

ROYAL AUSTRALIAN NAVY TODAY



MORE SHIPS, MORE MEN

The Royal Australian Navy is growing at a rate unprecedented in peacetime.

A total of 28 new vessels are on order in shipyards in Australia, Britain and the United States.

These vessels, patrol boats, destroyer escorts, submarines and an escort maintenance ship, are due for delivery by the end of 1969.

A similar growth is being made in manpower. More than 15,000 men and women are now serving in the Permanent Naval Forces. The number has increased by over 1,200 in the past year.





Some events in the life of a growing Navy . . .

Left: The submarine HMAS OXLEY is launched at Greenock, Scotland.

Above: The stern of the escort maintenance ship, HMAS STALWART, is swung into place at Cockatoo Island Dockyard, Sydney.

Below: The launching of the guided-missile destroyer, HMAS BRISBANE, at Bay City, Michigan, US.

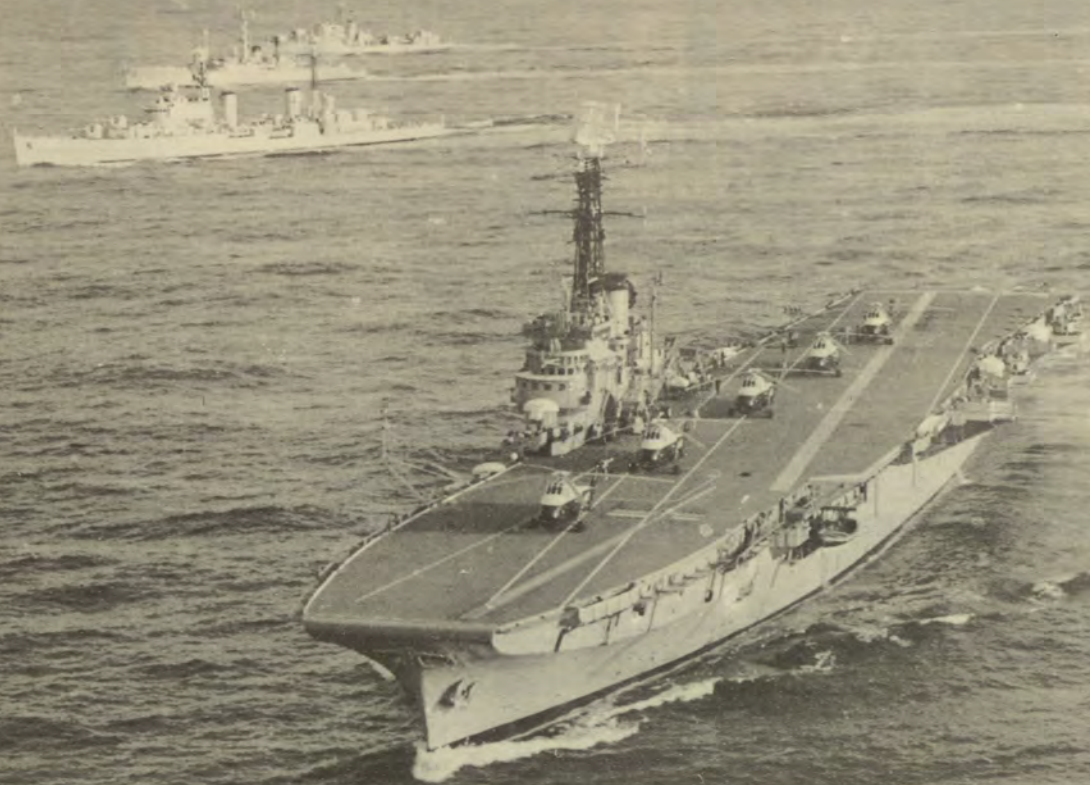
Right: HMAS PERTH, the first of Australia's guided-missile destroyers, arrives in Sydney.



THE NAVY IS GROWING



OPERATIONAL EXERCISE



GREEN MEANS DANGER

A CONVOY of 45 warships of five SEATO navies is crossing the South China Sea from Manila to Bangkok. They expect to be attacked, but they don't know if the enemy will appear on the surface, in the air, or under the sea.

Next morning, just as dawn lights the sky, a green grenade flares in the sky. It has been fired from a submarine, and it means the submarine has made an attack.

There was no loss of ship or of life.

The submarine, a Royal Navy vessel, had made a mock attack — part of the SEATO maritime exercise, codenamed "Sea Imp", in which ships of the British, American, Philippines, New Zealand and Australian navies took part.

