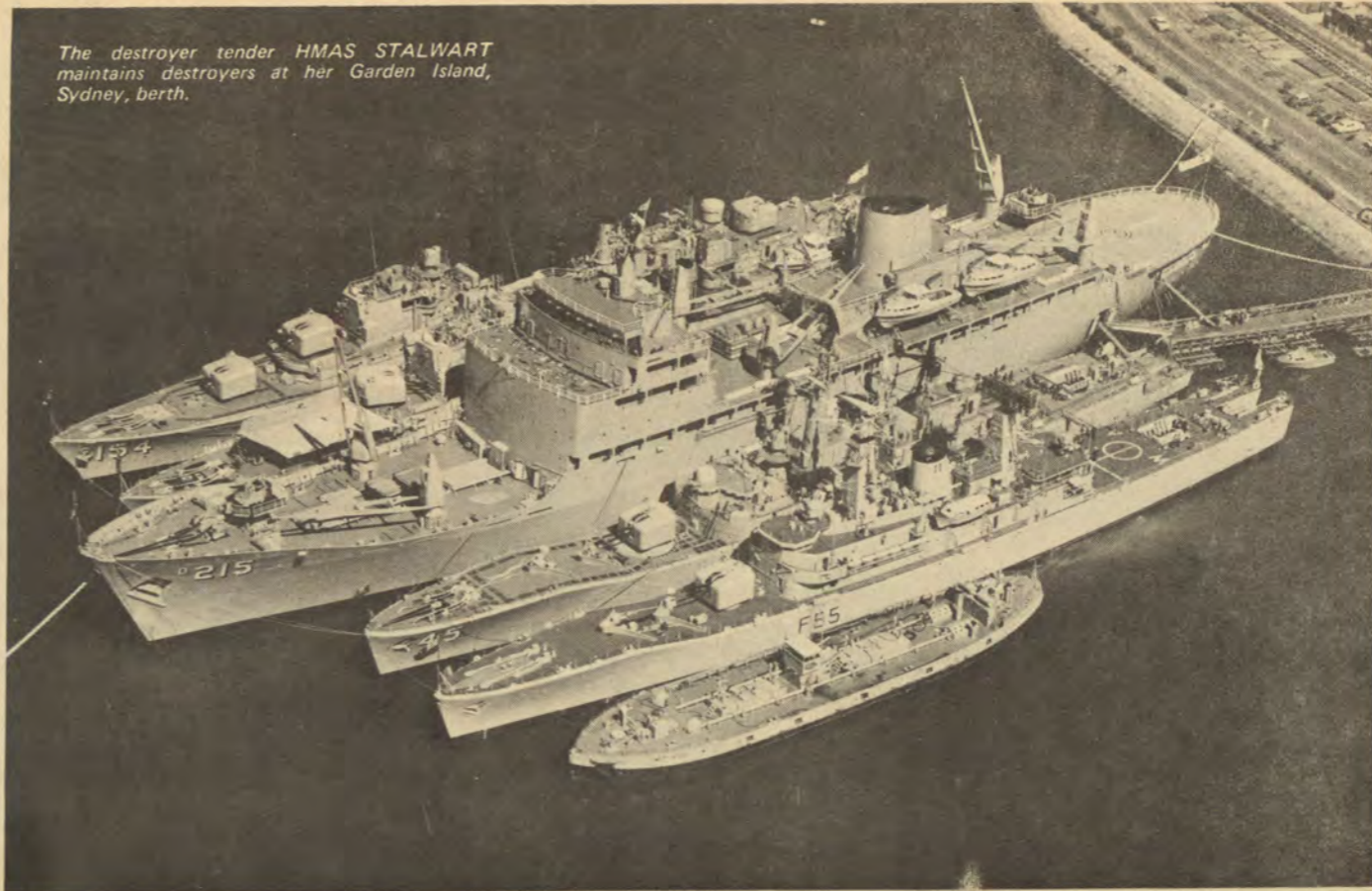
Mine hunting is complementary to minesweeping and utilises a high definition sonar set to detect the mine and carries divers who are used to make safe the mines.

