The NAVY
The Magazine of the Navy League of Australia
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Copy deadline for the next issue is 9th August 1997.

Viewpoint

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THE NAVY LEAGUE OF AUSTRALIA

First published May 1938
A quarterly magazine covering all aspects of naval activities in Australia

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FROM OUR READERS

Calling All Ex FAA Personnel

Dear Sir,

The Fleet Air Arm Association of Australia is holding their Golden Jubilee Reunions at HMAS ALBATROSS 28 October to 3 November 1998 and are trying to locate all surviving ex FAA personnel to invite them to this significant occasion. The 50th Anniversary of RMAS ALBATROSS is also being commemorated in a joint celebration during the period. Would you please allow details to your readers for the ex FAA shipmates can make this a worthy and memorable occasion.

Please contact MIKE LEHAN SECRETARY FAA 50th ANNIVERSARY COMMITTEE PO BOX A15 NAVAL PO NORTH WA 2540

Washing you all the very best of health and we look forward to seeing you in 1998 at the Naval Aviation Museum in the meantime.

Yours sincerely
RADM Neil Ralph AO DSC RAN (Ret President)

FBW Honoured

Dear Sir,

Your Excellency the Governor of Western Australia, Major General Michael Jeffery, honoured navy personnel in Western Australia on March 25 when he presented them with the Navy League of Australia Perpetual Trophy for Community Services.

The Seagull Trophy is awarded by the Navy League to a ship or establishment for sustained and significant support of the general community. Commodore Bob Trotter, Commanding Officer HMAS Stirling, was delighted to accept the award for Navy’s support of the WA community and in particular the Rockingham community.

During 1986 HMAS Stirling provided financial support and voluntary labour to a wide range of community-based organizations with the relationship with the Malibu Special School proving a wonderful experience for many personnel. Malibu provides the special needs of severely handicapped children who cannot be placed in a normal school.

Fleet base personnel have associated Malibu Special School since 1989 with working bees, fundraising which generates about $2000 a year, and the Welfare Committee puts on an annual Christmas party and beach picnic at Camp Markham. HMAS Stirling continues to get tremendous satisfaction from these activities with many helpers available.

The Governor stated that HMAS Stirling’s community service program builds increased cooperation between the civilian and military sectors of society and helps strengthen the community. He also said it was a reflection of the altruism and sometimes personal sacrifice that is a hallmark of naval service.

Motor Lighters

Dear Sir,

In the October-December, 1996 issue of The Navy, L Day of Ports Point wanted to know the details of some photographs, one of which was the launching of MHT 256.

I visited the radio equipment onboard MHT 256 and served as photographer in the crew when she was commissioned in may 1971. Her commanding officer was LIEUT Guyatt, RAN. She was built at the State Dockyard, Newcastle, and as far as I can recall was launched in March, 1946.

Sorry for the delay, but we have only recently seen the October-December issue of the magazine.

Yours faithfully,

D. Ley

FAREWELL “ALBATROSS”

Dear Sir,

In August, 1996 I was in Papua New Guinea and read a newspaper article about the disposal of one of the patrol boats given to PNG by Australia in 1974. The former patrol boat, HMPNGS ALBATROSS, decommissioned in 1985, was scuttled as the cost of maintaining the vessel was apparently beyond the resources of the National Museums.

I only recently found the article at home when looking for some souvenir of my visit to PNG. I hope it is not old news. The article may be of some interest and hopefully the details included in a future edition of The Navy. Regards,

(name and address supplied)

Editor: We have included a newspaper photograph of the ALBATROSS being scuttled.

CARRIERS and REGIONAL SECURITY

After taking part in the combined Australian-American Exercise Tandum Thrust, the oldest commissioned warship in the United States Navy, the aircraft carrier USS “Independence” visited Sydney. A few weeks later the USS “Constellation” lead her battlegroup in Richard Jackson reports on the US carriers and their role in regional security.

Indonesia

I read the Indonesian Naval People with interest. I would like to make it known that the correct name for the navy is Tentara Nasional Indonesia - Angkatan Laut, or TNI-AL, the Tentara Nasional Indonesia - Angkatan Laut, or TNI-AL, the last two words literal translation being ‘sea force’.

Yours faithfully,

R. Doyle

(ex Photographer RAN Randwick 2011)

Independence Day

It’s a familiar image, from countless CNN news reports and movies like Top Gun. The angular bulk of an US aircraft carrier has become a modern icon, but this morning, in the Tasman Sea approaching Sydney, the USS independence is overwhelmingly real. The 80,000 ton carrier is at ease, her aircraft neatly arranged on deck, the immense steam plant held to a fraction of its power, the crew in their white shirts lining her sides, as the ship sails quietly past Sydney’s famous Heads.

Over the previous three weeks, the carrier has been battling both the exercise enemy and the elements. Cyclone Justin has won this battle of the Coral Sea and forced the naval commander, Rear Admiral Charles Moore USN, to take his task force of Australian and American ships far to the south and east of the exercise area until the storm eased.

“We can fly in rough weather”, Moore explains, “but we train with a margin of safety”. As Justin eased and was once again under control, the carrier conducted a ‘firewall’ search for emergency surgery.

On the Front Line

Independence and her crews have been on the front line, both literally and metaphorically, since 1959. The ship’s log records the raw facts of history of much of the cold war independence, currently the oldest active ship in the US Navy, was the fourth of the supercarriers, designed in the first
Life Extension

But Independence herself was nearing the end of her designed life. The value of the big carriers was unquestioned, yet the cost of new ships was enormous. Even though the USN had the Nimitz-class nuclear powered carriers entering service, it was still cost effective to refit the older carriers. After a long SLEP (service life extension program) independence emerged from the Philadelphia naval shipyard in 1988, ready and ready for another decade of service. This time she was deployed to the Pacific, home ported in San Diego. In August 1990 Indy (as she is inevitably nicknamed) was at sea in the Indian Ocean when Iraq invaded Kuwait. She was the first carrier into the Arabian Gulf and her airgroup enforced President Bush's "Line in the sand" during Operation Desert Shield.

In September 1991, Indy and all her families moved to Japan. The United States Seventh Fleet has a carrier battle group and air wing home ported in Japan, under the recently reaffirmed US/Japan defence treaty "We are made welcome there", says Admiral Moore. "The Japanese people are keenly interested in us, and we have no problems like the Marines have experienced on Okinawa". The US Navy's presence in Japan provides a valuable contribution. And it's not a one-sided struggle; the submersaries rarely boast, but they have their successes too. At Pearl Harbor in the submarine force HQ, they proudly display a replica of the USS Independence, the first nuclear-powered ship commissioned, that launched the first nuclear-tipped missiles in the 1960s. Independence left her Atlantic fleet duties for the Pacific, home ported in San Diego. In August 1991, Indy and all her families moved to Japan, where the US Navy's presence in the Pacific provides a valuable contribution.

Maritime Battle

On this deployment, independence is flagship of the battle force commander and center of a powerful and versatile battlegroup. Admiral Moore commands his battle group from an operations room just below flight deck level on the carrier. He also has his own Flag Bridge, four decks above the flight deck, but the battle is managed from the radar scopes and computer screens of the tactical center. There, Moore, and his staff, have the luxury of seeing the battle from a distant anti-submarine range beyond the escort screen, using the high speed of the carrier as part of her defense, and the nuclear-powered USS Constellation, which is set to replace her. Constellation is just three years out of her SLEP, she will continue in service beyond 2003. When she retires next year, the USS Independence will replace her in Yokosuka. Constellation is just three years out of her SLEP, she will continue in service beyond 2003. Independence's S-3 Vikings and SH-60 Seahawks play a vital part in creating noise that can be picked up by the Vikings and within the battle group, building that submarine-free sanctuary. The Vikings provide close air support and computer screens of the tactical center. There, Moore, and his Australian counterpart, Commodore Tim Cox, who embarked with his Australian staff, fight the maritime battle of the battle force commander and center of a powerful and versatile battlegroup. Admiral Moore commands his battle group from an operations room just below flight deck level on the carrier. He also has his own Flag Bridge, four decks above the flight deck, but the battle is managed from the radar scopes and computer screens of the tactical center. There, Moore, and his staff, have the luxury of seeing the battle from a distant anti-submarine range beyond the escort screen, using the high speed of the carrier as part of her defense, and the nuclear-powered USS Constellation, which is set to replace her. Constellation is just three years out of her SLEP, she will continue in service beyond 2003.
Fast Moving Air War

The air war is the opposite of the ASW battle ‘fast moving, wide ranging, demanding instant decisions amid the ‘noise’ of information overload. Far ahead of the battle group an E-2C Hawkeye, its powerful radar looking long and seeking out hostile aircraft. From inside the crowded cabin, air controllers direct the F-14 into long range interceptions.

‘This thing is a dinosaur’, says Lieutenant Commander Dave Richter, one of the ‘Black Knights’, the aviators of Fighter Squadron VF-154. He’s talking about his F-14A, the long range, heavily armed interceptor that has been the mainstay of USN air defence since 1973. With three types of new carrier commissions, the US has ordered only sufficient new ships to maintain its strike carrier building yard.

And the US is not alone in maintaining a carrier force. France has launched its first nuclear powered carrier, the Charles de Gaulle, while Russia, amid the whole sale scrapping of much of the former Soviet Navy, has still maintained its one large deck carrier, Admiral Kuznetsov. Britain, of course, went to smaller Harrier-Carriers; one of its three, HMS Illustrious, is leading this year’s Ocean Wave task force which is presently deployed to the Asia Pacific region.

By the time this is published, Constellation will be near the end of her Indian Ocean deployment, having operated in the Gulf and around the Arabian Sea. Independence will be heading north from her South East Asian deployments. Between them, the two carriers provide the proof of America’s commitment to regional security, the embodiment of the Seventh Fleet motto ‘Ready for Peace’.

Sidebar: The Value of Port Visits

This year Sydney will host over a dozen US warships, including Constellation, and the huge amphibious ship USS Essex. Other ships, including the nuclear-powered carrier USS Carl Vinson and nuclear-powered cruisers, have visited Melbourne and Hobart, while Fremerline frequently sees ships from the US Navy’s Indian Ocean task forces. After Exercise Tandem Thrust every major port on Australia’s east coast had at least one US warship visit, in fact with the disruption to commercial shipping by Cyclone Justin there were barely enough berths available for all the visiting ships.

For the Americans, port visits mean rest and recreation for the crew and a chance for families to fly out and join their spouses for a few days during an otherwise long, lonely deployment. Some 50 wives had come to Sydney from Japan to meet the Independence, others were there for the accompanying destroyers. But the port visit also means a round of diplomatic and official visits – the Flag Officers and Captains face an intense program of calls and receptions. Then there are the community activities, sports, visits to the ship by community groups and service clubs, and support by the sailors for local charities.

Constellation has a group of clowns, who are in demand from children’s hospitals and orphanages wherever they go. On Anzac Day, 200 sailors from Constellation and her escorts marched in the Sydney Anzac day parade, many young American sailors are now better aware of Australia’s distinguished war record. Both carriers were also opened to the public, 40,000 people queued to board Connie in one day, Independence attracted over 70,000 people over two days.

For the RAN, the port visit facilitates exercise briefing and professional discussions. ‘We may lack the technological edge of the Americans’ says Commodore Cox, ‘but the exercises improve our ease of integration into a multi-national force, and help us prove our doctrine’. Informal discussions and visits continue, between the battlegroup and RAN ships, while friendships are renewed between the two nations’ sailors.

For Sydney, the carriers’ visits pump some ten million dollars into the local economy. As well as the personal spending of 5,200 sailors from each carrier, there are the valuable official contracts, on the day of her arrival, 14 semi-trailers were lined up on the wharf with food, supplies and freight for independence.

Oh, and there was a brief protest. Just 12 protestors, including a fox on a surfboard, tried to impede the berthing of Independence. Their motives were confused; one was protesting the possibility of nuclear weapons on board (the Navy didn’t want to announce the 1991 decision to land naval nuclear warheads) and others thought they were protesting about damage to the Great Barrier Reef (although the exercise was carried out under strict environmental controls). But when the USS Constellation came in a month later, on her way to an Indian Ocean deployment, there was no protest at all. Rather, Sydney’s preserved Constellation arriver and a bevy of news helicopters welcomed the Connie for her Anzac weekend visit.
The RAN and Maritime Airpower

By Navy Leaguer

Fifteen years ago, in 1982, the RAN lost its aircraft carrier and its organic fixed wing aircraft. These were A4 Skyhawk jet strike fighters and 52 Tracker twin engined anti-submarine aircraft.

At the time, the Navy League fought hard against what was unquestionably a substantial reduction in the fighting capabilities of both the RAN and the Australian Defence Force. A decision on the future of fixed wing naval aviation was necessary because the aircraft carrier HMAS MELBOURNE needed replacement. Potential replacements were either too expensive in themselves or necessitated a new generation of aircraft – the Sea Harrier took off and landing type. Although cost was a factor against a new aircraft carrier, the major arguments were that such a ship was unnecessary for the defence of continental Australia, its offshore territories, its coastal shipping routes and its territorial waters. A less logical, but influential factor in some quarters was that aircraft carriers were perceived as symbols of maritime expansionism.

The aircraft carrier had replaced the battleship as symbols of the major arguments were that such a ship was unnecessary for the defence of continental Australia, its offshore territories, its coastal shipping routes and its territorial waters. A less logical, but influential factor in some quarters was that aircraft carriers were perceived as symbols of maritime expansionism.

As a result, the RAN decided to operate a new generation of ships and to acquire a new generation of fixed wing aircraft. This applied not only to the carrier but also to ship borne helicopters. Although about 10 Sea Kings and a number of Westerlings remained in service, no warships were capable of operating either type.