The air forces of the Philippines, New Zealand, Britain, Thailand, the U.S. and Australia were used both to attack and defend the convoy.

Whether or not the British submarine's torpedo attack was successful is not known until at least three months later.

For three months, scientists analyze by scientific methods whether the submarine got through the protective screen of air and sea anti-submarine defences with which the Royal Australian Navy and other SEATO navies are equipped.

They learn whether he fired his torpedo before he himself was detected and sunk or whether he got away safely and, using computers, they assess whether his attack was successful.

LEFT: The aircraft carrier, HMAS MELBOURNE, steams close to escorts of many nations during a SEATO exercise in the South China Sea.

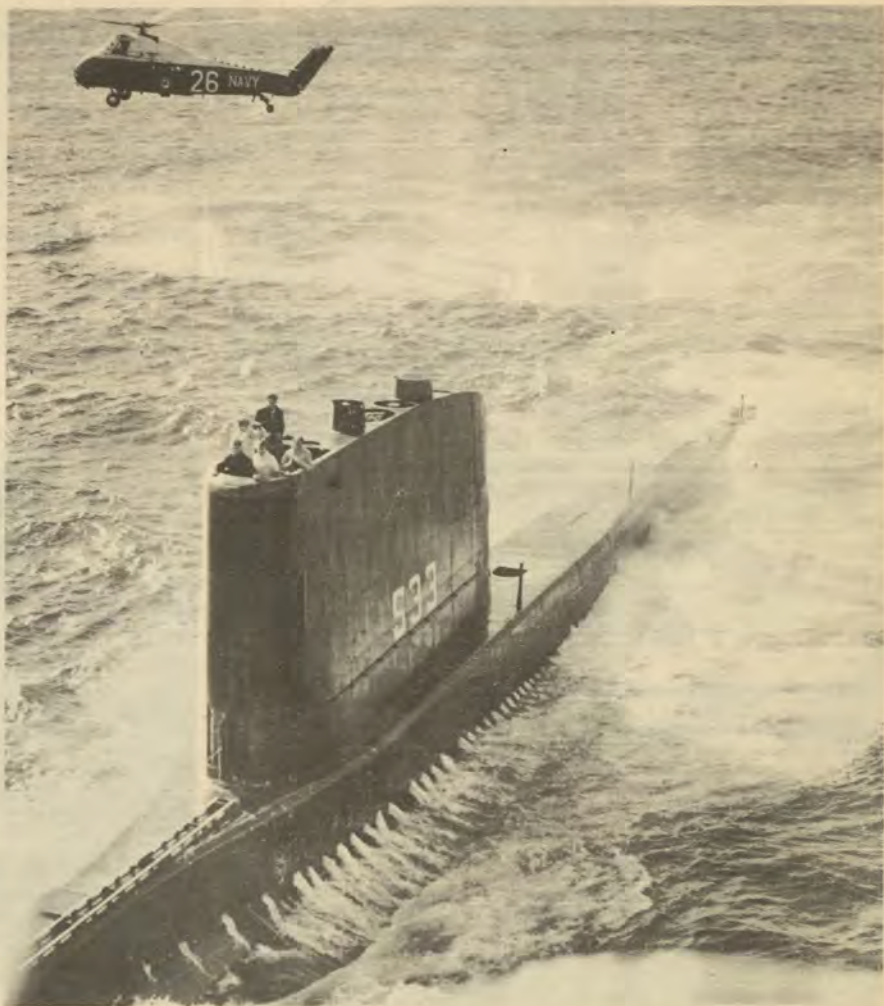
Australia First

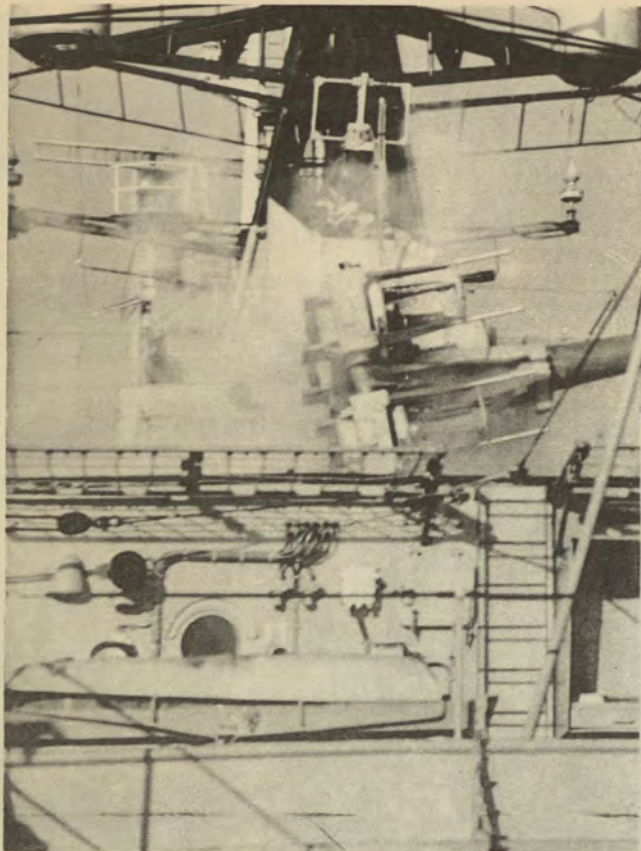
Reconstruction of the exercise is done with such precision that every action by every ship can be seen on paper.

Australia has played a leading part in initiating such detailed analyses of naval exercises by scientists. Naval authorities believe that six years ago Australia was alone in this field. Now the practice is being adopted by other navies, in some cases along similar lines to those developed here.

Scientific analysis of this type is an essential part of a modern naval exercise. Naval warfare can take place over such vast distances and involve such complex operations, that, without the help of highly skilled analysts, who may be mathematicians, physicists or engineers, it would be almost impossible for any commander to be reasonably confident about drawing firm conclusions from exercises.