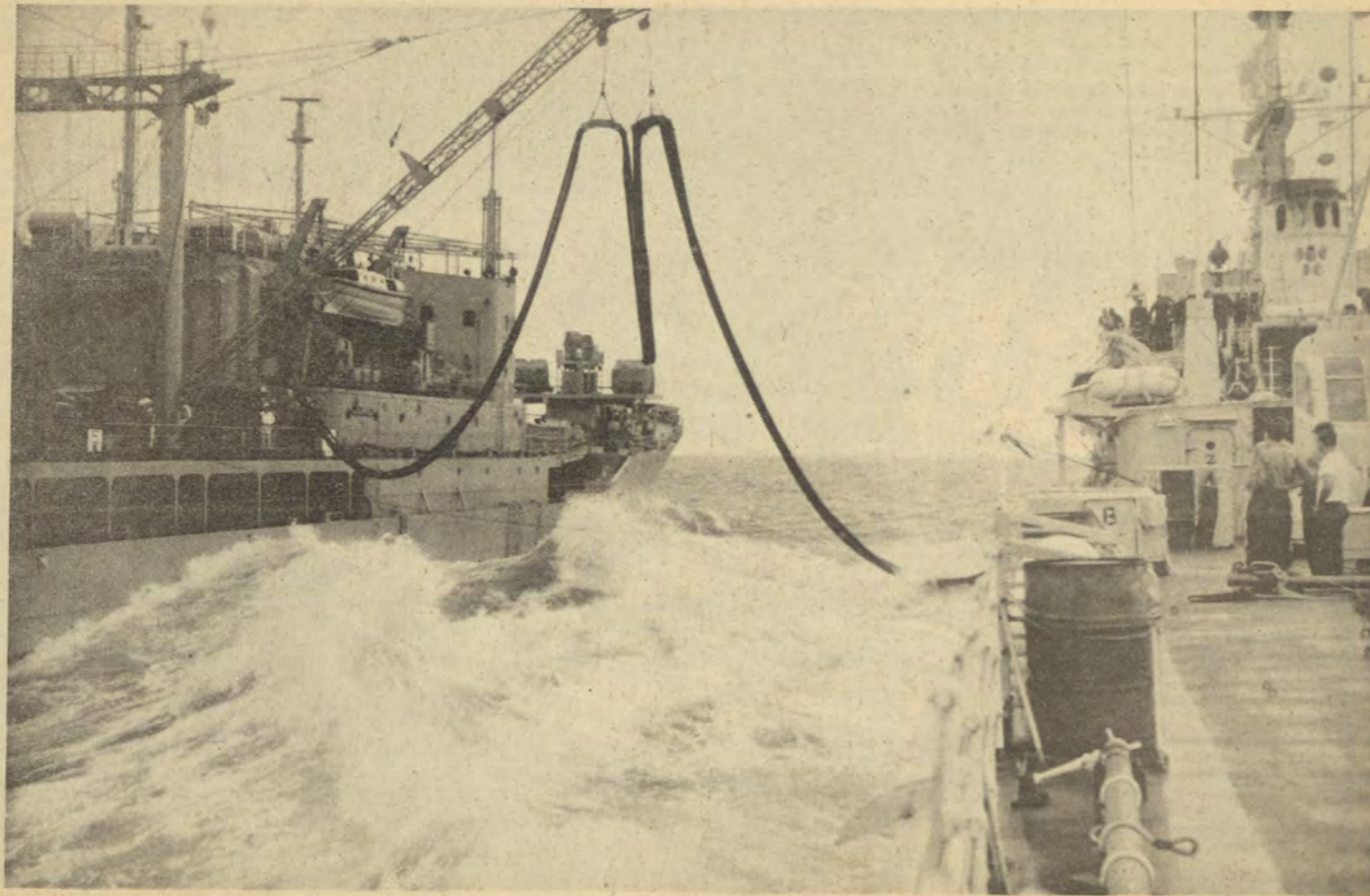
There are 20 patrol boats in the RAN and they are used for a variety of purposes, including fisheries patrols, reconnaissance, fleet duties, and naval reserve training.



The Patrol boat HMAS BUCCANEER one of 20 in the RAN.

The destroyer tender HMAS STALWART maintains destroyers at her Garden Island, Sydney, berth.