Since that time, the Westerlings have been retired but the RAN has acquired 16 S-70B Sea Harriers. These are excellent aircraft, for surveillance, over-the-horizon targeting and for operations with the fleet.

The second reason was that no aircraft carrier is necessary for the defence of continental Australia, its offshore territories and its territorial waters.

The second reason was a lack of the necessary management and personnel resources. During the last ten years, the RAN has started construction of new ships with new technology and many new types of sensors and weapons. The management of these projects requires a large number of skilled personnel. The RAN has a lack of personnel resources.

The second reason was that no aircraft carrier is necessary for the defence of continental Australia, its offshore territories and its territorial waters.

The Tomahawk strike capability would be more effective and infinitely cheaper than a carrier borne strike capability. Turning to fighters, economics would require the RAN to acquire a fixed wing fleet. The Tomahawk would be a major undertaking, requiring up to a decade.

Another step that would cost no extra money and would provide a potential sea-going platform for UAVs would be to transfer to other duties of virtually all the RAN's fixed wing aviation personnel – both flying and ground support. The RAN has lost its fixed wing aviation skills.

The RAN and Maritime Airpower

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The RAN can be provided with a very long range precision strike capability by arming the Collins class submarines and Anzac class frigates with Tomahawk high explosive tipped cruise missiles. The Tomahawk strike capability would be more effective and infinitely cheaper than a carrier borne strike capability. Turning to fighters, economics would require the RAN to acquire a fixed wing fleet. The Tomahawk is being developed in the United States, with British participation.

The joint strike fighter is still in the early stages of development. Further, there are those who argue that unmanned aerial vehicles (UAVs) will provide a cheaper and smaller alternative to manned fixed wing aircraft.

It can be argued that the RAN should acquire STOVL type aircraft to provide a very long range precision strike capability by arming the Collins class submarines and Anzac class frigates with Tomahawk high explosive tipped cruise missiles. The Tomahawk would be a major undertaking, requiring up to a decade.

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It can be argued that it would be imprudent for the RAN to press for a fixed wing fleet as long as it is certain that a viable new generation of fighter will be available. However, one step that can be taken will be to invest in new fighter aircraft and in the development of new generation of aircraft and in the development of new generation of aircraft and in the development of new generation of aircraft.

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What's in a Name

The Naming of RAN Units
By Joe Stracey

To most Australians the names of some Australian naval vessels are instantly recognisable. Name such as SYDNEY, MELBOURNE, VENDETTA and ANZAC. Other names such as CERBERUS, HARMAN and NORMAN may not be as easily recognisable. Whilst the third group of ELEPHANT, WAG and COCKROACH would only draw blank stares yet all of these are names which have graced the pages of Australia's naval history. If these are all names of naval vessels how were they selected and why? In this first of a two part article the current RAN naming principles and procedures will be explained. Part two of this article will explain the origins of most of the named vessels which have served the RAN.

Until 1995 there was no formalised system of naming RAN vessels. However, in the main an informal system existed. This informal system saw the RAN retain names of Royal Navy ships on loan to Australia and for its major ship classes use the names of cities or towns or perpetuate a system of distinctly Australian names such as the River Class. In 1995 all this changed with the introduction of a Defence Instruction (Navy) detailing principles to be followed for naming various types of naval vessels.

Defence Instruction states that:

- Surface combatants are to be named after Australian cities, towns, districts or previous ships of the type
- Submarines would carry names with an Australian connection or names of previous naval vessels
- Survey and other marine science vessels would be named after large coastal or offshore features, such as rivers, lakes, individuals who have contributed to the knowledge of our maritime environment or previous Australian vessels employed in the marine science role.
- Smaller attached marine science craft may also be named after foreign vessels which have contributed to the exploration of Australia's coast.
- Amphibious warfare ships are to be named after a combination of several Australian commanders or previous ships of the type
- Mine warfare vessels are named after Australian rivers and bays or previous vessels of the type
- Support ships are named after previous support ships or naval establishments.
- Tugs and harbour craft are to be named after Australian flora and fauna or previous vessels of the type
- Commissioned and non-commissioned establishments could carry names which were connected with either the area the establishment was located or the function of the establishment.

This Defence instruction states that:

- The instruction also provided guidelines for the use of the name AUSTRALIA. This name was reserved for a large vessel which due to its role would have a high national and regional profile.
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Part two of this article will detail the origins of many of the names used by RAN ships over the years.

Naval News

Seahawk Upgrade

The Minister for Defence, Mr Ian McLachlan has announced that Hawker de Havilland Victoria Limited has been selected as the preferred tenderer to acquire and to integrate forward looking infrared, electronic support and countermeasures equipment for Australia's 16 Seahawk helicopters.

The Hawker de Havilland proposal offered the best all round value for providing a sensor suite to enhance the protection, and combat effectiveness of the Seahawk helicopters which are operated from the six RAN Adelaide class frigates.

The selected equipment will be fully integrated into the aircraft's weapon system to detect and identify potential threats, and to avoid or counter them. These systems will operate at all times of day and night. The same equipment will be used where feasible in the existing Seahawks and the new Super Seagull helicopters, which are planned to be acquired from Kaman Aerospace of the USA.

While component equipment will be sourced from overseas companies, Australian industry will integrate and install the equipment. Hawker de Havilland Victoria Limited will be the prime contractor and will conduct most of the installation work in Australia. The new equipment is planned to be operational in the Seahawk helicopters by 2002.

Survey Crews to Maximise Availability

The new hydrographic vessels, to be named HMA Ships "LEEWIN" and "MIQUELL", will be manned by three crews to maximise the ships' availability, the Hydrographer, Commodore Bob Will, said in May.

He was speaking on 9 May, before laying the keel for the second of the two new ships being built under a $214 million contract with NQA Australia Ltd in Cairns. Defence's requirement was for the ships to be available some 300 days per year - double most other Fleet units.

Apart from the requirement for extra crews - ship's company will be about 47 per vessel - NQA are factoring in the high availability requirement into the ships' design and maintenance plan. The contract price includes a follow-on support contract for the ships in Darwin to be managed by NQA for five years from the time they enter service.

"The 71.2 metre, 2550 tonne ships, "Leevin" and "Miquelle" will significantly enhance and modernise Australia's hydrographic systems. The hat, 25% larger than normal size, was designed by Canberra sculptor Mr John Ahearn and was presented in the week before the presentation at ANZAC Day, by three crews to maximise the ships' availability. The hydrographer, Commodore Bob Will, said in May. He was speaking on 9 May, before laying the keel for the second of the new ships being built under a $214 million contract with NQA Australia Ltd in Cairns. Defence's requirement was for the ships to be available some 300 days per year - double most other Fleet units. Apart from the requirement for extra crews - ship's company will be about 47 per vessel - NQA are factoring in the high availability requirement into the ships' design and maintenance plan. The contract price includes a follow-on support contract for the ships in Darwin to be managed by NQA for five years from the time they enter service.

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HMAS "ANZAC" Digger's Hat

On Saturday, 19 April, Mr John Newman, Chief Executive Officer of Australian Marine Technologies presented the Commanding Officer HMAS "ANZAC", Commander Les Patsky RAN, a bronze sculpture of an ANZAC's hat.

The hat, 25% larger than normal size, was designed by Canberra sculptor Mr John Ahearn and was presented in the week before the presentation at ANZAC Day.
contribution at Gallipoli, a campaign upon which much of Australia's military heritage has been built. ANZAC designers Australia, engineers and planners who fought for Australia and New Zealand on the Gallipoli peninsula, the sands of Palestine and the muddy fields of France and Flanders. It is fitting that their bravery is remembered today aboard their ship HMNZS ANZAC with one of their hails they wore into battle.

Collins Memory Honoured Thursday, 13 February 1997 saw a special presentation in the (Admiral) Collins Room of the Melbourne Naval and Military Club. A Naval Sword and Cutlass, suitably mounted in a glass case were presented to the Club by the Victoria Division of the Navy League of Australia and unveiled by two of Collins old shipmates, Commodore Ian Purvis R.N.A. and Commander David Struth R.N.R. Before jointly unveiling the presentation Sword and Cutlass, the Commodores entertained the assembled members of the Navy League and the Club with short stories about their service while onboard their old shipmates.

"A Stealthy Frenchman" The arrival of France's guided missile frigate FNS "LA FAYETTE" (F710) to reduce her radar echoing area with external equipment such as capstans, bollards and lifeboats, either concealed or installed as low as possible onboard all ships. As a stealthy frigate she is remembered today aboard her superstructure is inclined at 10 degrees at the vertical.

the Port of Fremantle on 20 April turned many heads as she passed through the heads. Looking more like a futuristic "Star Wars" movie ship than a warship as a current day operational fleet unit, the FNS LA FAYETTE was certainly different. The hero of France's new generation stealth ships, her superstructure is inclined at 10 degrees at the vertical to her radar echoing area with external equipment such as capstans, bollards and lifeboats, either concealed or installed as low as possible onboard all ships. As a stealthy frigate she is remembered today aboard her superstructure is inclined at 10 degrees at the vertical.

barneying lines appearing from the ports instead of cannons it was an interesting evolution.

Commanded by Captain Danielou, LA FAYETTE carries a complement of 139 plus 12 arrier and 12 armes. Armed with Exocet missiles, a 100 mm gun and several smaller LA FAYETTE also carries a Panther helicopter.

The combined efforts of HMNZS ANZAC and LA FAYETTE to the Royal Navy and Hong Kong in 1997, it was said Admiral Slaters, a beginning of a new era... I very much hope that after 30 June, it will not be long before ships of the Royal Navy revisit Hong Kong and give us the chance to renew links with the many, many friends we have here.

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VAMPIRE Handover

On 9 April, RADM David Campbell formally handed over the destroyer “VAMPIRE” from the Royal Australian Navy to the Australian National Maritime Museum.

On hand at the special occasion were The Hon Bronwyn Bishop, Minister for Defence Industry, Science and Personnel; Ms Kay Costie, Chairman of the Australian Maritime Museum; former Commanding Officers and Directors of VAMPIRE himself, Vice Admiral Rod Taylor, had given special permission for this, the first time that a non-naval ship has been allowed to fly the Australian White Ensign. However, although she may trick passers-by into thinking she’s still a commissioned ship in the Royal Australian Navy, she has only a partial suit of uniforms as worn by members of the RAN. 

RADM Campbell said that “in her 27 years of active and having been associated with the Royal Australian Navy, she has only a partial suit of colours, and does not wear the masthead commissioning pennant that is also necessary to legally bind her as one of Her Majesty’s Australian Ships. But as I’m sure you’ll agree, the White Ensign will make her seem properly dressed,” RADM Campbell said.

Minister Bishop then officially handed over the “VAMPIRE” to the Chairman of the Australian Maritime Museum, all who sail her!” Dame Te Ata proclaimed before releasing the traditional bottle to smash on the bow of the 2,000 tonne frigate. The ceremony was attended by the Group Managing Director of Transfield Defence Systems, Mr Paul Salteri, said the launch brought together the elements of power, authority and status inherent in the name TE MANA.

After congratulating the company and workers responsible for the ship, Prime Minister Howard said the launch was a reminder to Australians and New Zealanders of the importance of maintenance of significant defence capability. He said the sacrifice of men and women of Australia and New Zealand in earlier battles produced a debt. We owe them and one of those debts, of course, is to maintain a constant surveillance about the security of our region,” he said.

While the first of class, HMAS ANZAC, is progressing towards full acceptance into Naval service, TE KANA, the first of the new ships for New Zealand, is nearing completion and due to sail in the very near future.

Kiwi Frigate Launched

The fourth ANZAC ship and the second for New Zealand is in the water.

She was launched by the Maori Queen, Te Aniwaniwa Dame Te Aratanga-kahu, in the presence of Prime Ministers and Defence Ministers of New Zealand and Australia at Williamstown on 10 May 1997. The name of this ship TE KANA. God Bless her and all who sail her!” said Dame Te Ata. 

ANZAC Spirit Lives On

HMAS “ANZAC”, first of the Anzac class frigates completed for the Royal Australian Navy, sailed from Sydney on 17 May for a three month deployment, including missile firing trials at the Pacific Missile Firing Range off Hawaii. For her harbour departure, two of the ship's company dressed in military uniforms as worn by the ship's company of the original HMAS ANZAC. The RAN Bridging Train was formed in Melbourne in February 1915, consisting of mainly Naval reservists with a good knowledge of engineering. Amongst the first Allied troops ashore at Gallipoli, the RAN Bridging Team was employed throughout the campaign, constructing and repairing wharves, salvaging sunken ships and maintaining fresh water supplies.

The Bridging Train was the last of the original ANZACs to leave Gallipoli at 0430 on 20 December 1915.

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Warships Return from Northern Waters

The guided missile destroyer HMAS “Brisbane” and guided missile frigate HMAS “Melbourne” returned to Sydney on 23
TULLOCHS of BRAYS BAY

The Search for Brays Bay Second World War Vessels and Relics

In late 1995 the Department Of Urban Affairs and Planning (DUAP) commissioned the Sydney firm of landscape architects, Pittendrigh Shinkfield and Bruce, to develop a Master Plan for the Philips site in Brays Bay, Sydney. The site is located on Concord Road between two existing parks, Rhodes Park and McIlwaine Park on the Rhodes Peninsula.

The Master Plan will guide the development of a park on the Philips site which links to the two adjoining parks to create a popular and visually prominent open space area on the foreshore of the Parramatta River. It is intended that the new park, to be called the Brays Bay Foreshore Park, will draw upon the site's industrial history, in particular its naval and Second World War shipbuilding past.

