# Know your warships!

Richard Pelvin with Graham Clews Ian Hodges Australian War Memorial

Battleships, carriers, battle cruisers, cruisers, destroyers, frigates, sloops and corvettes are ship "types" designed for very different naval roles and vary greatly in size and armament. Such names are often used imprecisely and interchangeably to refer generically to big ships with guns.

The design of all warships represents a compromise of many features including armament, speed, protection, The design of all warships represents a compromise of many features including armament, speed, protection, endurance and seaworthiness. . Emphasis on one facet of design usually requires compromise in another. Ideally, the design of the finished ship will be determined by the kind of tasks the ship must perform, the nature of the enemy it might face and the environment in which it will operate. Additionally, extraneous factors have influenced ship design. These include financial considerations, infrastructure limitations such as the size of docking facilities or canal widths, or the need for rapid construction. Between the two world wars, the design of capital ships and cruisers was heavily influenced by treaty restrictions.

Warships are usually built in classes, i.e. in homogeneous or near homogeneous groups. A change in class occurs when alterations, sometimes quite minor, were made to the ships' design or armament. These changes might occur to streamline a ship for particular duties, to correct faults in earlier designs or as a response to improvements in technology.

The ships within each class usually bear generic names: "town-class" cruisers were named for for towns, and "N-class" destroyers given names that began with that letter. A class of ship is often named after the first ship of that class to be commissioned, such as the "Bathurst-class" corvettes, named for Australian provincial centres; early submarines were given letters themselves for names, e.g. AE2, thus E-class submarines. An exception to the rule is the collection of unrelated names given to the Anzac-class frigates.

The following tables identify the major types of warship and list, by class, all warships that have served in the Royal Australian Navy during the twentieth century. For the most part, the vessels listed were purpose-built for naval service. This issue of *Wartime* lists the combat vessels down to destroyers; an article to appear in a later issue will list escort vessels, patrol vessels, mine and amphibious warfare vessels and auxiliary types. As far as possible the following details are provided:

#### Service dates:

From commissioning to decommissioning or conversion to another role.

#### Displacement:

The displacement of a ship is determined by the weight of water it displaces. Standard displacement is given.

#### **Dimensions:**

Given as length by beam (width) by draught (depth of the ship beneath the water), in metres.

# Maximum speed:

Given in knots.

#### **Armament:**

In most cases, only main armament is detailed. Given in inches or shell weight in most cases, metric for later vessels. Aircraft numbers are indicative of those actually operated from the ship, rather than maximum capacity.

#### Complement:

The number of men serving on the ship.

Silhouettes: All drawn to the same scale.

Sources: John Bastock, Australia's ships of war (Sydney: Angus and Robertson, 1975); J. H. Straczek, Royal Australian Navy A-Z: ships, aircraft and shore establishments (Sydney: Navy Public Affairs, 1996).

# Capital ships

Battleships, battlecruisers and, occasionally, aircraft carriers, are commonly referred to as capital ships.

Australia never acquired a battleship, the largest of all warships until the advent of the super carrier. As battleship design progressed, these ships grew steadily in size, the largest being the Japanese Yamatoclass of vessels, displacing 66,000 tons and armed with 18-inch guns.

Battlecruisers, not unlike battleships in size, were conceived by the Royal Navy before the First World War. Their design sacrificed protection and armament for speed; their role was to hunt down and destroy enemy cruisers, to form a fast wing of the battle fleet to push home a reconnaissance or use their speed to concentrate on a vulnerable part of the enemy's battle line. Unfortunately, their thin armour left them dangerously vulnerable to heavy calibre gunfire; four were lost at Jutland in 1916. A few were built after the First World War but the necessity for such ships declined with the increased speed of newer battleships.