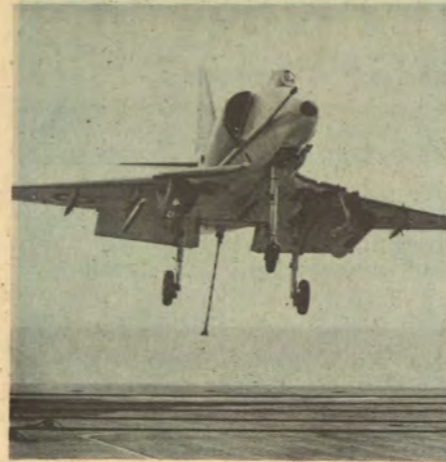
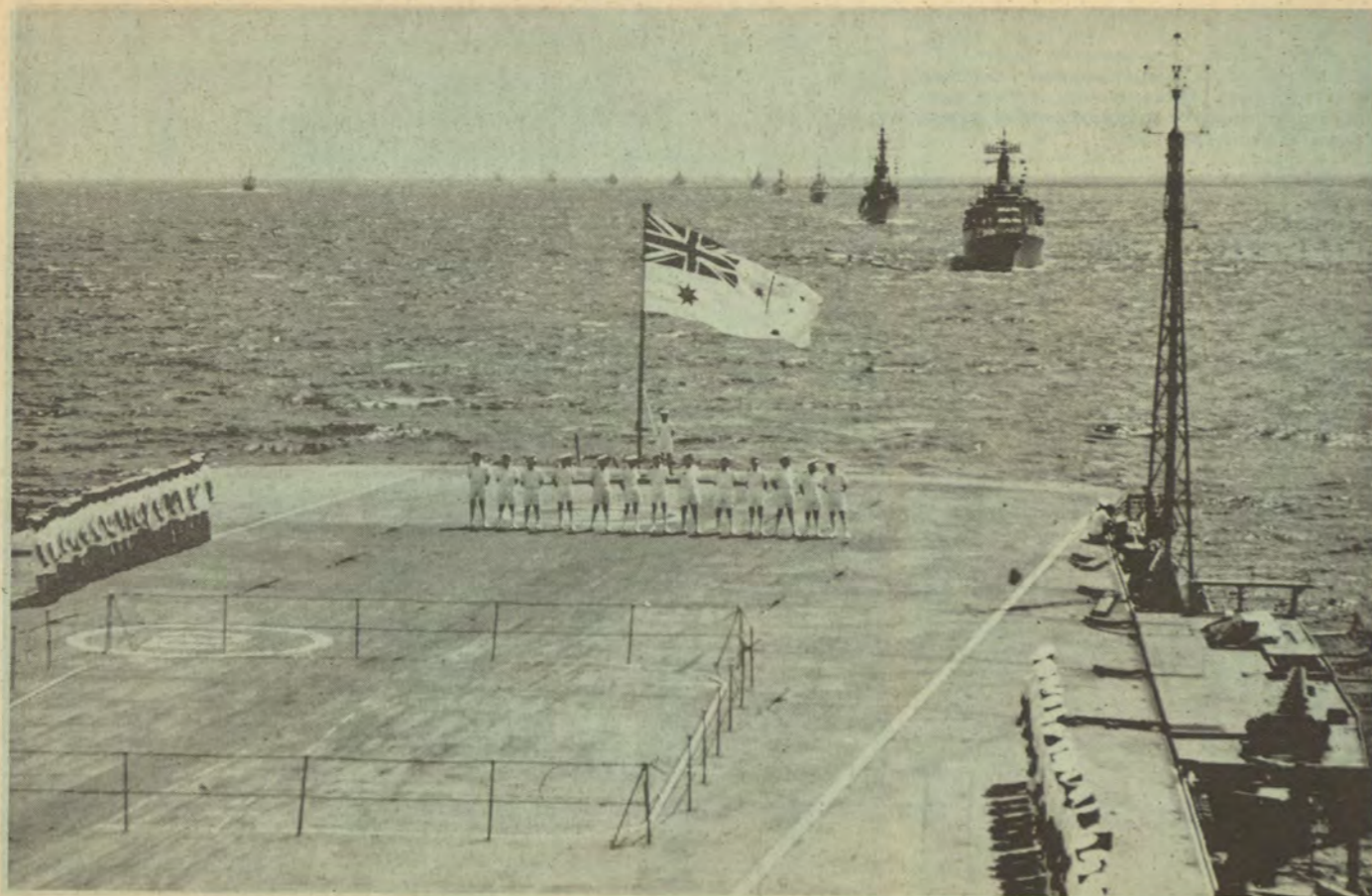


Opposite page — The Fleet oiler HMAS SUPPLY refuels the Canadian escort ST. CROIX during a multi-national exercise. Australian Naval forces regularly exercise with ships of allied navies both in Australian waters as well as South-East Asian.

Right — The destroyer HMAS DUCHESS shows some dash during a high speed run.

Below — Hunter and the hunted. Tracker aircraft passes low over a submarine which it has detected earlier with its electronic "eyes".