The site's industrial history began in 1915 with the founding of Tulloch's Phoenix Ironworks which initially manufactured a broad range of engineered goods. During the war, production was diverted to the construction of military vessels when Tulloch's was designated as the Commonwealth warshipbuilding yard. The shipyard became one of only a few facilities in Australia to build steel vessels, with most similar facilities (particularly in Sydney) building timber vessels.

One of the distinctive vessels constructed at Tulloch's during this period was the 120 foot steel cargo vessel designated in the Australian Navy (RAN) as Motor Stores Lighters (MSLs), Motor Refrigeration Lighters (MRLs) or Motor Water Lighters (MWLs). These vessels were designed by the Australian Shipyards Board, commissioned from the Australian Shipbuilding Board during the Second World War and built in large numbers.

Prefabricated sections for 120 foot steel cargo vessels were built at structural steel yards at a variety of locations, however assembling and lifting out was limited to the State Dockyards at Dyke End, Newcastle, Tulloch's at Rhodes and Goodwins at Port Kembla in New South Wales. Johnstone's Tyne Foundry in Melbourne, Victoria and Structural Engineering Co. at Perth in Western Australia.

At least 11 of these vessels were built at Tulloch's Yard. All of the ships ordered for the Army were given names beginning with 'E' e.g. EVELYN, ENCHANTRESS, ELLEN etc.

In the years after the war the site was used for a variety of industrial purposes. Tulloch's was forced to close in 1974 and it was at this time that Philips industries acquired the site. Philips activities on the site included electronic manufacturing and it is due in part to the large 'Philips' sign on the river-facing wall of a now demolished building that the site has become known colloquially as the 'Philips' site.

In early 1985 the NSW government announced plans to acquire the site as part of a plan to return foreshore land to public ownership. All structures remained virtually unoccupied. It is now owned by the Department of Urban Affairs and Planning who view it as an important open space asset for recreation and foreshore access improvement as outlined in the Parramatta River Foreshores Improvement Programme (Department of Planning 1995).

The current proposal for the Tulloches/Philips site is illustrated in the Brays Bay Foreshore Park Masterplan (see image). The Masterplan seeks to transform the site into a public park based on an interpretation of the site's wartime shipbuilding past and using actual shipbuilding elements once manufactured at the Tulloch's Yard. The park will link thematically with Rhodes Park which features a Memorial Walkway to those who fought on the Kokoda Trail.

DUAP is currently seeking information on the known whereabouts of any surviving lighters with a view to acquiring a vessel, or relics thereof, e.g. the fore and aft gantries.

It is intended that the dismantled parts of MRL, MSL and MWL vessels will be used as sculptural elements within the new Park and will form the basis for a reinterpretation of the Philips site's shipbuilding past.

In addition there is the potential to incorporate relics/photographs etc. into interpretive material on permanent educational opportunities through the provision of a staffed information centre and approximately 24 interpretive memorial stations associated with the Kokoda Trail Memorial Walkway.

Any reader of The Navy magazine who can assist the Department of Urban Affairs and Planning in locating or obtaining one of the original eleven lighters or other items e.g. Peggy top buoys manufactured by Tulloch's for any of the four other shipyards listed in the quote above) please contact:

Mark Blanche
Pittendrigh Shinkfield and Bruce
Landscape Architects
Phone: (02) 9906 4500
Fax: (02) 9906 4479

The current search and potential for display within the highly prominent proposed Brays Bay Foreshores Park on Parramatta River, provides the opportunity for an increased appreciation of Sydney's Second World War shipbuilding past. Any assistance in finding items suitable for display will therefore be greatly appreciated.

New Port Services and Support Craft Contract

The Sydney-based joint venture Serco-P&O has bid successfully for a contract worth about $300 million to provide port services and support craft to the Navy for 10 years from mid-1997.

The Navy announced in late April that the joint venture would provide a wide range of services, some of which would directly affect the operational efficiency of the Australian Fleet.

In common with other Defence commercial support program (CSP) contracts, the devolution of the services from the Navy to private enterprise will represent a considerable saving to the taxpayer - in this instance of around $80 million over the term of the contract.

However, this CSP contract will be different from others awarded previously by the Navy because the operational efficiency of the Fleet will depend to some extent on the performance of the contractor.

Another difference is that it sweeps into one contract diverse areas including capital acquisition, logistics, maintenance, port service operations, Fleet support and training support, reflecting the Navy's confidence that Australian industry will be able to deliver a wide range of essential services.

A Navy spokesman said the Navy Port Services and Support Craft Project had carried out a rigorous evaluation of bids from a variety of consortia together with an In-House Option employees currently providing the services from within the Navy and Public Service.

For $300 million (at 1996 prices), Serco-P&O will provide services which will be in evidence in ships and establishments through the RAN. These include:
- Tug services and target service for surface gunnery training;
- Torpedo recovery and weapon ranges support;
- Support of the new submarine force and, in particular, trials for the new Collins Class submarines;
- A full range of training services involving both motor and sailing craft; and
- Planning activities associated with harbour defence.

The Defence Efficiency Review

"In Brief" is not the place to examine in any detail or to even summarise a report containing a large number of proposals and recommendations which, if fully implemented, would change Australia's defence organisation quite dramatically.

It is however legitimate for one to have been associated in one way or another with an element of the defence force - the Navy - for over half a century to offer a few comments.

After reading the two-volume report of the review panel the writer was left with a number of impressions, the most distinct being:

(a) The haste with which the review was conducted - less than five months from nomination of the six-man review panel to presentation of the panel's report to the Defence Minister and acceptance by cabinet.

(b) The high priority given to reducing expenditure - to saving money.

(c) The pressure to be exerted on the Navy, Army and Air Force to combine their activities to a sometimes unreal intent given the stated intention to retain the three Services as separate elements of the Australian Defence Force.
only in Australia) for many years. The recent rapprochement between Russia and China with the object of countering the global influence of the United States, will no doubt add to the problems of the planners.

The need for the ADF to be able to act as a single, joint force, stated and restated in the review documents is understandable and is already practised in exercises. On the other hand practically all the combat operations in which Australian forces have been engaged since World War II have been essentially single Service operations in which our sea, land and air forces have augmented forces of allies. This appears likely to continue as the major political parties have expressed support (in principle at least) for United Nations operations. Defence Minister McLachlan appears to have gone further and was reported in April as adding the North American Treaty Organisation and Australia’s allies should they ask for military help. It is difficult to envisage Australian forces operating independently abroad unless one of our weaker island neighbours sought assistance.

Finally, the writer finds it surprising that a review claimed to be one of the most important in Australia’s military history should be accepted and changes set in motion before being tabled in Parliament. Many of the changes must affect local communities and should therefore be of interest — if that is the right word to use — to quite a few members of Parliament.

Admiral Honoured

Personnel who served in ships of the Strategic Reserve operating off Malaya in the fifties gathered in Cooma on Anzac Day as a tribute to Vice Admiral Sir Richard Peek who has been living on their behalf to obtain recognition for their service. Admiral Peek who was Captain of HMAS TOBRUK at the time, took up farming on the Monaro high plains near Cooma on his retirement as Chief of Naval Staff.

Sir Richard and Lady Peek, together with their supporters were warmly received by the citizens of Cooma at various functions and at the Anzac Day march, which the naval party led. As participant Roger Delisle said — “the Admiral set a good Whale Island pace.” (The writer recalls the Admiral as a fearsome gunnery officer when he was doing courses at Hinder’s Naval Depot – HMAS CERBERUS – many years ago)

Members of the group travelled from several States to pay what must be deemed an unusual tribute to an officer who attained the highest appointments in the Royal Australian Navy.

HMAS “SYDNEY (II)”

Several years ago the writer was asked for an opinion on a proposal to mount a search for the light cruiser SYDNEY, lost with her entire crew after an engagement with the German raider KORMORAN in 1941.

After consulting with colleagues a response was made to the effect that the basic facts concerning the engagement were known (KORMORAN was also destroyed but most of her crew survived) and that SYDNEY was considered to be a war grave, not to be disturbed, no good purpose would be served by locating the ship.

Proposals have again been made to conduct a search and for an inquiry into the loss of Australia’s (at the time) best known warship. While facilities for locating and examining sunken vessels have undoubtedly become very sophisticated over the years, the writer’s earlier views remain the same. What good purpose would be served — assuming of course the ship is intact?

For KORMORAN, a converted merchantman, albeit heavily armed, to destroy a regular man-of-war was no mean feat; it will never be known why SYDNEY was placed in a position that enabled an inferior opponent to cause her loss. An inquiry might possibly indicate if any cover up of wrong doing by shore authorities was involved at some stage as has been claimed, but at this distance in time it seems pointless.

In conclusion, it is possibly worth noting that despite location of the liner TITANIC and several underwater hull examinations, the actual cause of the great ship’s sinking is still a matter of conjecture.

(The editor is keen to hear from readers who possess copies of the magazine, published since 1938, to mark its Diamond Anniversary next year).
Onboard an Arleigh Burke

Story and photographs from Mark Schuwerkett

Last March the Arleigh Burke class of destroyers made its Sydney debut in the form of the USS Curtis Wilbur. Her classic lines and styling make the ship devastatingly beautiful and yet beneath her exterior is the most devastatingly powerful destroyer in the world. One could mount a very credible argument on the basis of size and capability that the class should actually be classified as cruisers.

The technology represented in this class is at the forefront of modern Western naval design. Phased array radars, two VLS Vertical Launch Systems for 90 missiles, full NBC (Nuclear, Biological and Chemical) protection, the latest stealth technology and an Aegis combat system capable of handling any threat that may arise, combine to make an incredibly versatile surface combatant.

As this was the first Arleigh Burke to visit Sydney, it provided an interesting opportunity to examine what many would regard as the front runner for the RAN's 1400 project to replace its ageing, and soon to be decommissioned DDGs.

Class

The origins of the DDG-51 class stem from the cold war and the USN requirement to defend its CBGs (Carrier Battle Groups) against massed Soviet anti-ship missile attack in a NBC contaminated environment. They were also to be capable of escorting amphibious assault groups, patrolling SLOC (Sea Lanes Of Communication), projecting power and to act as flagships. Although its cold war specialties are now unlikely to be used, the ship still possesses the flexibility to operate in a littoral environment anywhere in the world. Part of its NBC operability consists of the ship's systems being hardened or protected against Electro Magnetic Pulse produced during a nuclear explosion and renders most electrical systems inoperable in order to keep operating when other ships cannot.

The class will number 21 hulls before the Flight IA version appears. This version differs in that it is fitted with a helicopter hanger, something which the earlier Fights were criticised for not having. As mentioned before this ship could also be classified as a cruiser given not only its capability, but also its size. It is only 433 tons lighter and 19 metres shorter than a Ticonderoga class cruiser but is heavier than the older Beking and Leahy class cruisers.

The first ship of the class, USS Arleigh Burke, was commissioned in 1985 with Curtis Wilbur commissioned in May 1994. Being one of the newest ships in the USN it is representative of the navy of today having segregated male/female facilities. The class embarks a crew of 280 with a mix of 30% female and 70% male.

Stealth

This is the first USN class of ship to incorporate 'stealth' in the design. Walking around the deck one notices how flush smooth and uncluttered everything appears. All right angles including edges and corners have been eliminated. All sides are sloped to deflect radar energy in different directions other than where it came. One will also notice how little above deck superstructure there is. The superstructure essentially consists of two smoke stacks, a solid angled tripod mast and the bridge structure, which also houses the SPY-1D radars. All exposed surfaces are covered in RAM (Radar Absorbent Materials). This soaks up radar energy hitting the side of the ship, further reducing the RCS (Radar Cross Section). This material is like padding and one is able to push a finger into it to see it is a solid steel plate.

Air vents all have angled panels covering them to further deflect radar and even the steps on ladders and stairs are angled. Although not apparent, in situations which require a low RCS, the practice is to fold down all the railings and cover certain areas of the ship, such as the bow with all the clutter of bollards, anchor chains etc and refueling points with RAM blankets. These blankets, similar to what HMAS Brisbane and HMAS Sydney were fitted with for their Gulf War deployment, further reduce the RCS for items that cannot be stealthed and which could return radar energy. Another stealth feature is the reduced number of access points for the crew to the weather decks. Crew moving around topside are capable of inadvertently returning radar energy. This also means why there are no deck mounted machine guns or cannon as these also can reflect radar.

Of course the idea of stealth is to reduce the ships susceptibility to search radars and weapons using radar such as an anti-ship missile like Harpoon or Exocet. A low RCS will also enhance the effectiveness of countermeasures to lure away any missile fortunate enough to actually lock onto the ship.

Stealth is not restricted to radar evasion alone as acoustic and IR (Infra Red) stealth technologies have also been applied. Each of the four LM-2500 Gas Turbines is salt mounted and contained in a sound proofed box. To further reduce underwater noise a Prairie Masker bubble system is fitted. This forms tiny air bubbles around the hull and propellers to mask noise emanating from the hull and apart from making the ship less detectable to submarines it also enhances its own passive sonar performance and the SQQ-25A torpedo decoy system.

Engine exhaust emissions from the Gas Turbines are cooled before release into the atmosphere to reduce the ships IR (Infra Red) signature which reduces its susceptibility to IR missiles such as Penguin.

Weapons and Systems

The ships Aegis 3D SPY-1D phased array radar system, four flat panels around the bridge superstructure and covering a full 360 degrees, is designed to automatically detect and track over 500 long range targets simultaneously as well as identifying them as friend or foe and supplying fire control quality Information to the fire control system. Three airborne targets can be illuminated simultaneously via three SPG-62 fire control radars for the ships 76mm ranged Standard SM-2MR missiles.