RIGHT: Victory for the hunter . . . A Wessex helicopter from HMAS MELBOURNE hovers over a British submarine playing a villain's role in a SEATO exercise.





Seacat



Ikara

THE NAVY IN THE MISSILE AGE

Three types of missiles are in service with the RAN – Tartar, Seacat and Ikara.

Each missile is designed and produced in a different country and each missile is



considered by the RAN to be the best available in its particular field.

TARTAR, a medium-range surface-to-air missile produced by the American General Dynamics Corporation, is the main anti-aircraft defence of HMAS PERTH and HMAS HOBART.

The Tartar missile has one rocket engine. When fired, the engine produces sufficient thrust to shoot it into the air at speeds greater than the speed of sound. Then the engine cuts back its power to give the missile endurance for a long high-speed chase after its target.

It is fired on the computed information of the ship's radar but in the air it has its own guidance system which enables it to follow a moving target.

SEACAT

Seacat, a British short-range anti-aircraft missile is much less complex than Tartar.

The missile is visually aimed during flight by an operator who can guide it to its target by radio control.

IKARA

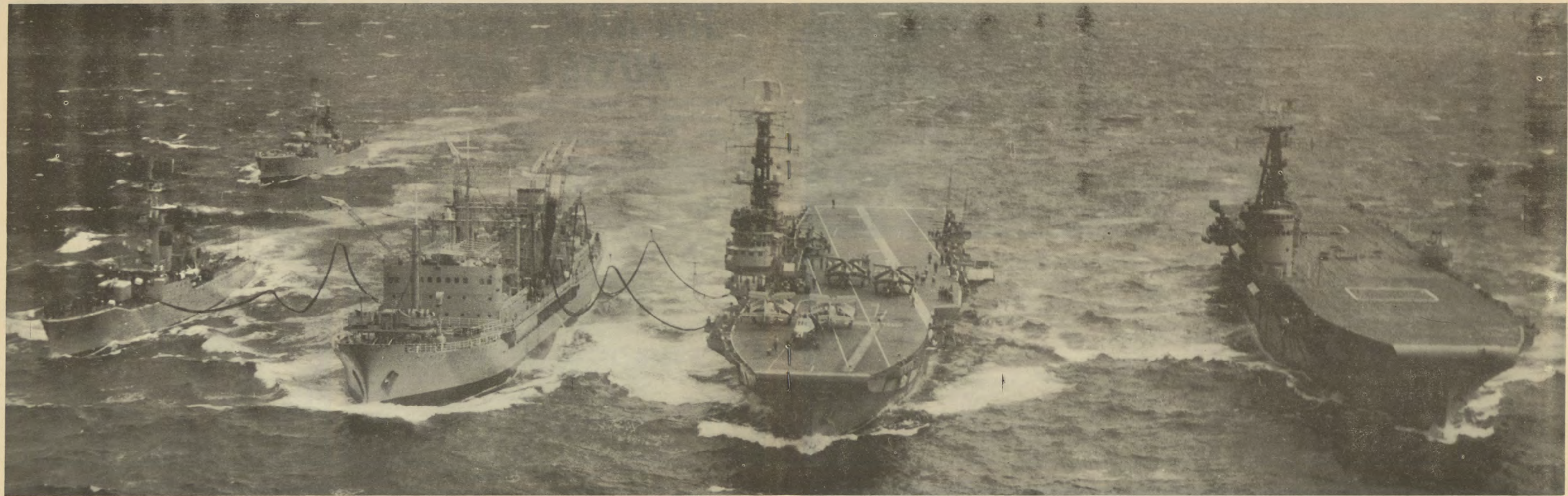
Ikara, the Australian designed anti-submarine missile, carries a homing torpedo. The missile vehicle is controlled from the ship until it drops its torpedo in the vicinity of the submarine. The homing device in the torpedo then guides it to the target.