# Indefatigable-class battlecruiser

179,3 x 80 x 30 18,300 tons

25 knots

8 x 12-inch guns

2 x 21-inch torpedo tubes (TT)

complement 900

Australia 1913-1924

# Aircraft carriers



# Carriers were of two types:

Fleet carriers were of widely ranging sizes, carrying from 30 to 100 aircraft. Their main task was to seek out and destroy the carriers and other ships of the enemy and defend their own fleet against air attack. To have as many carriers at sea as possible for fleet work, navies introduced the light fleet carrier, a vessel that was smaller, simpler but less capable than the larger type.

Escort carriers, designed to do routine patrol work, scouting and convoy escort. Their small aircraft complements (20-30) also provided fighter and close air support for amphibious landings. They also served as aircraft transports and resupply ships. Escort carriers were smaller, slower and less well armed and protected than their fleet counterparts.

A number of carriers were built during the First World War but their value was still in dispute at the outbreak of the Second World War. They came to be the decisive weapon in the Pacific war. Three light fleet carriers served in the RAN after the Second World War.

The RAN also operated a seaplane tender between the wars. It was designed as a floating base for seaplanes. It did not operate aircraft from its deck but from sheltered waters, using large cranes to hoist them in and out of the water as required. This vessel was transferred to the Royal Navy prior to the Second World War.

# Majestic-class light fleet carrier

212.7 x 24.38 x 7.62 19.950 tons

24.5 knots

26 aircraft

24 x 40-mm guns

complement 1,343

Sydney 1948-1962

# Colossus-class light fleet carrier:

211.83 x 24.38 x 7.01 18,000 tons

24.5 knots

c. 26 aircraft

12 x 40 mm guns

complement 1,076

# Aircraft carriers



## Modified Majestic-class light fleet carrier

20,000 tons 213.9 x 24.38 x 7.62

24 knots

c. 20 aircraft

24 x 40 mm guns

complement 1,350

Melbourne 1955-1982

#### Seaplane tender

4,800 tons

135.02 x 18.51 x 4.95

21 knots

6 aircraft

4 x 4 7-inch guns

complement 450

Albatross 1929-1938

# Cruisers



Cruisers traditionally performed two kinds of tasks: trade protection and fleet duties. Trade protection usually involved larger ships with long range and good sea keeping (good handling at sea). Trade protection cruisers patrolled the sea lanes, hunted raiders and protected merchant shipping, especially troop convoys. Fleet cruisers performed reconnaissance duties with the battle fleet and prevented enemy cruisers from doing the same. They provided useful anti-aircraft support for battleships and carriers, and had a useful shore bombardment capability. The division between heavy (typically eightinch guns) and light cruisers (typically six-inch guns) was set by treaty between the world wars.

The work of purpose-built cruisers was augmented by armed merchant cruisers, essentially passenger liners converted by arming them with six-inch guns. Since they were vulnerable vessels without the protection measures of warships, they were assigned to trade protection duties in quieter theatres.

Heavy cruisers

#### Kent-class

9.850 tons 192.02 x 2.11 x 4.95

31.5 knots

8 x 8-inch guns

8 x 21-inch torpedo tubes (TT)