The ship has two MK-41 VLS for a total of 90 missiles, 29 forward, 61 aft. These can consist of a mix of Standard SM-2MR, BGM-109 Tomahawk (all variants), VL, ASROC and VL Sea Sparrow if needed. The combat system can be placed on an automatic mode which can detect, track, classify, designate and destroy any threat at any speed within the ship's radar and missile range. This capability will be more important in the future as anti-ship misses become faster thus reducing the reaction time for the operations centre staff.

Part of the ships command and control function in a CBG or at an amphibious head is air traffic control and co-ordination of friendly aircraft onto approaching enemy. During the recent "Tandem Thrust" exercise USS Curtis Wilbur was responsible for air traffic control for the entire exercise. For this role she embarked air traffic controllers from the RAAF, RAN, USN and USMC. It seems a waste to use such a powerful destroyer for safety purposes but bears testimony as to the immense flexibility of the class.

Not only can it conduct air traffic control in an exercise but also conduct strike missions at far off land targets with Tomahawks, establish an area air defence perimeter, prosecute submarines, conduct shore bombardment, provide surveillance information, attack shipping with its...
Onboard an Arleigh Burke
tubes for MA-46 ASW torpedoes and the ability to fire VL ASROC. Its sonar systems and acoustic stealth make it a formidable submarine hunter but the class suffers in this role by not having its own ASW helicopter.

For shore bombardment duties the ship mounts a MK-45 127 mm gun in the "A" position. This gun, the same as on the Anzac class, fires 20 rpm at targets nearly 23 km away it can also be used against aircraft with fire control data from one of the SPG-62 radars or a TV/optical sensor mounted above the bridge of the ship.

For anti-ship defence the ship uses two Phalanx close in weapon systems and a SLQ-32 ESM system. Some criticise the class for not having any ECM equipment but this would defeat the purpose of stealth as ECM transmits a jamming signal designed to be detected. In the future this transmission source could possibly be used by anti-ship missiles to find "stealthy" ships.

Data links with other ships give the DDG-51 commander, or embarked group commander, a clear and precise picture of the ship's and/or group's activities including the enemies on two large wall mounted displays in the CIC. These display monitors can produce any and all information and data required from sonar information to AAW data, Tomahawk attack flight paths, ESM data and land maps with the position of friendly and/or foe units and types.

Another feature of its cold war origins is the extensive NBC (Nuclear Biological and Chemical) warfare Collective Protection system. This consists of double air lock doors, pre-wetting, crew NBC decontamination wash points, an over pressure air conditioning system with extensive filtration of incoming air and recycling of existing air. The over pressure system works by having positive pressure in the ship's spaces. In the event of a hull breach, air will escape rather than enter the ship thus keeping out any NBC contaminated material/particles. Virtually the whole ship is covered by the NBC Collective Protection system except parts of the engine room and the bridge. The engine room has the increased level of exposure to the outside air these places have.

Engines

The ship's engines consist of seven gas turbines. For propulsion the ship utilises four LM-2500 gas turbines which propel it to a maximum speed of 31 knots via two controllable pitch propellers. Other gas turbine consists of three Allison 501 EK4 generators with one located at the bow, amidships and the stern. One of these gas turbine generators can provide all the power requirements to the ship's systems but two are generally used so as to split the load on each generator and to have one ready in the event the other is put out of action.

Damage Control

Damage control in the class of ship is state of the art. Many of the lessons of the USS Belknap's collision with the carrier USS John F Kennedy and the Iraq Excite attack on the USS Stark have been applied to the design to make a very survivable ship. Some of the features include 70 tonnes of kevlar armour around the CIC which is located just below the waterline. The ships 13 bulkheads are made of hardened steel to contain fire and explosions. In fact the whole ship is made of steel except the funnels which are aluminium. There could be said to be one of the lessons of the Falklands war as the aluminium hulls of the Amazon class ships actually burned and were ineffective in containing fire and explosions. They also suffered from stress cracks in the heavy South Atlantic sea.

Areas such as the engine rooms and each individual engine module are fitted with nozal gas insufiers and sprinklers to suffocate a fire. These are either automatic upon detection of fire or manually controlled. All compartments are fitted with sprinklers and the ship makes its own foam to fight fires. The only damage control drawback I could see was that all the ship's passage ways are very small, almost submarine like. This could present a problem for fire fighting teams of more than three people but the ship's fire fighting system of halon gas, foam and sprinklers may reduce the need for large teams.

During the crew's battle to save the USS Stark the ship was nearly lost due the amount of water used by the crew to extinguish the fires. Taking this into account the Arleigh Burkes nave a primary and secondary drainage system. Many of the ship's systems are double redundant and located at different areas around the ship.

Conclusion

The recent "Tandem Thrust" exercise demonstrated, yet again, the high degree of inter-operability the RAN has to have with the USN. Bearing this in mind, questions are being asked about the Anzac frigates' ability to perform the defence and escort requirements of a USN CBG or amphibious group. Consequently Australia needs a surface combatant that can replace them at a level of inter-operability. The current SEA1400 project to replace the DDGs is serious and that is not replacing them with a modified Anzac frigate derivative to replace the DDGs given that level of inter-operability. If the current SEA1400 project to replace our DDGs is serious, that is, not replacing them with a modified Anzac frigate (with all its drawbacks further modified), then it cannot go past the DDG-51 class.

When the Charles F Adams destroyers joined the RAN it was somewhat of a revolution. Not just because it was the first time we had bought American warships, or that we were the first overseas customer for the class, but because of the technology and capability the ships represented today the Arleigh Burke class represents that same jump in technology and capability. But however impressive the Arleigh Burke's technology is, it must be remembered that this is currently the norm and representative of current technologies. Maybe it is the mystique that the powers that be in Canberra feel this class of ship is endowed with, that prevents them from seeing an Arleigh Burke in the RAN order of battle. Or possibly it is more capable a ship than our current and financially convenient expectations for conflict allow for and whose acquisition would perpetuate the Foreign Affairs Department perception of offending a regional neighbour. As an Australian aircraft carrier is supposed to...
Sealift for the Soldiers

New Zealand has its first military sealift ship - the former 7220-tonne Danish-owned container ship Mercendarian Queen II now commissioned into the Royal New Zealand Navy as HMNZS Charles Upham. Named in honour of the country's most decorated soldier, the vessel will move troops and equipment in support of the Government's defence foreign policies, and assist areas struck by cyclones, earthquakes and other civil emergencies. The ship's arrival changed the dark prediction of the 1991 Defence White Paper that our response to crisis could be limited "by available transport."

"We've got it!"

Immortal words they're not, but for Defence project director Peter Ware and his team they marked final acceptance of a hard-fought $14 million deal for New Zealand's first military sealift ship. The new ship sailed into Auckland after unloading a cargo of containers in Australia to defray the cost of bringing it out from Denmark. Then in October 1996, Upham's widow Molly officially named the ship, formally commissioning it into the Royal New Zealand Navy.

Charles Upham's main task will be to deploy the Army's Ready Reaction Force on overseas operations - up to 150 troops, the M113A1 armoured personnel carriers (APCs), 4-10 ton Unimog trucks, 8-10 ton dump trucks, 105 mm howitzers, rough terrain cranes, field kitchens, the relocatable field surgery, ammunition, stores and equipment.

The ship will also enable the Defence Force to directly support New Zealand's United Nations commitments. It will be a floating port of call for afloat UN peace-keeping operations. The vessel will provide facilities for landing UN forces and UNhospitals will be set up on board. The ship will also operate as a landing platform for helicopters, and as a floating command centre.

The vessel is not amphibious, which means it must unload at a port rather than run up on a beach, though this would only be a problem if harbour facilities were damaged by storm or another natural disaster. In such cases, the ship's helicopters will be deployed above the ship. The helicopter deck apart, most modifications are not likely to be structural or expensive. Even so, the Defence Force is not in a tearing hurry because, says Ministry Defence Project Director, Peter Ware, they "want to get it right." No firm decisions will be taken on major alterations for some months, during which crews will be able to get operational experience with the ship.

A few changes, however, have been made already. The ship was coated below the waterline with tri-butyl tin (TBT) during which crews will be able to get operational experience with the ship. The ship will be fitted with a flight deck, and accommodation for 65 people, up to 10 percent of them women. Standard accommodation for an additional 150 is also planned.

A flight deck will be installed with a hangar capable of housing two helicopters - large enough to take Seahawks or Sea Kings when the ship is operating with Australian forces. No firm decisions have been made whether the ship will have a helicopter or helicopters of its own, and temporary deployments may well meet the need.

Four 0.5 inch machine guns will be installed and missile defence provided by SBOC (chalif) launchers and an electronic warfare suite. A standard RNZN damage control centre will also be installed, and the ship's radars supplemented with Identification Friend or Foe (IFF) transponders. Military communication systems will be fitted.

The vessel is not amphibious, which means it must unload at a port rather than run up on a beach, though this would only be a problem if harbour facilities were damaged by storm or another natural disaster. In such cases, the ship's helicopters will be deployed above the ship. The helicopter deck apart, most modifications are not likely to be structural or expensive. Even so, the Defence Force is in no tearing hurry because, says Ministry Defence Project Director, Peter Ware, they "want to get it right." No firm decisions will be taken on major alterations for some months, during which crews will be able to get operational experience with the ship.

A few changes, however, have been made already. The ship was coated below the waterline with tri-butyl tin (TBT) anti-fouling paint, which isn't allowed in New Zealand waters because it leaves toxic residue. That was removed in Denmark, and the ship's upperworks have been repainted "Waikato" or RNZN grey.

Special attention is also being paid to keeping the ship clear of toxic or ozone depleting substances. The ship's firefighting system will not be based on halon, nor will ozone-depleting chloro-fluorocarbons be used in the refrigeration or air conditioning systems.

As a merchant ship, the Charles Upham offers flexibility and operating efficiencies that a specialised military vessel cannot. For example - there will be about 150 extra mouths to feed when the Ready Reaction Force is embarked. A galley big enough to handle such numbers would be expensive, and unused most of the time. But the ship has fifty reefer points for refrigerated containers, which means that the Army might find it easier to load a container of food, or even put a field kitchen aboard.

Critical Need

The decision to buy the Mercendarian Queen II goes back to the shift of New Zealand's defence focus into the South Pacific. During the 1950s, New Zealand became closely involved with its region under the ANZUS treaty. By 1960, it had a reinforced battalion group away from New Zealand. The ANZUS and SEATO paper called for a sealift vessel able to "deploy a force into the South West Pacific, and if current modification plans are adopted, the ship's helipad will be ready to deploy from the quayside in the same weather. Its unrefuelled range at this speed is above 6000 nautical miles.

It was a wide-ranging policy dictated by New Zealand's position as an island nation dependent on globe-spanning trade. The need for a sealift ship to move equipment in support of those policies was clear, and by the 1960s the Navy wanted a tanker, the Army a sealift vessel to carry men and equipment. The proposed ship was to have an ice-strengthened bow for Antarctic operations, workshops, and helicopter facilities.

This was thinking big with a vengeance, but even in those days, New Zealand couldn't afford such a costly ship. After the ANZUS dispute of the mid 1980s, the Navy bought a tanker - HMNZS Endeavour - and the concept changed to a more logistic vessel able to hold the Army's men and equipment.
at sea and 2100 in harbour. Finding one for sale in the right bracket wasn't easy, but from the available choices, a ship able to meet 80 percent of Army's needs appeared a better deal than a larger and more expensive vessel. The Mercandian Queen II - one of a class of five roll-on-roll-off freighters - was for sale in Denmark and seemed right for the job. With a typical displacement of 7220 tonnes, the ship is almost the same size as the Navy fleet tanker HMNZS Endeavour. It is also one of the largest vessels the Navy has operated since the 8800-ton cruiser Gambia during World War II.

Many decisions have yet to be made before the Charles Upham is fully operational, but at this stage the future of New Zealand's military transport looks bright. Certainly the ship will give a much-needed boost in an area that has long been lacking, and it looks set to do so at a minimum cost to the taxpayer.

**Vital Statistics**

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<thead>
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<tbody>
<tr>
<td>Deadweight (at draft of 6.16 metres)</td>
<td>7220 tonnes</td>
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<tr>
<td>Dimensions:</td>
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<tr>
<td>Engine:</td>
<td>MAN Diesel, Type 12M453AK, developing 5250 bhp</td>
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<tr>
<td>Auxiliaries:</td>
<td>3 Mercedes-Benz diesels, each 444kw, single screw, Bow thruster 900 hp</td>
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<tr>
<td>Speed:</td>
<td>Trial speed at 4890 bhp and 4.97 metres draft = 15.7 knots</td>
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<tr>
<td>Cargo Capacity:</td>
<td>516,000 cubic feet, or 414 containers, or 111 trailers (12.2m length), or 611 cars</td>
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<tr>
<td>Bunker Capacity:</td>
<td>522 cubic metres</td>
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<tr>
<td>Fuel Consumption:</td>
<td>18.5 metric tonnes per day</td>
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</table>

**WHAT IS A... Signalman/Telegraphist**

The 'What is a...' navy people series was originally written in late 1950s. The set of eight will be re-produced in The Navy during 1997-1998.

(Hysterical note, or he went data way)

Once, way back in history (Naval history that is, as opposed to other more progressive types of history) there was an Admiral called Nelson. Because of a weak voice, this Admiral was unable to make verbal contact with a certain Lady of Hamilton, and so he invented Signals. Signalmen were born (particularly when it comes to buzzes). It consisted at the beginning of only Signalmen, but internal strife (and Macaroni) split the Branch, which eventually settled quite naturally into two camps - the Telegraphists forming the "other" camp.