Ikara was developed by the Department of Supply and the RAN and is to be installed in all RAN destroyer escorts and guided missile destroyers.

The Royal Navy will also use the system in its newest ships.

RIGHT: Australia's second guided-missile destroyer HMAS HOBART puts on speed on her way to Australia for the first time. HOBART commissioned in Boston, US, in December 1965 and arrived in Australia in September 1966.





POWER OF THE SEA

**THE SKILL OF THE SAILOR,
THE POWER OF THE SEA.**

**The sea gives no quarter and
the sailor expects none. With
skill and assurance HMAS
SUPPLY (left) and HMAS
YARRA (below) make good
headway through heavy seas
off the Australian coast.**



New aircraft for Fleet Air Arm

The aircraft carrier HMAS MELBOURNE, floating home of the RAN'S Fleet Air Arm, will have new capabilities early in 1968.

The new strength will come from the delivery of 24 new aircraft.

Fourteen are two-engined fixed wing Tracker Anti-submarine aircraft equipped with several types of underwater detection devices.

The other 10 are Skyhawk fighter-bombers. These aircraft will give HMAS MELBOURNE and the ships she sails with protection against enemy attacking and reconnaissance aircraft. They will also give MEL-

BOURNE herself some attack potential.

These new aircraft will replace the existing Gannets and Sea Venoms.

With the modern Wessex anti-submarine helicopters already carried by MELBOURNE they will make the carrier a formidable escort ship.

Already RAN pilots are training in America and Canada to fly the new aircraft. The US Navy is also teaching RAN ground crews how to maintain them.

RIGHT: An RAN Fleet Air Arm aircraft maintainer at the US Marines air station at Pensacola, Florida, looks at an A-4G Skyhawk fighter-bomber.

BELOW: A Wessex helicopter flies plane guard as a Gannet takes off from HMAS MELBOURNE.



Preparing and revising charts of Australia's 12,000 miles of coastline is the responsibility of the RAN, and is one of the Navy's several contributions to the peacetime development of Australia.

SURVEY

SHIPS

CHART

LONG COAST

RAN hydrographic and oceanographic vessels steamed about 105,000 miles in widely separated areas in the past year.

The RAN inherited the survey task from the Royal Navy whose ships carried out the first detailed explorations of the Australian coast.

A few sections of the Australian coast have never been surveyed and in some other areas the original charts of the explorer-surveyors are still the only maps available.

The RAN began its own hydrographic service in 1921, ten years after the RAN was created.

In 1956 the RAN began the first of a proposed series of comprehensive five-year mapping programmes. The third five-year programme is now being undertaken.

The programmes are worked out in consultation with interested Federal and State Government departments and with shipping interests.

The RAN has four survey vessels. The most modern is HMAS Moresby, a glamorous, white-painted, air-conditioned vessel equipped with several types of electronic surveying aids.

OCEAN CRUISES

Moresby's most recent surveys have been off the north and east coasts of Tasmania and off the north-west coasts of Western Australia where she is establishing safe routes for coastal shipping and ocean-going vessels carrying iron ore from Port Hedland.

Another but smaller survey ship,



ABOVE: The RAN's main survey ship, HMAS MORESBY, drops a launch used in survey work. RIGHT: On the job off the north-west coast of Australia, a survey party goes ashore to set up a base camp.

HMAS Paluma, has for many months been working off Papua-New Guinea, particularly in the New Ireland area.