complement 815

Australia 1928-1954

Canberra 1928-1942

#### London-class

9,830 tons

192.93 x 20.11 x 5.18

32.25 knots

8 x 8-inch guns

8 x 21-inch TT

complement 820

Shropshire 1943-1949

# Light cruisers

# Pelorus-class

2,200 tons 95.97 x 11.20 x 5.18

16 knots

8 x 4-inch guns

2 x 21-inch TT

complement 230

Ploneer 1913-1916

Psyche 1915-1922

# Challenger-class

5,880 tons 114.6 x 17.06 x 6.47

21 knots

11 x 6-inch guns

2 x 18-inch TT

complement 475

Encounter 1912-1923

# Cruisers



#### Town-class

5,100 tons

139.29 x 15.24 x 6.47

25 knots

8 x 6-inch guns

2 x 21-inch TT

complement c. 450

Sydney 1913-1928

Melbourne 1913-1928

Brisbane 1916-1935

## Modified Chatham-class

5,560 tons

140.20 x 15.24 x 5.63

25 knots

8 x 6-inch guns

2 x 21-inch TT

complement c. 450

Adelaide 1922-1945

# Modified Leander-class

c. 7,000 tons

169.16 x 17.29 x 4.57

32.5 knots

8 x 6-inch guns

8 x 21-inch TT

complement c. 650

Sydney 1935-1941

Hobart 1938-1962

Perth 1939-1942

#### Armed merchant cruisers

Kanimbla 1939-1943

Manoora 1939-1942

Westralia 1940-1942

# **Destroyers**



Destroyers were originally conceived as torpedo boat "destroyers" prior to the First World War, but rapidly became deadly torpedo craft themselves. They could charge ahead of the slower but more valuable capital ships and attack the enemy's torpedo craft with their guns, or they could attack the enemy's capital ships with their own torpedoes. In the Second World War, their responsibilities extended to offering protection against air attack and submarines. Few capital ships left port without their escort of destroyers. The destroyer's high speed and versatility made it eminently suited to a great variety of roles and tasks.

After the Second World War, the requirement for torpedo attack declined and the destroyer's role became that of an anti-submarine and anti-aircraft escort.

# River-class torpedo boat destroyers

700 tons

76.2 x 7.46 x 2.74

26 knots

1 x 4inch, 3 x 12-pounder guns

3 x 18-inch torpedo tubes (TT)