**Signalmen**

Being old Nelsonians they demand first place. A Signalman is the person you see hauling up odd pieces of coloured rag hoping to God that it conveys a message to someone. As well as this, Signalmen operate with staccato like movement, a curious mechanical Venetian blind covered lamp. This they flash mysteriously day and night. For some odd reason this flashing is understood by other Signalmen. (No one can explain this - not even the Signalmen). Apart from these two duties, Signalmen look through telescopes, binoculars, key-holes, and sun themselves all day on the flag deck.

It is rumoured that Signalmen consider themselves to be higher than the rest. This is understandable from such an old world branch who work way up in the air. (They are higher - can't get much higher than the Flag Deck, mate!)

**Telegraphists**

According to my dictionary, the word telegraphist comes from two very old words, "tele" meaning "sound", and "graph" meaning "to write". Which meanings, in the case of the Telegraphist, is absolutely correct, for they do "sound" (invariably off) and they do spend their time writing - home.

Apart from this, they hide in compartments around the ship, amongst and behind, odd assortments of radio equipment. Like other complex social groups (Ubanga natives for example) Telegraphists have a code. This they follow religiously.

Some people feel that telegraphists are anti-social and keep away from other people. This is not true. Their job entails them being "away" as it were, in small compartments marked NO ADMITTANCE where they work at... (security prevents me from saying what they actually do in these compartments. Obviously however, it must be hard on them, for you often see the Telegraphist emerging tired looking, haggard and worn. This is probably because they have been - once more security forbids disclosure.)
**The Armed Forces of Indonesia**

*By Robert Lowry*

Published by Allen & Unwin  
Cost: $29.95  
Reviewed by Joe Staniek

For many years the Republic of Indonesia had been viewed, officially and unofficially, as Australia’s most likely enemy. Today the point of view is different: Australia and Indonesia, whilst still having many differences, have many common goals and objectives. This book captures the entire spectrum of the Indonesian political and military structures from the people’s policies to the military that make up the Armed Forces. It is an attempt to provide a succinct survey of the organisation and what drives it. As General Murdani stated in the Foreword, whilst many in Indonesia, and for that matter in Australia, may not agree with what Mr Lowry has written, he has made a none the less valuable contribution which should be read by all those who are interested in the military policies and structures of our northern neighbour.

This book is part of a general series of books on the Armed Forces of Asia being edited by Profesor Desmond Ball. As such it has set a high standard for the others to follow and build upon. The real challenge to the series authors will however be to keep these books relevant over the years by updating and amending them as required.

The publishers should also be congratulated for initiating the series and it is hoped that these books are read by a wider audience than the usual political/military circle. All in all Mr Lowry has produced an informative book which should become essential reading for anybody interested in the Armed Forces of Indonesia.

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**U-BOOTE 1935-1945 The History of the Kreigsmarine U-Boats**

*By Robert Lowry*

Published by Allen & Unwin  
Cost: $29.95  
Reviewed by Joe Staniek

Books published in France, about the German naval war activities and readily available in Australia in English, are not great in number. This particular effort was completed in 1996, presenting a complete breakdown of the operations of the U-Boat force.

U-BOOTE begins with a brief account of the rebirth of the type, followed by detailed descriptions, from the first victories in 1939-40, the massive U-Boat campaign of 1941-42 which almost destroyed the allied powers war effort, the Turning Point in 1943 with the anti-submarine weapons and tactics improved to respond to the threat, the Final Effort via German technical innovations and, lastly, the Death of the Wolves.

Today, with the performance of his U-Boats, Admiral Doenitz explored a number of technical innovations including improved diving capabilities, new magnetic torpedoes, adhesive anti-aircraft guns of some classes, improved aircraft detection devices to avoid crash dives to escape allied warplanes, the Schnorkel to improve underwater endurance, a design for a high speed (30 knot) submarine and finally, a boat capable of independent open-ocean operations, the Type XXI.

Supporting the excellent narrative, the U-BOOTE book is well illustrated by hundreds of new photographs, with colour technical drawings, contemporary posters, paintings, sketches and some wartime photographs.

All aspects of the life of the U-Boat are covered in this glossy, hard back book, with numerous onboard views of personnel and equipment. Highly recommended.

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**Forgotten Fleet**

*By Bill Lunney and Frank Finch*

Published by Forfeet Publishing, 7 Wade Close, MEDOWIE, NSW 2318  
Reviewed by Ross Gillett

Many naval writers researching their books in the 1990s seem to be specialising on those ships and fleets of naval vessels, somehow forgotten by the official war histories. One of these was trying to be Saitos by John Leggoe, then Iris Nesdale with Small Ships at War and last, Brian Aisop with his Australian Army Warpage. Now from the stables of Forfeet comes another mystery navy. Titled the Forgotten Fleet, it is a history of the part played by Australian men and ships in the United States Army Small Ships Section in New Guinea between 1942 and 1945.

In the introduction to the book, the authors state: "There were schooners such as the HAROLD and the ARGOSY LEMAL, packed with radio communications gear. There were tugs and tug boats and old harbour ferries from Sydney (BIVANGARRA and Newcastle (ROONOOLOGO)) and an ancient four stack ex-destroyer-cum-bubabanana-boat, the MASAYAAB. The oldest ship in the fleet was the ORTANNA, built in 1876, which had enjoyed previous lives as a steam paddle tug, three masted schooner and sugar lighter."

But, the Forgotten Fleet is also a story of the personnel who manned the mixture of vessels, one skipper had gone to the Boer War at the age of 13, many had served in the Great War, and others in the more recent Spanish Civil War. More than 3000 Australians volunteered to serve with the US Army Small Ships. One skipper had one leg, an engineer operated his boat’s machinery with one arm. Many had been declared medically unsuitable for the regular Australian armed forces, but soon found a niche in this other armynav force.

The book is divided into three parts, the history of operations, the memories and finally, the ships and personnel. All are illustrated by clear large format photographs, numerous sketches and maps of the areas of operations. The Forgotten Fleet is highly recommended to all readers of The Navy. It’s an absorbing tale of these unusual vessels which sailed unescorted, close to enemy lines, transporting everything from guns and ammunition to biscuits, fuel and tanks, to troops, the wounded and deceased, to and from the safety of the allied ports.

Phone enquiries regarding The Forgotten Fleet can be made to Ruth Lunney, Editor, on 049 - 820 437.

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**U-Boat Far From Home**

*By David Stevens*

Published by Forfeet  
Cost: $35  
Reviewed by Greg Szczepan

U-Boat Far From Home, by former Naval officer David Stevens, is an excellent account of the epic voyage by the German submarine U682 to Australian New Zealand waters in 1944-45.

It describes in detail the actions of U682 and her crew under the command of Korvettenkapitan (Lieutenant Commander) Timm from their departure from Germany in mid 1944 until the end of the war. U682 was the only U-boat to enjoy any sort of success in Australian waters with the sinking of two 7000 ton Liberty ships in December 1944 and February 1945 respectively.

This is not just an operational history of a single submarine, but describes in detail the German U-Boat. Any submarine should be so far from the normal area of operations in the Atlantic. It also looks at the actions of the RAN and RAAF in combating this new threat in what was, by 1944-45, very much a rear area of the war.

Stevens has used extensive personal information from the crew of U682 and survivors from the two Liberty ships that were sunk, to give the reader the human insight of the war at sea from both the German and Allied viewpoint. The research to complete this book is first class and has come from archives around the world as well as private papers.

U-Boat Far From Home is well illustrated with several maps of the areas in which U682 operated and relevant photographs of the submarine, her crew and their opponents. It also has a substantial endnotes section which reinforce the information in the chapters.

U-Boat Far From Home is a paperback and at $24.95 it is well worth the money and available from most good bookshops. I enjoyed it and found it not just to be a historical text, but a ‘bloody good read’ as well. Very highly recommended.

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The book reviews are all copyrighted by The Argus July-September 1997.
International Roundup

Compiled by Mike James

Indonesian Submarines

The German Government has confirmed that Indonesia intends to buy five ex-German Navy Type 206 submarines. The boats, unlike 12 sisters, did not receive a major modernisation between 1987-92 and have been declared surplus to German Navy requirements. Displacing 500 tonnes, the five boats, U13, U14, U19, U20 and U21, are armed with eight 21 inch torpedo tubes (no reboots). Designed for the shallow waters of the Baltic they should prove useful in the similarly shallow waters of the Indonesian archipelago

Corvettes for South Africa

The South African Navy is once again in the running for a class of corvettes to replace the MINISTER class patrol boats. The new ships will be much larger than the current 430 tonne MINETERS, able to cope with the large seas off the South African coast. The UK is reported to have made an offer to supply 2500 tonne corvettes similar to the LEKIU class fitting out for Malaysia. One part of the deal is that the SAN has been offered the four decommissioned UPHOLDER class submarines at an "attractive" price to replace the SANs aging MARIA VAN RIEBEECK class

UAE

The United Arab Emirates signed an agreement with the Royal Netherlands Navy last year for the transfer of two KORTENAAR class frigates. As is often the case with arms deals in that part of the world, the customer seems to have changed their minds again. While the two frigates will still be delivered the latest thinking seems to be turning towards smaller vessels, with a request for proposals for a class of six missile boats and several corvettes being issued. Exactly how the UAE Navy, with a total strength of 2100 personnel will be able to man these ships, if not, each frigate requires almost 200 crew

BOB HOPE

The US Navy has christened the first ship in a new class of roll on / roll off cargo ships. The 62,000 ton USS BOB HOPE is capable of carrying almost 400,000 square feet of cargo, mostly helicopters, tanks and vehicles, at 24 knots. Once accepted into service BOB HOPE will be used to store pre-positioned US Army equipment and based at the US Indian Ocean base of Diego Garcia where it can be rapidly moved to the Persian Gulf in a crisis. The ship is named after the legendary actor who entertained US troops worldwide in numerous wars for over 50 years.

New British Nuclear Subs

The Royal Navy has signed a contract with GEC Marine for the supply of an initial batch of three ASTUTE class nuclear attack submarines, with an option for two more to follow. The initial order is worth more than two billion pounds. A total of five boats are needed to replace the aging SSWIFTSURE class SSNs. The first boat is not due to commission until at least 2005, by which time SSWIFTSURE will have been in commission for more than 30 years.

Another Majestic Goes

The ranks of aircraft carrier operating navies has shrunk by one with the decision by the Argentinian Navy to scrap the 52 year old VENTENTICCO DE MAYO. Laid down as HMS VENERABLE for the Royal Navy in 1942, she was sold to the Royal Netherlands Navy in 1948 prior to her acquisition by the Argentinians in 1968. Her poor condition and advancing age kept her from playing a meaningful part in the 1982 Falklands War. In recent years she was reported to have been laid up in a poor state of repair, unlikely to ever go to sea again.

Horizon

The Royal Navy is a participant in the tri-nation HORIZON programme to build an air defence vessel to replace the existing Type 42 batch 1 and 2 destroyers, completed from 1976 - 1982. As is the nature of such multinational programmes, HORIZON is already running late and over budget, with the first ship not expected to enter service until 2005. This could see the batch 1 and 2 Type 42s pay off before a replacement is available. Into this scenario has stepped the US Navy, who are rumoured to have offered the RN the lease / loan of five TICONDEROGA class cruisers to tide the RN over until the first HORIZON commissions. The ships reportedly on offer are the first five, fitted with less capable electronics and the older Mk.26 missile launcher instead of the vertical launch systems fitted in latter units. However, the USN are now deciding if they will update the older cruisers, as a cost saving measure.

New Indian Boats

India is reported to have signed a deal for the delivery of two additional KILO class submarines. These will be of a more modern variant than the eight KILO class currently in service. Featuring improved fire control and quieter propulsion, one is scheduled for delivery later this year with the second due in 1998. Such a rapid delivery suggests that the two boats are lying partially completed in Russian yards, unable to be completed for the cash strapped Russian Navy.

Wave Class

The Royal Navy has placed an order for new tankers to replace the 30-year-old support tankers OLWEN and OLNA. The contract, worth some 200 million pounds, was placed with Vickers Shipbuilding and Equipment, for delivery in 2000 and 2001. The new ships, designated Fast Fleet Tankers, will be named WAVE KNIGHT and WAVE RULER. A mixed crew of 22 RN and 80 civilians will be carried.

The Navy. July-September 1997
The three units of the former Hong Kong Squadron (above) will soon be sold to the Philippines Navy.

The restored Qantas Super Constellation makes a low level pass above the USS 'CONSTELLATION' to mark her arrival in Sydney. (ABPHA Alderson)
ANZUS After 45 Years
AE2 Located * Naval Humour * All Compass Points
Colonial Curiosity – The Gunboat "Spitfire"
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- Japanese Submarines since 1954
- Onboard a Farneuse
- ADF Tour Gallipoli
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- Naval News
- Observations
- All Compass Points
- The Navy Revealed
- Book Reviews

Viewpoint

The last three months has witnessed several notable milestones for the RAN in 1997. In July, the senior service celebrated with the launchings of the lead ships for both the Minehunter Coastal project (HULUMI) and the new generation hydrographic ship LEEWIN.

On the historic front, Turkish authorities announced that the remains of the 84-year-old submarine HMAS AE2 had been discovered in the Sea of Marmara by Rahmi M. Koc Maritime Museum, a private consortium. The boat lies at a depth of 85 metres.

On Wednesday, 13 August, the Minister for Defence Science and Personnel, Mrs Brownyn Bishop, became the first female to stay overnight in an Australian submarine. The event took place in South Australian waters aboard HMAS FARNCOMB; second of the Collins class to be commissioned into the Australian Fleet. Describing the conditions aboard her submerged home of 18 hours as "commodious", the Minister also announced that up to 83 females would begin training for the submarine arm in 1999.

