

#### **GUIDED MISSILE** FRIGATES (FFG)

With four FFGs in commission and the construction of two sister ships underway in Australia the FFG now forms the backbone of the present day RAN. Each FFG is a long range escort ship designed to satisfy area air defence, antisubmarine warfare, surveillance, reconnaissance and interdiction roles.

Like the DDGs the FFGs are armed with both Standard anti-air and Harpoon antisurface missiles. For anti-submarine warfare each FFG can embark two Sikorsky Seahawk S-70B-2 helicopters to provide long-range cover for the fleet.

The FFGs are the first RAN ships to be driven by gas turbines for main propulsion, allowing them to get underway in less than 45 minutes. DARWIN and NEWCASTLE are the RAN's first ships of the name. ADELAIDE, CANBERRA, MELBOURNE and SYDNEY were former RAN cruisers and aircraft

FFG Data - Displacement 3680 tonnes, length 135.6 metres, speed 30 knots,

but also boast significant anti-submarine and surface gunnery capabilities. During the 1960s and 1970s PERTH, HOBART and BRISBANE operated in Vietnamese waters and in the late 1970s all received major weapon systems updates.

Each DDG is fitted with modern combat data systems and two Australian designed Ikara anti-submarine missile launchers. To allow these effective ships to remain in front line service, well into the 1990s, each has now received an extensive mid-life modernisation in Australia, including the capability to launch the RAN's new Harpoon surface to surface missile

PERTH, HOBART and BRISBANE were commissioned from 1965-67. All carry the names of former RAN cruisers.

knots, crew 333.



#### **GUIDED MISSILE** DESTROYERS (DDG)

The RAN's three DDGs are primarily responsible for air defence of the Fleet

DDG Data - Displacement 4580 tonnes, length 133.2 metres, speed 30

HMAS BRISBANE

The first ANZAC frigate is expected to be commissioned into the RAN in 1995-96 and the rest at the rate of one

ANZAC CLASS

FRIGATES (FF)

for eight new MEKO 200 (ANZAC class)

frigates, to be built at Williamstown.

naval construction programme ever

127 mm general purpose gun and a

point defence missile system. One

speed of more than 27 knots.

undertaken in Australia.

Victoria. The frigate project is the largest

Each of the new frigates will carry a

Seahawk helicopter can be embarked in

each ship. Power will be provided by a

combined diesel and gas system for a

A decision was announced in mid 1989

FF Data - Displacement 3495 tonnes, length 118 metres, speed 27 knots plus.

ANZAC CLASS FRIGATE

Launch of the fifth FFG MELBOURNE in 1989.



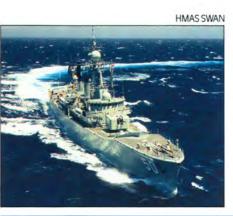
#### DESTROYER ESCORTS (DE)

Four River class DEs are now in service with the RAN. In the early 1980s STUART and DERWENT received half-life modernisations including a new gun fire control system, conversion to diesel oil, new torpedo tubes and improvements in their accommodation. The two youngest ships, SWAN and TORRENS have also been extensively refitted.

The River class DEs are responsible for anti-submarine warfare, being fitted with the Australian designed Ikara missile launcher. For self defence each ship is armed with the Seacat missile system and a twin 4.5 inch gun, which can be used against air or surface targets. Each ship is also fitted with two sets of torpedo tubes.

With the exception of DERWENT, the DEs carry the names of former RAN destroyers and sloops.