A second small vessel, HMAS Bass, has surveyed in Torres Strait and near Melville Island.

The frigate, HMAS Diamantina, working from Fremantle, makes frequent oceanographic cruises in the Indian Ocean and waters south and north of W.A., working in co-operation with scientists from the C.S.I.R.O.

Survey sailors went in first

World War II proved a testing time for the RAN's Survey Service.

Many of the operational areas in the Pacific were uncharted and the hydrographers, in their small ships, had the unenviable job of "blazing the trail."

Before offensives could be launched in New Guinea, the Navy hydrographers had to chart the coastline.

They were in the forefront of the Allied advances in the Philippines and other areas.

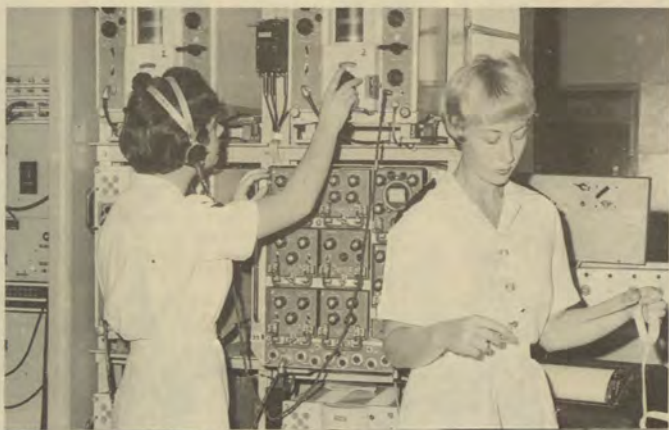
Their hazardous existence is reflected in the fact that the comparatively small band of surveyors won a total of more than 30 awards for gallantry.

In 1945 the Survey Service was using 13 vessels. During the war, the Navy's hydrographic office in Sydney printed almost one-and-a-half-million charts for allied forces in the South West Pacific.



WRANS

Members of the Women's Royal Australian Naval Service do the work of sailors in shore jobs . . . allowing sailors to spend more time at sea. More than 600 WRANS are at present serving. Among them are cooks, sick berth attendants, drivers and radio operators.





ABOVE LEFT: Sailors who man the new guided missile destroyers after commissioning in the US have time for sightseeing. This group went to Washington.

TOP RIGHT: Few RAN sailors have not visited South-East Asia. These sailors are shown in Malaysia.

BELOW LEFT: Submariners training in Britain meet a French paratrooper in Piccadilly Circus.

BELOW RIGHT: A trip to Hollywood for the RAN and they meet Lorne Greene, a Western star.



THEY JOIN THE NAVY...

And see the world

The manpower strength of the RAN has never been greater in peacetime. More than 15,000 men and women are now serving in the Permanent Naval Forces.

As well as greater career opportunities than have occurred before in our increasingly technical Navy, sailors and officers have the chance to spend more time ashore overseas than those in the past.

Large numbers of RAN officers and sailors continue to train overseas.

The entire ships companies of HMAS PERTH and HMAS HOBART, a total of 664 men, trained in US Navy shore establishments before taking over their new ships which arrived in Australia in 1966.

In addition, some sailors and officers who will join the third guided missile destroyer, HMAS BRISBANE, and the escort maintenance ship, HMAS STALWART, are at present training in US Navy schools.

Submariners

In Britain 15 officers and more than 218 sailors have begun training or are now serving in operational submarines of the Royal Navy.

After initial training at Portsmouth, about 70 miles from London, these submarines are posted to British bases in England and Scotland or may be sent to Canada and Singapore where British submarines also serve.

An increasing number of pilots and aircraft maintainers training to fly and maintain the new Tracker and Skyhawk aircraft being obtained for the RAN at the end of 1967 are being sent to US Navy establishments.

Some are also training with the Royal Canadian Navy.

Many of the RAN personnel overseas have their wives and families with them. A sailor posted overseas for more than a year may take his family at Navy expense.

Apart from training, RAN ships are making frequent operational visits to South-East Asian ports.

At one stage in 1966 a total of 12 RAN vessels, manned by 3,584 officers and sailors, were in the South-East Asian area.



AT RIGHT: Across the Tasman and an introduction to a Kiwi. EXTREME RIGHT: Rhode Island is the site of a large US Navy training depot where many Australians have served. There is always time for leave... and sightseeing.



IN DEFENCE OF AUSTRALIA



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

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.