On Friday, 22 August, Mrs Bishop also launched the new Defence Industry Internet onboard HMAS MELBOURNE at Garden Island in Sydney. She described the ADC site as "an important new link in taking Australia's defence and technology products to markets around the world."

The new site is accessible via www.adc.gov.au.

We acknowledge Sir Richard Pim, KBE, C DSC (Rtd) as our Patron; His Excellency The Governor of South Australia, Admiral David Leach, AC CBE, LVO, RAN; and Admiral Michael W Hudson, AC RFD, as our Patron, Sea Secretary, the Governor of Western Australia.

The opinions or assertions expressed in The Navy are those of the authors and are not necessarily those of the Federal Council of the Navy League of Australia, the Editor of The Navy or the Royal Australian Navy.

Copy deadline for the next issue is 9th November 1997.
FROM OUR READERS

Farewell "AITAPE"

Dear Sir,

As the first Commanding Officer of HMAS AITAPE during World War II and later during the Independence Defence Force of Papua New Guinea, I am writing to express my concern over the apparent neglect of the warship HMAS MORETON (ex-AITAPE) which was launched in Sydney in 1941 and became the first commissioned ship of the Papua New Guinea Defence Force.

HMAS MORETON was a warship that played a significant role in two world wars. Its story is one of sacrifice and heroism, and it deserves better treatment than what it is receiving.

Yours faithfully,

[Signature]

Dear Sir,

I am a retired member of the Royal Australian Navy and have been following the progress of the HMAS MORETON (ex-AITAPE) project with great interest. I would like to express my appreciation for the efforts being made to preserve this important naval heritage.

As a regular reader of 'The Navy', I was delighted to see the recent article on the HMAS MORETON (ex-AITAPE) project. The project is an important step in preserving our naval history and ensuring that future generations can learn from the sacrifices made by our servicemen.

Yours sincerely,

[Signature]

Dear Sir,

I urge you to consider the following points in your coverage of the HMAS MORETON (ex-AITAPE) project.

1. The importance of preserving naval heritage
2. The need for adequate funding
3. The role of community involvement

Yours faithfully,

[Signature]
Colonial Curiosity – The Gunboat “Spitfire”

Colin Jones

The Building of a Gunboat

During the early colonial period in Australia, all governments supported a variety of vessels for official purposes, but few that could be regarded as warships for this, the existence of a legitimate disciplined force was required, and after the closure of the penal facilities, it was not considered necessary.

The defence of the country as a whole rested on the history of the Royal Navy, and the residual garrison forces of the British army. Nevertheless, the absence of permanent local forces worried the colonial administrators, especially in view of the inadequate state of such coastal gun batteries as existed.

The main defence of Sydney, it seemed, resided in the paddle sloop Acheron, whose 16-pdr and 4-pdr guns would be the main force available to repulse an enemy for his part, Sir William Denison, the Governor of New South Wales, judiciously strengthened the defences of Sydney with the building of the Pinchgut fort, which was named in his honour on its completion in 1857. As he wrote,

You laugh, and with reason, at the panic which led people in these colonies to insist upon fortifying themselves against the Russians. I never partook of this panic, but I have gone into the question of the defence of Sydney for the purpose of keeping off much more unpleasant neighbours than the Russians, namely, our friends the French, and our relations the Americans.

Whether a panic move, or one done on consideration, the other action was the building of a gunboat. By the 1850s, the Navy had persuaded the whole operation of the British fleet, and the building of a sailing gunboat was a real worry, but for New South Wales it was a practical and swift solution to the problem of fascing defence. A local shipbuilder, John Cuthbert, had a yard at Darling Harbour, and he had already built for the government a sailing vessel named Lady Denison. He was given the contract to design and build the gunboat.

So it was that the ketch Spitfire was launched at Cuthbert’s yard, at Millers Point, on 4 April 1855, in the presence of the Lieutenant, Captain Brown and Mr Moranty. Her construction had been gratifyingly swift. Cuthbert’s yard could launch a vessel like this two months after the laying of the keel. She was intended to carry one 18 lb 3-pdr. (13-pounder) on a traversing carriage, the rail and bulwarks on either side being so constructed as to allow of their being lowered at any time so as not to impede the firing in any direction. The following description indicates her size and build:

Dimensions, tonnage and layout

<table>
<thead>
<tr>
<th>Tonnage</th>
<th>Measurement (burthen)</th>
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<tr>
<td>60 tons</td>
<td>(not actual length of keel)</td>
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<thead>
<tr>
<th>Beam (m)</th>
<th>Moulded (to outside of frames)</th>
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<td>16'</td>
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<table>
<thead>
<tr>
<th>Depth of hold (ft)</th>
<th>Later noted as 6'6&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>7'3&quot;</td>
<td></td>
</tr>
</tbody>
</table>

draught (ft) | 5'6" (designed) strengthened to take one long 32 pounder (9'6")

build & layout

ketch rigged, raked stem and square counter stern, keel of ironbark, frames of blackbutt, kauri planking, copper fastened throughout and sheathed with 12oz copper. A small cabin aft, and other accommodation, for a maximum of about 12 persons. As a pilot vessel she needed to be roomy enough to take a buoy on board and she usually carried a whiteboat.

The only known picture of her is an etching first reproduced in the Illustrated Sydney News of 14 April 1855 (and a sketch produced by naval historian, the late Mr. John Bastock – Editor). The 1855 etching is probably speculative to a degree, as she would probably not have had her mast in her before the sketch was published. The weight of evidence points to her being rigged as a schooner, certainly by 1857 and possibly by 1856. The well-known photograph of a ketch moored as a buoy by the Endeavour Tree in Cocktown and dressed with flags, does not show the Spitfire but is actually the Pilot.

The Early Life of the “Spitfire”

A question hangs over the early years of the Spitfire, as a schooner fitted with topsmasts and rigged with hemp except for wire main stays. Her owner in 1896 noted that she had formerly been fitted with a running bowsprit, which was drawn in as sails were reefed.

Moreton Bay was the Cinderella area of the colony, where the government in Sydney only spent money if it had to. The navigation could be very dangerous, certainly for the unwary, as witnessed by the ship Phoebe Dunbar which was stranded at Amity after mistaking Point Lookout for Cape Moreton in May 1855. Nevertheless, a lighthouse was under construction, and the Spitfire carried the lantern and other gear from Brisbane to Moreton Island. The light was formally proclaimed on 29 January 1857.

Moreton Bay Pilot

In 1857 the schooner Pearl, which had been purchased the previous year, was surveyed and found to be in need of repair, so she was replaced as pilot vessel for Moreton Bay by the Spitfire from December 1857 to May 1862. Captain Moreton was her master, and she was worked by a crew of five. The pilot vessel had other duties when not attending to the shipping, as she was responsible for the buoys and markers in the bay, as well as for the lightship Rose.
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[Image of a ship]

The Navy, October-December 1997

Colonial Curiosity: The Gunboat "Spitfire"

The gunboat "Spitfire" was a small vessel used by the Royal Navy in the 19th century. It was named after the Spitfire, a type of military aircraft.

In August 1860, the ship was commanded by Lieutenant John Smith. During this time, the ship was involved in surveying the coastline of Queensland.

The ship was later transferred to the Queensland Government, and it continued to serve as a survey vessel until it was decommissioned in 1884.

The "Spitfire" is an example of the early days of maritime exploration and surveying, and it played a significant role in the development of Australian waters.

[Image of the "Spitfire" ship]
A report on the Spitfire said that she was much improved as a schooner compared to how she had been as a ketch, "an excellent seaboat although rather too small."

In 1873 she was dismasted and almost lost in a storm, but was saved owing to the efforts of Pilot William Woods. In weather too thick to allow her to be seen from the lighthouse, she rode out a south-easterly gale at anchor in five fathoms of water off dangerous sandbanks for three days. She was subsequently refitted and remasted, replaced meanwhile by the schooner Ethel. It should be noted, however, that at no time, including the Russian war scare of 1878, was she ever considered for reversion to her original role as a gunboat.

Cooktown Pilot

The Palmer River gold rush of 1873 was a phenomenon in Queensland, and led to the foundation of the town of Cooktown. Increasing trade in the far north soon called for the services of a sailing pilot vessel, and the Spitfire was chosen. She was replaced at Brisbane by a new schooner, the Governor Cairns, a significantly larger vessel, 78 feet in length, which arrived in 1879. The desire of the pilots for a fast vessel was illustrated by their alterations to the new schooner immediately upon her arrival in Brisbane. They raised the height of the masts by four feet. Probably they had already done something similar to the Spitfire.

The north is a different environment to Moreton Bay. There is the ever-present danger of the coral of the Great Barrier Reef, and also the strong trade winds against which sailing vessels found it very tedious indeed to beat. The Spitfire therefore, though intended to be used for pilotage and the servicing of buoys, beacons and lighthouses for much of the innace passage, in practice found herself confined to within a safe distance of her base. One early task was to investigate the Cape Squirrel area where there had been reports of a white woman living among the blacks. No trace of her was found. A rather more tragic task was for her to bring back the remains of Mrs Watson, her child and her servant after their death from thirst on Hinchinbrook Island in January 1882. The story of the heroes but futile escape from murder by the natives at Lizard Island was to be told for generations to come. The Spitfire also brought back the survivors of the German steamer Freya, which had been wrecked, after sailing from Cooktown, on Oyster Reef in October 1882.

The north was very much less civilised, also, than the Moreton region. When the first stage of the Cooktown railway was opened, 31 miles to Normandy Creek, in 1885, it was still possible for workers to be attacked by Aborigines. Still, the reach of the government was long, and the Pearl was used to take officials to Port Moresby to claim New Guinea for Queensland on 4 April 1883.

For the Spitfire, though, it was almost the end of the road. In 1883 she was replaced as the Cooktown pilot vessel by the Ethel, a vessel which was regarded as more efficient for general service. Then in 1885, considered not worth cost of repair, she was sold out of government service for £300 and became a bêche-de-mer fishing vessel. The Ethel herself was replaced in 1887 by the Governor Cairns.

The Last of the "Spitfire"

The new owner of the Spitfire was Alex Matthewson, but he sold her in 1889 and she was sold again in 1892 to a partnership of Daniel Moynahan and S. Andreassen. They were by trade a shipwright and a sailmaker respectively, and they found that the old vessel needed some attention. On 26 January 1896 the barometer fell to 29.26 inches and the Spitfire was lucky to escape with just the loss of its masts off Hinchinbrook Island in Cyclone Sigma. They saved some of the sails and brought her into Cairns under jury rig. After that they sold her. The bêche-de-mer fishing went hand in hand with the pearl fishery in the north, and both involved a large number of vessels. They were all desperately vulnerable to the weather. The entire pearling fleet, over 100 vessels, was to be lost in Cyclone Mahina in March 1899. But the Spitfire was no longer there to be lost. The newspaper reported.

The Japan mail steamer Omi Maru, which arrived from Brisbane today, brought news of the loss of the schooner Spitfire. The steamer picked up the master of the schooner, Mr Andrew Allison, off the Queensland coast. He reported that the vessel sprung a leak, and he fired off an "L" near Piper Island lighthouse. No lives were lost. The Spitfire was built as a gunboat for Sydney at the time of the Crimean war. She was afterwards, for many years, a pilot vessel at Brisbane and Cooktown. Subsequently she was sold, and was in the bêche-de-mer trade when lost.
### SUBMARINES & THE ADF

**by Navy Leader**

The RAN is spending a very substantial sum on building six Collins class submarines. There is the possibility that a further two will be ordered.

Although they are armed with torpedoes and sub-surface to surface anti-ship missiles, the primary role of the Collins class is reconnaissance. To do this they are equipped with seven different types of sonar, an electronic warfare mast and a radar mast. The signals received from these are classified by computer and used in the Collins own fully integrated combat system and, where appropriate, passed to other ADF vessels and aircraft by the link 11 combat data communications system. Reconnaissance reports are also passed through the Etmouth Gulf naval communications station. Although they are very well equipped for their primary reconnaissance role, the Collins class has, relatively low priority. This was in spite of the fact that diesel electric submarines have been increasing their capabilities for some time. Regional powers have been acquiring more submarines - in many cases new and more modern submarines.

Moreover, they are increasing their ASW capabilities. In these circumstances, a review of the ADF's ASW modernisation plans shows that, although a number of steps are being taken, these steps are not being taken quickly enough.

The programmes include:

- A new generation of heavy weight torpedoes for the Collins class submarines (Studies have been approved, but no decision to buy the torpedoes will be made until 1999/2000).
- Airborne light weight torpedoes for the Collins class submarines. Studies have been approved, but no decision to buy the torpedoes will be made until 1999/2000.

These plans represent one step in a much needed and overdue increase in priority accorded by the ADF to anti-submarine warfare (ASW).

For some years, ASW has not been accorded a mark 48 mod 4 anti-submarine and anti-surface target torpedoes are approaching obsolescence. There are plans to replace them with a new generation of submarine launched heavy weight torpedoes. These plans represent one step in a much needed and overdue increase in priority accorded by the ADF to anti-submarine warfare (ASW).

The Navy, October 1997

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Orons and RAN Seahawk helicopters with an active sonobuoy. While this shows promise, this development is in the prototype stages.

- Mines for the Collins class to enable them to 'mine in' opposing submarines into their bases. In this case, progress is strong, with a request for tender expected later this year.

The big gaps are in the sonar equipment of RAN surface combatants and in the lack of dipping sonars for RAE helicopters.

Although improvements can be made in the hull mounted sonar sets in the Anzac class FFGs (which have Raytheon SQS-56), and the Thomson Marconi Sphynx 8s in the Anzacs, this is an up-to-date hull mounted sonar, the range at which any hull mounted sonar can be effective is limited - and shorter than the range of most submarine launched torpedoes. It is generally accepted that hull mounted sonar is approaching its maximum development potential.