complement 66

Parramatta 1910-1929

Yarra 1910-1929

Warrego 1912-1929

Huon 1915-1928

Torrens 1916-1926

Swan 1916-1928

#### Marksman-class destroyer leader

1.310 tons

99.06 x 9.70 x 3.69

34 knots

4 x 4-inch guns

4 x 21-inch TT

complement 122

Anzac 1920-1933

## Admiralty S-class destroyers

1,075 tons

84.12 x 8.15 x 10.1

36 knots

3 x 4-inch guns

4 x 21-inch TT

complement 90

Stalwart 1920-1937

Tasmania 1920-1937

Success 1920-1937

Tattoo 1920-1937

Swordsman 1920-1937

# Destroyers



## Scott-class destroyer leader



1,530 tons

1,100 tons

101.34 x 9.67 x 3.73

36.5 knots

5 x 4.7-inch guns

6 x 21-inch TT

complement 185

Stuart 1933-1946

# V- and W-class destroyers

95.09 x 8.99 x 3.53 34 knots 4 x 4-inch guns

6 x 21-inch TT

complement 130

Vampire 1933-1942

Vendetta 1933-1945

Voyager 1933-1942

Waterhen 1933-1941

#### N-class destroyers

1,760 tons 108.65 x 10.87 x 4.81 35 knots

6 x 4.7-inch guns

10 x 21-inch TT

complement 226

Napier 1940-1945

Nepal 1942-1945

Nestor 1941-1942

Nizam 1941-1945 Norman 1941-1945

# Q-class destroyers

1.705 tons

109.42 x 10.82 x 4.03

34 knots

4 x 4.7-inch guns

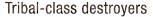
8 x 21-inch TT

complement 220

Quadrant 1945-1948 Quiberon 1942-1948 Quality 1945-1948

Quickmatch 1942-1950

Queenborough 1945-1950



114.9 x 11.12 x 3.96

36 knots

8 x 4.7-inch guns

4 x 21-inch TT

complement 261

Arunta 1942-1968

Warramunga 1942-1959

Bataan 1945-1957

## Battle-class destroyers

2.400 tons

1,927 tons

115.51 x 12.49 x 3.14

32 knots

4 x 4.5-inch guns

10 x 21-inchTT 1 Squid A/S mortar complement 320

Tobruk 1950-1972

Anzac 1951-1965

## Daring-class destroyers

2,800 tons 118.87 x 13.10 x 3.88

30.75 knots

6 x 4.5 inch guns

5 x 21-inch TT

1 x Limbo A/S mortar

complement 320

complement 333

Voyager 1957-1964

Vendetta 1958-1979

Vampire 1959-1986

Duchess 1964-1977

## Charles F. Adamsclass guided missile destroyers (DDG)

3,370 tons

133.19 x 14.32 x 4.57

35 knots

2 x 5-inch guns, 1 Standard SAM launcher

2 x Ikara anti-submarine missile launchers

6 x 21-inch anti submarine TT

Perth 1965-1999

Hobart 1965

Brisbane 1967-

# I Book Reviews

# A jungle circus: memories of Vietnam | Mike Towers

Allen & Unwin, St Leonards, 1999

A jungle circus provides an enlightening and often humorous insight into the world of a national service rifleman during the Vietnam War. The author, Mike Towers, was conscripted in May 1968 and subsequently served in South Vietnam with 4 RAR, an experience that irrevocably changed his life.

Towers narrates his experience with the wry humour for which Australian veterans are renowned. He recreates the intimate brotherhood that exists within a combat unit at war and the simultaneous mistrust of outsiders and disdain for the "pogos" (Australian Army slang for base or administrative troops, one of many terms explained in Towers' comprehensive introduction to the Australian dialect, "Solja"). The book's great strength is in its depiction of an infantry section at war in Vietnam: Towers understands the reactions of the men with whom he served there and this is clearly evident in his colourful, yet compassionate, rendering of them.

As A jungle circus is the result of Towers' own coming to terms with his Vietnam service, it is also a work full of ambivalence. The narrative is punctuated by angry and ranting tirades about the "depravity" of the national service scheme and the perceived unjust and uncaring fashion in which the Army implemented it. The author's anger is not reserved just for the system and its minions, but is also directed at himself for allowing himself to be trapped by it. Side by side with these emotions, however, is a very obvious sense of pride and belonging that Towers derived from the "fraternity of combat soldiers", and the knowledge that he has never run away from anything – unlike the draft evaders who are described as acting "a little bit like a pack of mongrel dogs".

Those with little knowledge of Australia's war in Vietnam need to approach *A jungle circus* with caution and not allow themselves to be carried away by Towers' rage. Towers was obviously sent to Vietnam against his will, but any notion that the Army was acting illegally, or "Against regulations!" (as claimed by the book's cover copy), is pure fallacy. Under the provisions of national service legislation, national servicemen could be deployed anywhere at any time without their volunteering for this service. Towers' recollections of his own experiences under the national service scheme frankly illustrate the way military training functions.

Towers never claims that his book repre-

sents anything but his own experiences and his own reflections. He challenges the reader to take them or leave them, and to compare his version of Vietnam with the increasingly fantastic versions offered up by popular film-makers. Stick out Towers' occasional tirades, because the rest of the experience is worth it.

Garth Pratten,

Australian War Memorial

# The Red Baron's last flight

Norman Franks Alan Bennett

**Mike Towers** 

Grub Street, London 1997

On 21 April 1918 Captain Manfred von Richthofen, the "Red Baron", was killed over Australian lines in northern France. Von Richthofen, the German flying ace who had shot down eighty allied aircraft, was himself shot down while pursuing a relatively novice fighter pilot, Lieutenant May.

But while von Richthofen hunted May, there were many others gunning for the ace [see Wartime 2]. The RAF immediately credited the "victory" to one of its pilots, Canadian Captain Arthur Roy Brown. This was immediately challenged, as Australian anti-aircraft gunners were also firing at von Richthofen as he flew low over their lines. Even C.E.W. Bean, author of the Official History, devoted an appendix in Volume V to an examination of the death of von Richthofen, in which he argues that an Australian Vickers machine-gunner must have fired the fatal shot.

The controversy surrounding the death of von Richthofen has now continued for over eighty years;