DE Data - Displacement 2750 tonnes, length 112.8 metres, speed 30 knots, crew 250



torpedo tubes, capable of firing

## **COLLINS CLASS SUBMARINES**

The decision to build a new torpedoes, Harpoon missiles and mines. A computerised combat system, generation of submarines, the Swedish designed Type 471, was announced in incorporating powerful sonars and the May 1987. All six boats will be boats' armaments, is designed to remain constructed at Port Adelaide with the operational in the face of battle damage. first to be launched in 1994 and the The class has a patrol endurance of 70 remaining five, from 1995 to 1999. days and a range of 9,000 nautical miles, similar to the present Oberon boats. Each submarine will be armed with six

Commissioning of the lead boat,

COLLINS, is expected in 1995 with the following units named FARNCOMB, WALLER, DECHAINEUX, SHEEAN, and

Type 471 Data - Displacement 2500 tonnes, length 70 metres, speed more than 10 knots on the surface, 20 knots submerged, crew 41.



#### SUBMARINES (SS)

Six Oberon class submarines, commissioned between 1967 and 1978 are operated from HMAS PLATYPUS in Sydney Harbour and from HMAS STIRLING in Western Australia. The boats are tasked to provide anti-submarine and antisurface ship defence for the Fleet and are armed with eight torpedo tubes.

In addition to the long range MK48 torpedoes. Harpoon sub-surface to surface anti-ship missiles now arm the

Since 1977 all six boats have undergone extensive modernisation with new fire control systems and modern sonars to detect and track targets at long range.

OXLEY and OTWAY are named for early RAN submarines, OVENS and ONSLOW for Australian pioneers, OTAMA is the Aboriginal word for dolphin and ORION was chosen to preserve the RAN's longestablished links with the Royal Navy.

Planning is currently in hand for the construction of six new Australian built Type 471 submarines to replace the Oberons during the 1990s.

SS Data - Displacement 2070 tonnes, length 89.9 metres, 12 knots on the surface, 15 knots submerged, crew 63.





HMAS IDSWICH

### PATROL BOATS (FCPB)

Fremantle class patrol boats are deployed around the Australian continent to satisfy a multitude of roles. from Oil Rig Surveillance in Bass Strait to Fishery Patrols in Northern waters. The 15 boats entered service between 1980 and 1985 as replacements for the smaller Attack class patrol boats allotted to the Naval Reserves or paid off for transfer under Defence Co-operation

Each Fremantle class boat is equipped with high definition navigation radar, high and ultra-high frequency communications equipment, gyro compasses, echo sounder and a satellite navigation system. Two of the class, FREMANTLE and WARRNAMBOOL are now attached to the RANR in addition to their usual Fleet duties.

The lead boat FREMANTLE was constructed in the UK and the remainder at Cairns in Northern Queensland. All boats carry the names of Second World War Bathurst class Minesweeping Corvettes

FCPB Data — Displacement 220 tonnes, length 42 metres speed 30 knots, crew 22.



HMAS TORRUK

#### LANDING SHIP HEAVY (LSH)

Considered by many as the RAN's most versatile vessel, the heavy lift ship TOBRUK was commissioned in April 1981.

TOBRUK can carry more than 500 troops and is fitted with a small hospital. To discharge her cargo of personnel, stores and equipment the LSH can utilise her own embarked landing craft; employ helicopters from two aviation spots: carry two large Army landing craft as deck cargo or side carry two self propelled pontoons.

In established ports TOBRUK can offload cargo using her own heavy lift derrick and cranes as well as through the bow and stern ramps onto a roll-on-rolloff terminal. If no port facilities are available the ship can discharge by beaching herself, by marrying the bow ramp to beach causeway or by discharge onto pontoons, landing craft or amphibians.

TOBRUK can carry up to 18 tanks in the tank deck and 46 armoured personnel carriers on the vehicle deck.

LSH Data — Displacement 6000 tonnes, length 126 metres, speed 17 knots, crew



#### LANDING CRAFT HEAVY (LCH)

Six LCHs are in service or in maintained reserve. BETANO and BRUNEI are employed as diving tenders homeported to HMAS WATERHEN in Sydney while LABUAN and BALIKPAPAN are the reserve training vessels for the Brisbane and Darwin Port Divisions of the RANR. TARAKAN is homeported to Cairns providing seatime for both the RAN and Reserves. WEWAK is held in maintained reserve in Cairns.

In the amphibious role each LCH can carry up to three Army Leopard tanks.