The big opportunity for the surface ship to recover its defences against the submarine is in improved dipping sonars for its helicopters.

In this area, there has been a major technological breakthrough. The latest helicopter borne low frequency dipping sonars can now achieve ranges far in excess of their predecessors. This comes at a time when the RAN has removed its AQS-13B dipping sonars from their Sea King helicopters. At this stage, there are no plans to replace the Sehawks with a modern dipping sonar such as Allied Signals Ocean Systems' HERAS or the Thomson Marconi FLASH.

One very authoritative RAN source has stated that a number of regional powers in the near north are undertaking major upgrading to their ASW capabilities. A number of regional powers (Japan, Taiwan, India, China and Pakistan) naval helicopters are already equipped with dipping sonars. One, South Korea, has ordered AQS-18B for its Lynx helicopters. These navies have expressed interest in acquiring HERAS.

HERAS was demonstrated to the RAN in the Timor Sea - one of the world's most difficult sonar environments - and achieved ranges very substantially in excess of anything achieved by the Sea Kings: AQS-13B.

The Italian Navy aircraft carrier GIUSEPPE GARIBALDI undertook an exercise in a cleared area in the Mediterranean using a helicopter with HERAS deployed to locate the submarine (a modern, very quiet Italian diesel electric boat). The trial was extremely successful.

There is no doubt that the RAN should and will explore all alternative methods of low frequency active sonars. These will include both Thomson Marconi Sonar's FLASH, Raytheon/Hughes AFS (in which Thomson Marconi Sonar plays an important part) and Allied Signal Ocean Systems' HERAS.

However, at this stage there are no firm plans to acquire dipping sonars for the RAN's helicopters. A decision to undertake the inevitable studies is due in 2000. Under current plans, actual delivery of modern low frequency dipping sonars is unlikely before 2004.

The RAN needs a strong ASW capability to undertake its own ASW operations and to exercise the Collins class boats in evading modern ASW sensors. Unless urgent action is taken to acquire modern dipping sonars, and to accelerate the other programmes, the RAN will have the world's most capable diesel electric submarines but be without the opportunity to train them to operate against regional ASW forces equipped with modern dipping sonars.

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**The Navy, October-December 1997**
FLEET LAUNCHINGS

By Ross Gillett

For the Royal Australian Navy the month of July witnessed the launchings of two new ships for the Fleet. The first was conducted in Cairns, northern Queensland on 19 July and the second, the coastal minehunter, HUON, in Newcastle six days later.

"LEEWIN"

The first of two new 2500 tonne hydrographic ships currently being built for the Royal Australian Navy, LEEWIN was launched from NQEA Limited's shipyard in Cairns on Saturday, 19 July. The Minister for Defence Industry, Science and Personnel, Mrs Bronwyn Bishop, addressed shipyard personnel which provides an estimated 300 jobs in the local area.

The Australian Hydrographic Service provides accurate charts and Notices to Mariners for all ships, yachts and boats which operate in our sea lanes, on the continental shelf and in estuaries around Australia.

The Wollongong-based Australian Hydrographic Office has responsibility for an area equal to about one-eighth of the earth's surface.

"HUON"

HUON, the leadship of six HUON class minehunters AFC Limited is currently building for the Royal Australian Navy was formally launched at its Newcastle construction facility on 25 July. The naval event was attended by more than 1,000 guests and workers including senior Australian defence force personnel, international defence industry and Newcastle community leaders and the minehunter construction workforce.

The Minister for Defence, Mr Ian McLachlan, provided the key address at the launch. The new minehunters are named after Australian rivers, with HUON, the first of class, named after the Tasmanian waterway. HUON was launched by Mrs Betty Norris, wife of the Mayor of the Huon Valley Council in Tasmania. A state-of-the-art combat system will make the HUON class the most advanced minehunters in the world today. The sonar system fitted to each ship will locate and classify threatening mines, then, employing the remotely operated disposal system, will place a charge alongside the mine. The new ships possess far better sea-keeping capabilities that the older RUSHCUTTER and SMIDALWATER, currently in service with the mine warfare force.

The $1.2 billion construction program is on target to meet the Navy's schedule and is within budget. The hull and bulkheads of the second minehunter, NORMAN, have been completed and outfitting is progressing well. Construction of the hull of the third ship, NORMAN, is complete and the laying of the keel of the fourth minehunter, GASCOW, was performed on 13 September. LCDR Geoff Uren, has been selected as HUON's first commanding officer. LCDR Uren has previously been selected as a mine hunter and patrol boat during his 18 year career with the Royal Australian Navy. During exchange with the US Navy, he spent six weeks on the command staff of a mine clearance operation following the 1991 Gulf War. More recently, he has been to sea on the Italian Navy's Gaveta class minehunters upon which the HUON class is based.

HUON will have a crew of 38 comprising the commanding officer, five officers, six senior sailors and 26 junior sailors. Twelve technical crew members commenced training for the ship in Newcastle in August. They will be followed in November by another 22 operators, including Lt Commander Uren.

All six HUON class coastal minehunters will be homeported at HMAS Waterhen in Sydney. HUON is expected to enter service in early 1999, with sea trials from April 1998 and delivery to the Navy eight months later, in December.

The first HUON was a river class torpedo-boat destroyer which was built at Cockatoo Island in Sydney. She served during the Great War and in the 1920s.

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Fleet Launchings

"HUON" after launch. (Photo - DbePH Antaltonette)

"LEEWIN" on 25 July, 1997. (Photo - DbePH Tomasz Arturkoski)

"MELVILLE" prior to launching. (Photo - DbePH Tomasz Arturkoski)
HMAS AE2 LOCATED

Found after 82 years - Australia's unsung naval hero of Gallipoli, the submarine AE2, which first pierced the Dardanelles to expose the Turkish flank during the Great War. Identified by sonar or images lying upright and partially covered by silt and fishing nets in 80 metres of water in the Sea of Marmara behind Gallipoli, AE2 is a significant Australian maritime historical discovery.

"It was eerie being the first person to see the AE2 since she was scuttled by her crew 82 years ago," said Seiçük Kolya, the Istanbul museum director whose dogged underwater detective work has finally located and photographed the first submarine captained by the flamboyant Irishman Lieutenant-Commander H.G. Stoker. AE2 created naval history for Australia - breaching the narrows of the Dardanelles against mines, currents and strong Turkish fire from afloat and ashore.

AE2 arguably then changed the entire course of the Gallipoli campaign. Stoker's message to Allied headquarters that he had breached the narrows arrived on the night of April 25, 1915, just as Allied commanders were assessing the disastrous landing, and deciding whether to press on or pull out.

The signal swayed the decision in favour of staying, and led to the famous message to Australian troops from General Ian Hamilton to "dig, dig, dig", the origin of 'digger'.

Five days later, after attacking Turkish shipping and being constantly pursued, AE2 was hit by a shell from the Turkish gunboat Sultan Hesper.

Stoker and his Australian/British crew scuttled AE2, but were rescued from the sea only to spend the next three years in Turkish prisoner-of-war camps. All attempts by both Turkish and Australian authorities to locate the boat over the years had failed, because Stoker had probably given misleading co-ordinates to stop the enemy finding what was then a state-of-the-art piece of military equipment.

Seiçük Kolya, Director of the Rahmi M. Koç Industrial museum took a different tack with his investigations, culminating in him finding Stoker's relatives. One aged aunt, Primrose, told him Stoker in his latter years would shout "north" in his sleep. Searching north of the sinking sites recorded by British and Turkish naval authorities he finally found the RAN's AE2.

His exploratory dives on the hulk revealed that she was basically standing upright, although the conning tower had fallen to one side after the steel rivers corroded.

It was a great thrill to be the first person to step on her in 82 years," he reported. "The water around is muddy and she is smothered by the many fishing nets she has entangled over the years."

Mr Kolya is keen to raise AE2 in a joint venture with Australia, and display it in Istanbul's Koç Industrial museum. This would create a dual attraction, with Gallipoli's Anzac Cove, for the growing pilgrimage to Turkey.

Cruisers

All of the cruisers built for the RAN were named after either Australia, in the case of the large cruisers, or capital cities, for the light cruisers. CANBERRA, a heavy cruiser, carried the name of the nation's capital.

Cruisers transferred to the RAN by the Royal Navy retained their original names whilst serving with the Australian fleet.

Torpedo Boat Destroyers

The first three TBDs, PARRAMATTA, YARRA and WRARREGO, were named after rivers with a distinctively Australian name. The second group of three, HUNI, TORRES and SWAN were named after rivers carrying non-indigenous names.

Australian authorities had fallen to one side after the steel rivers corroded. Mr Kolya estimated it would cost about $531 million to raise, clean and put AE2 on display, although tentative Australian estimates are higher. He has applied to the Turkish Government for salvage rights, which have already been approved by the Turkish Navy.

Australia has indicated to Ankara it believes the submarine could be designated Australian property under international law.

The Turkish governor "Sultan Hisar", responsible for the loss of HMAS AE2.

ITOLUS AE2, alongside Garden Island in 1914.

WHAT'S IN A NAME

By Joe Strzezek

Colonial Ships

The ships of the Colonial navies carried a mixture of names with origins ranging from Greek mythology through to names with indigenous connections.

When the surviving vessels were transferred to the RAN they retained their original names, although in the case of CERBERUS and PROTECTOR these ships were re-named to reflect a changing role late in their careers.

E Class Submarines

In line with RN practice the two submarines were not named. They were identified as AE1 and AE2. The prefix A being used to indicate they were modified E class submarines built for Australia.

WWII Requisitioned Craft

These craft retained their original names.

GIFT Fleet

After the Great War the Admiralty loaned the RAN a number of ships to replace the smaller units which had seen extensive service or had been lost. These included the destroyer leader ANZAC, S class destroyers - WARRAMUNGA, WARRAMUTA, WARRAMUDDO, SUCCESS, TASMANIA and TATOOSH; flower class Sloops - GERANIUM, MALLOWS and MARGUERITE; J class Submarines - J1, J2, J3, J4, J5 and J7, and the sloop SILVIO. With the exception of SILVIO (renamed MORESBY) all retained their former names.

Records indicate that the Naval Board did consider renaming the S class destroyers after DARWIN, PREMATURE, RABAIU, LAUNCESTON and MORESBY respectively. SILVIO was renamed, with Admiralty approval, MORESBY in honour of Admiral Moreby's survey work. The names COOK and BASS had also been suggested.

Scrapping Fleet

In 1933 the RN agreed to loan the RAN replacements for its destroyed floatilla. The new ships; STUART, VAMPIRE, VOYAGER, VENDETTA and WATERHEN again retained their original names.

O Class Submarines

The Admiralty had advised the Naval Board that starting with the O class all RN submarines would be named. The two Australian boats, originally designated A01 and A02, were subsequently named OXLEY and OXLEY respectively.

II Class Destroyer:

In selecting names for the II class destroyers the RN considered names must be easy to pronounce, easy to spell and the name should come from a significant theme or national pride. The two first names selected were TRIBAL and ARUNTA. These ships were loaned from the RN and retained their RN names.

Requisitioned WWII Craft

These ships; NAPIER, ZEAM, NESTOR, NORMAN, NELSON and QUALITY, QUADRANT, QUEENBOROUGH, QUEENBEROW and QUICKMATCH, were loaned from the RN and retained their RN names.

N and Q Class Destroyers

These ships; NAPIER, ZEAM, NESTOR, NORMAN, NELSON and QUALITY, QUADRANT, QUEENBOROUGH, QUEENBEROW and QUICKMATCH, were loaned from the RN and retained their RN names.

"Bathurst" Class Australian Minelayers (Corvettes)

These ships: BATEMAN, BATHURST, BRAWN, BUSHMILL, BURBANK, BURLINGTON and BURMESTER, were loaned from the RN and retained their RN names.

 STATUS

New Zealand Nelson and Australian Bannockburn are among those destroyers loaned from the RN and retained their RN names. In cases where this may have resulted in confusion with ships already in service the name was changed.

"Bathurst" Class Australian Minelayers (Corvettes)

The 56 Bathurst class corvettes to...

The Turkish governor "Sultan Hisar", responsible for the loss of HMAS AE2.
In the RAN were all named after major regional centres. Given the numbers involved a good geographical spread of names was obtained. Of these ships a few were renamed prior to commissioning. These were Whyalla originally Glenelg, Gawler originally Gambier, Parker's originally Mudgee and Colac originally Hamilton.

"River/Bay" Class Frigates

This group of frigates have been described as either River or Bay class or Modified Rivers. All except two of the ships authorised for construction were named after Australian rivers, so perhaps they should be designated a River class.

The ships were approved in two groups. Of the first group, Cyclone was originally named Murray and Warburton was originally named Roger. Warburton and Murrumbidgee were cancelled. All of the second group were cancelled except for Condamine. Within the second group were two frigates to be named Balmain and Williamstown. These were named after the municipalities where the ships were to be built.

"Battle" Class Destroyers

The two Battle class destroyers were named after famous Australian battles; Anzac was originally to have been named Matapan.

Landing Ships Tank

Six ESLs were on loan to the RAN from the RN in 1948, and in line with the new RN practice, three of these ships were named after famous landings in the south-west Pacific area during World War II.

Aircraft Carriers

Australia's first aircraft carrier, ALBATROSS was named after a sea bird whilst the other two were named after capital cities, Sydney and Melbourne. Vengeance was on loan and so her RN name was retained.

"Daring" Class Destroyers

Originally the four Daring class destroyers were allotted the names of the wartime V and W destroyers, Waterhen, Voyager, Vampring and Venture. Of these Waterhen was cancelled and Voyager lost after colliding with HMAS MELBOURNE. HMAS DuCROSS was loaned to the RAN as a replacement and retained that name in RAN service.