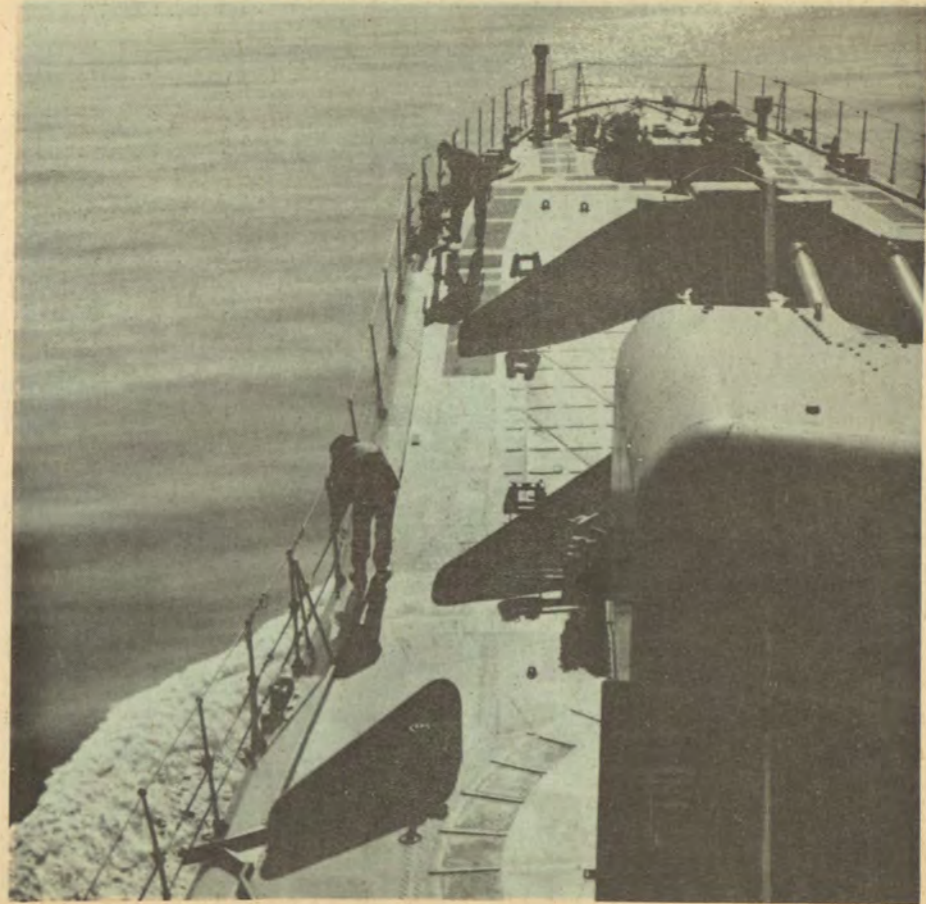


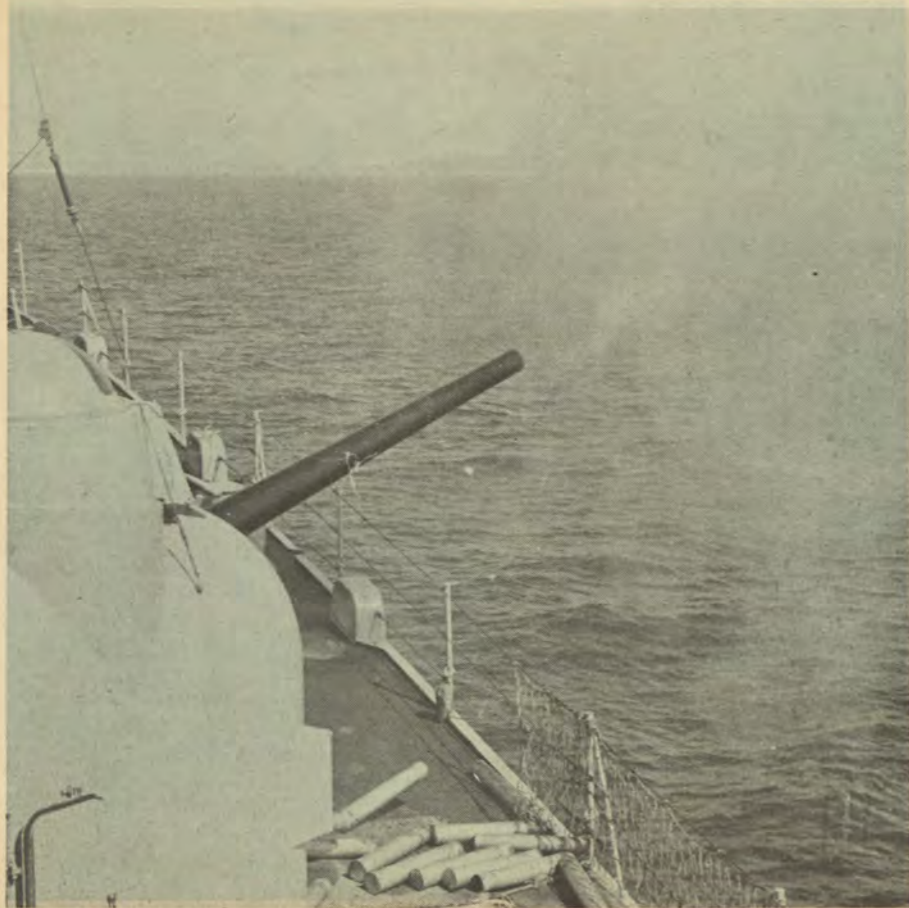


Above — Skill of the Naval pilot. A Skyhawk, hook dangling, seeks out the arrester wire to land on MELBOURNE.

Opposite page — The RAN flagship HMAS MELBOURNE leads a multi-national fleet for a ceremonial entry following several weeks of joint exercises.

Right — After six months' service in South East Asia, HMAS YARRA moves quietly through a placid sea on her way home to Australia.





The Navy in Vietnam

The Royal Australian Navy has been fighting in Vietnam since 1967. An Australian destroyer is serving as an integral part of the US Navy's Seventh Fleet. Ships which have served in this role in Vietnam are HMA Ships PERTH, HOBART, BRISBANE and VENDETTA.

In addition, a 46-man helicopter flight is integrated in a combined RAN-US Army assault helicopter company. The company provides helicopter support to Allied ground forces and has operated with considerable success. Some pilots have flown up to 140 combat hours a month.

An Australian Navy clearance diving team is also attached to US Naval forces in South Vietnam.

Up to June 30, 1970, the troop transport HMAS SYDNEY had made 16 return passages to Vietnam transporting troops, vehicles and equipment.

The guns of HMAS HOBART voice their anger off Vietnam as they give support to allied ground forces ashore.



Shells litter the deck of an Australian destroyer after an engagement off the Vietnamese coast.



Top right — Iroquois helicopters, flown by Australian Navy pilots, lift off with troops they will carry into action.



Right — Replenishment at sea off Vietnam. Powder cases have just been swung across by jacksay from stores ship steaming alongside RAN destroyer. Bottom right — Australian troops leave HMAS SYDNEY in one of her barges after the troopship has anchored in Vung Tau Harbour, South Vietnam.





The men of the R.A.N.

There are more than 17,000 men and women in the Royal Australian Navy and the number is growing.