The ships are all named in honour of Second World War amphibious operations in which RAN ships and craft placed Australian Army units ashore or performed surveys prior to the landings.

LCH Data — Displacement 316 tonnes. length 44.5 metres, speed 9 knots, crew



the world.

#### MINEHUNTER INSHORE (MHI)

Two glass re-inforced plastic mine hunters entered service during 1986-87. A Royal Australian Navy design with a catamaran hull, RUSHCUTTER and SHOALWATER are the first of their type in

Each is non-magnetic and sufficiently silent not to activate acoustic mines. Both ships are fitted with a high|definition sonar for minehunting and mine disposal

MHI Data — Displacement 170 tonnes. length 31 metres, speed 10 knots, crew 14.



#### **AUXILIARY MINESWEEPERS** (COOP)

To support the Bay class catamaran minehunters, a small force of purchased and leased craft have been acquired by the RAN

The vessels are homeported to HMAS WATERHEN as an adjunct to the purpose built craft providing important training for both active and reserve personnel.

The current force comprises the trawlers BROLGA, KORAAGA, WAVERIDER and SALVATORE V.

BANDICOOT, and WALLAROO, largest of the auxiliary minesweepers, were acquired in 1990 and arrived in Sydney in October, Former commercial tugs built in 1982 the two vessels are also attached to HMAS WATERHEN.

## ROYAL AUSTRALIAN NAVAL RESERVE (RANR)

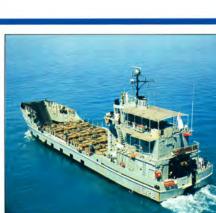
Three Attack class patrol boats are 1982-83.

Twenty Attack class patrol boats were

originally built in Queensland shipyards for patrol and survey work in waters around Australia and Papua New Guinea.

For Reserve training LCHs are attached to Brisbane, Cairns and Darwin and two Fremantle class patrol boats to Sydney and Melbourne.

PTF Data — Displacement 149 tonnes. length 32.6 metres, speed 24 knots, crew



operated by the RANR Port Divisions for training and as an adjunct to the larger Fremantle class. ADROIT is homeported in Fremantle, ARDENT in Hobart and AWARE in Adelaide. All boats were originally commissioned 1968-69 and were transferred to the RANR between

# **FLEET SUPPORT**

The principal Fleet support ships are the new oiler WESTRALIA and the oil replenishment and Flagship SUCCESS. Training afloat is satisfied by JERVIS BAY.

Forming the marine science force are the survey ships MORESBY and FLINDERS operating on the West Australian and Queensland coasts respectively and four new Paluma class survey motor launches (SMLs), PALUMA, MERMAID, BENALLA and SHEPPARTON, completed during 1989-90. Two general purpose vessels (GPVs) BASS and BANKs are homeported to HMAS WATERHEN. The Trials and Safety ship PROTECTOR operates from the Fleet Base in Sydney.

A large number of self propelled lighters, tugs, diving tenders and minor support craft are also manned at the major Fleet and support bases.



HMAS JERVIS BAY



HMAS PROTECTOR

HMAS FLINDERS



HMAS MORESBY



HMAS PALUMA



AUGUST III

HMAS SUCCESS, the fleet oiler and





**FLEET AIR ARM** 

Home for the Fleet Air Arm (FAA) is HMAS ALBATROSS at Nowra, NSW.

Westland Sea Kings are the principal anti-submarine helicopters and have operated from various ships including JERVIS BAY and TOBRUK.

For FFG operations the first of sixteen Sikorsky Seahawks began flying in 1989 with a maximum of two embarked in each frigate.

Light utility, search and rescue, survey support and training is performed by Aerospatiale Squirrel light helicopters. Bell Kiowas are used for communications and survey work.

Two HS748 electronic warfare training aircraft are flown by the Fleet Air Arm from HMAS ALBATROSS. Each HS748 can be reconfigured for the VIP or transport



HS 748



SQUIRREL