There are seamen, technicians, mechanics, engineers, cooks, gunners, storemen, drivers, maintainers, divers, electricians, sick berth attendants, shipwrights, photographers — even linguists and butchers.

They man posts aboard ships, in aircraft, in submarines, in shore establishments, in Australia and overseas. In many ways they are the Navy.

Top — Young junior recruits at HMAS LEEUWIN, WA, show their paces.

Bottom left — Divers training.

Bottom right — "Let go for'ard".

Opposite page — Left to right, top to bottom — After a replenishment at sea, there is work to be done; "Shooting the sun"; a fine adjustment for delicate machinery; the captain watches the way things are being done; a naval apprentice applies the heat; on watch at sea.





Variety of scene

Navy ships steam hundreds of thousands of miles each year, many of these in foreign waters. Apart from Vietnam, the RAN also maintains two ships in South-East Asia as part of the Commonwealth Strategic Reserve while other ships of the Fleet take part in exercises in waters to our north.

Apart from operational requirements, RAN ships are continually making goodwill visits, many of them to Asian ports where sailors on leave find much to interest them.

HMAS MELBOURNE arrives in Hong Kong for a goodwill visit. Opposite page — Top — A Filipino troupe of folk dancers entertain sailors aboard the carrier in Manila; Sailors pose with fanciful buddha in Singapore. Bottom — An Indian in Singapore assures a sailor his snakes are harmless; Himeji castle was highlight of visit to Japan for these sailors; trying a local drink — green coconut milk.



Further general information on the Royal Australian Navy may be obtained from the Director of Public Relations, Navy Office, Canberra, A.C.T., 2600.

Information on Naval careers may be obtained from Recruiting Officers in all capital cities, or from the Director of Naval Recruiting, Navy Office, Canberra, A.C.T., 2600.