"Type 12/River" Class Frigates

These ships carried on the tradition of naming sloops/escorts after Australian Rivers, although the final pair were technically not Type 12. Generally the class has been described as the River class.

"Oberton" Class Submarines

These boats carried on the tradition of having all their names start with the same letter. Of the six boats only Orion had no real Australian connection.

Guided Missile Destroyers

Named after the cities of Perth, Brisbane and Hobart.

"Ton" Class Minesweepers/Minehunters

On acquisition by the RAN these vessels were named after water birds.

"Attack" Class Patrol Boats

All names start with either the letter A or B. Those which were destined specifically for the PNG Division of the RAN were named after towns in Papua New Guinea.

"Freemantle" Class Patrol Boats

Carry names previously carried by Bathurst class corvettes.

Guided Missile Frigates

Named after Australian cities. Darwin and Newastle are the first ships to carry these names in the RAN. Newcastle is also the first RAN ship not to carry forward Battle Honours won by an RN ship of the same name.

Support Ships

The naming of support ships appears to have been more haphazard than for other vessels. HMAS Supply was originally named TIDE ASTRAL, in keeping with RN naming for this class. Stalwart and Success were named after 5 class destroyers and Westralia carries the name of the Second World War LSI. Earlier support ships have been PLATYPUS, KURUMBA and BULGUGA.

Hydrographic Ships

Purpose built marine science craft have been named after early navigators and ocean explorers. These ships which were converted to the role normally retained their former name. The current Survey Launches carry names of ships previously involved in marine science or hydrographic work. The two new medium hydrographic ships which are currently under construction are named for large coastal features, Cape Leewann and Melville Island.

Minewarfare Craft

The Bay class MHSs are named after the Dhowahler and Rushcutters Bays. Those of the class are: HUON, HAWESBURY, GASCOYNE, DIAMANTINA, YARRA and NORMAN; carry names of Australian rivers.

The Auxiliary minesweepers purchased by the RAN have been named after First and Second World War requisitioned minesweepers; Kooraga, Gununjal and BenaNgalu.

Amphibious Warship Frigates

The post-war amphibious ships all carry names connected with Second World War amphibious operations, in the case of the LCHs, or operations in which there was significant naval support for the Army. TوبرUK. The two LPHs carry the names of the Second World War ESLs Ranjiuma and Manocka.

"Anzac" Class Frigates

The first four Anzac frigates are named after famous Australian destroyers; Anzac, Arunta, Warramunga and Stuart. The second group of four carry names of Australian cities; Parramatta, Toowoomba, Ballarat and Perth.

"Collins" Class Submarines

These ships are named after famous RAN figures and are the first ships in the RAN to be so named.

ANZUS AFTER 45 YEARS

By Andrew Robertson

Given recent questioning of the relevance of the ANZUS Treaty today, the public seminar held at Parliament House, Canberra on 11/12 August, 1997 by the Defence Sub-Committee of the Joint Standing Committee on Foreign Affairs, Defence, and Trade was timely and of particular interest and importance.

Chaired by Senator D MacGibbon, the seminar consisted of papers presented by 19 speakers, including Ambassadors and Members of parliament, academics, military and retired military officers, public servants, industrialists and historians. A video conference with the President of the Asia-Pacific Policy Centre, Mr Doug Paul, the Foreign Policy Advisor US Pacific Command, Ambassador Richard Turn, and Dr Bill Too, Reader in International Relations, University of Queensland, was also set up.

The introduction to the seminar was given by the new US Ambassador to Australia, Ambassador Genta Hawkins Holms who, against the historical background, outlined the positive features of the Treaty including its brevity, flexibility and adaptability and how its principles had stood the test of time. The Ambassador pointed out that the ANZUS Alliance has been a key element in the positive growth and development of the Asia-Pacific and quoted Prime Minister Howard's recent speech in New York:

(Australia's) close association with the United States has underpinned not only our security but also our stability. But most importantly it has given us an opportunity to share values across the Pacific, to share those fundamental beliefs of personal liberty of individual effort, of a just society and a belief that it is appropriate always to aspire to the ideal of a better world.

The US Ambassador stated that ANZUS provides a framework for co-operation in many areas - exchange assignments, ship visits, and joint exercises. These last were vital in terms of readiness and interoperability.

Australia is the key southern partner in our Asia-Pacific bilateral security arrangements - that is as true today as it was over forty years ago.

We will continue our military presence in the Asia-Pacific, both in terms of forward-deployed forces and our commitment to maintain about 100,000 troops in the region. For that presence acts as an incentive for continued development, stability and peace. Our five bilateral treaty alliances are key in providing the stability necessary for political, economic and social development in Asia, she said.

In the subsequent session the history and content of the Treaty were examined with particular emphasis on the Treaty requirements for continuous and effective self-help and mutual aid. The President explored those issues to which the agreement to consult whenever the US force was now below a credible minimum. The New Zealand Defence budget has fallen by 30% since 1990 and the view was expressed that New Zealand was not pulling its weight in our bilateral relationship and its defence force was now below a credible minimum.

The Joint US/Aust Facilities at NW Cape, Narrungar and Pine Gap were considered. NW Cape, important for submarine communications, will revert fully to the RAN in 1999, being already entirely manned by Australians. Narrungar is in close to being cancelled and operations in Pine Gap. This last enhances and complements our own intelligence capability.

The subject of the effect of our membership of ANZUS on South and East Asian countries was discussed. In general this was seen as being advantageous and did not seem a cause for concern with ASEAN nations. The disagreement between New Zealand and the US over the visits of US warships was a cause of considerable concern to Australia and created many problems. The US view was that New Zealand must repeal its anti-nuclear legislation or the tap remains turned off. Australia tried to maintain its military links with both countries but the need to organise separate exercises with New Zealand threw a great strain on Australia's planning capabilities. New Zealand continued to play an international role as witness its efforts in Cambodia, the Gulf War, Bosnia and now in Papua New Guinea, though its armed forces suffered considerably from no longer being an effective member of ANZUS.

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“ALBION” and “BULWARK”

British LPDs Take Shape

Following protracted negotiations, the contract to build two new amphibious dock transports (LPDs) was awarded by the UK Ministry of Defence (MoD) to VSEL on 18 July last year. Details of the design of these ships, to be named HMS Albion and HMS Bulwark, were revealed at the June 1997 Royal Institution of Naval Architects (RINA) conference on “Air Power at Sea”.

The new LPDs will be the first large surface warships built at VSEL’s Barrow in Furness yard since HMS Invincible was completed in 1978. They will replace HMS Fearless and HMS Intrepid “early in the next century”, with the first steel to be cut in November 1997.

With a docking well and stern gate, roll-on-roll-off (ro-ro) decks and access side ramps, the new LPDs will have a similar payload of troops, tanks, vehicles and equipment to the 158m Fearless class. They will, however, be larger.

- **Displacement:** 14,600 (full load 17,000)
- **Dimensions:** 176m (oa) x 28.9 x 6.1m (full depth 6.5m)
- **Machinery:** 2 shaft diesel-electric, 15.62 MW
- **Speed:** 18 knots
- **Armament:** 2 CIWS
- **Complement:** 650

The hull structure is designed to meet Lloyd’s Register Rules for eating ice. Six Class 1, IWS for unrestricted service, with scantlings generally well in excess of naval structural codes. However, warship features such as a nuclear, biological, chemical defence (NBCD) citadel are included. Using a modern ferry form with a bulbous bow as the basis, the hull has been optimised, using computerised fluid dynamic (CFD) techniques to compute for the docking well aft and heavy vehicle loading forward.

Albion and Bulwark are believed to be the first Royal Navy surface warships with a fully integrated diesel-electric propulsion system. This has been contracted to UK-based Ceg aficionados Projects of Rugby. Four Waltersta Vasa diesel engines (two Type 1632 developing 61250kW and two Type 4532E rated at 1560kW each) will generate 16.2MW power to supply current to a pair of 6MW synchronous variable-speed propulsion motors driving twin shafts with 4m diameter fixed-pitch propellers. A 108kN bow-thruster will also be fitted for slow speed maneuvering.

The platform management system (PMS) for both machinery control and damage control has been contracted to CAE Electronics, the Canadian company responsible for the Canadian Navy’s “City” class frigates’ machinery control system and US Navy battle-damage control systems.

The ADAWS 2000 combat system is based on the ADAWS system used in the Birmingham class destroyers and the Invincible class carriers, and is similar to the system selected for the new amphibious assault carrier Ocean. A Siemens-Philips type 996 surveillance radar will be the main sensor, with two Kelvin Hughes Type 1007 radars for navigation and helicopter control.

For self-defence the ships will be armed with a 30mm Goalkeeper close-in weapons system (CIWS), one forward and one aft, two single guns (had to be 20mm, but more likely to be 30mm Mk 1), an electronic support measures (ESM) system and decoy-launchers. - Antony Preston

**Naval News**

**‘Notices To Mariners’ Go On-Line**


As well as providing general information about hydrography and the AHO, mariners will be able to read the latest Notices to Mariners on-line. All recent changes and the latest information for the official Australian charts and publications can be viewed from the Web.

The site will also list all the charts of Australian waters, where charts and other publications such as tide tables can be bought, prices, and information on the latest products and developments.

The Hydrographic and head of the Navy’s hydrographic service, Commodore Robert Willis, announced the opening of the AHO website.

He described the on-line Notices to Mariners as “another practical example of how the AHO is serving the mariner and safety at sea in the electronic age”.

“We publish Notices to Mariners fortnightly so that mariners can keep their charts up to date using the latest important information which we have in the Hydrographic Office,” he said. “Chart users can now get this information from their computers rather than waiting for the mail or visiting their local chart agent. Sailors can also e-mail any new information which they think should go on the charts.”

Commodore Willis said that another recent example of maritime developments was the publication of the AHO’s Seafarer electronic charts.

These are identical copies of our official paper charts which can be used in standard PC or laptop systems, he said. “Seafarer also has a Notices to Mariners service which allows new information to be applied automatically to the charts. You can find all out the details on our website.”

**China Visit**

The Australian warships, HMAS “PERTH” (destroyer), HMAS “NEWCASTLE” (frigate) and HMAS “SUCCESS” (replenishment oiler) arrived in Qingdao, home port for the PLA Navy’s Northern Fleet, on Friday 29 August.

A combined 21 gun salute heralded the arrival of the ships, to mark the first RAN visit to China since PARRAMATTA in 1986. The ships remained in Qingdao until 3 September when they sailed for the Republic of Korea for a short visit. As well, Rear Admiral Chris Ritchie, Maritime Commander Australia, visited China to coincide with his ship’s visit, involving more than 750 crew members.

The visit is another step in the developing of defence relationships with China. The Prime Minister of Australia, Mr John Howard, during his visit to China in March-April this year, agreed with President Jiang Zemin, to step up the level of defence contacts between the two countries.

Defence activities between Australia and China now include annual dialogue at Vice Chief of Defence Force level, high level visits (Chief of Defence Force...
General John Baker visited China in September 1996 to be followed by the Secretary, Department of Defence, Mr. Tony Ayres in September, 1997. Other contacts have included military staff college visits and a range of other working level contacts.

The recent ships visits, together with other activities over the past 12 months, represented the most substantial level of defence interaction Australia has had with China since the establishment of diplomatic relations in 1972.

Transfield Shiplift Purchase

The Department of Defence has finalised the sale of its shiplift interest located south of Fremantle in Western Australia to Transfield Defence Systems (TDS) Pty Ltd.

The WA Marine Support Facility was commissioned in January 1989 under a three-year arrangement between the WA government, the Department of Defence, and WA company, Australian Shipbuilding Industries. TDS exercised its right as the long-term owner of the equipment to purchase the WA Marine Support Facility on a commercial basis. The sale makes provisions for third party access, representing a significant asset for support of the Royal Australian Navy (RAN) in the west.

The facility can accommodate vessels up to 8000 tonnes, so it remains capable of providing support for RAN vessels based at HMAS Stirling, south of Perth.

Persian Gulf where she was part of the United Nations force imposing sanctions against Iraq, REGINA was in the company of the US Navy destroyers PAAU and FOSTER and the guided missile frigate INGRAHAM.

Eight Nations in Australian Maritime Event

Ships, aircraft and more than 6000 military personnel from eight South East Asian countries joined forces in a major Fleet Concentration Period (FCP) in northern Australian waters from 28 July to 15 August.

Maritime units from the defence forces of Australia, Indonesia, Malaysia, New Zealand, Singapore and Thailand gathered in the Timor Sea for a range of training activities and manoeuvres aimed at developing the ability of regional maritime forces to operate with Australia.

Observers from Brunei and the Philippines also attended. The FCP was the third Fleet Concentration Period in the Kakadu series, following the success of the first one conducted in 1993. The current exercise represented more than twice the number of maritime assets and personnel as KAKADU 1.

Centred on Darwin, the FCP provided the opportunity for bilateral activities between Australia’s maritime forces and its South East Asian neighbours. Apart from general training in damage control and communications procedures and interaction between air, surface and subsurface assets, the FCP provided a wide range of other opportunities including personnel exchanges and work in explosive ordnance disposal techniques used by clearance divers.

FCP KAKADU 1 involved 26 ships, two submarines and maritime patrol and fighter aircraft and helicopters.

Last of the Line

The handover of the Pacific Patrol boat FSS "INDEPENDENCE" to the Federated States of Micronesia at Transfield Shipbuilding WA last May was the end of an era.

FSS INDEPENDENCE was the 22nd and last Pacific Patrol Boat to be handed over to Pacific nations in the current build of this 12 year project, the largest Defence co-operation project financed by the Department of Defence, International Policy Divisions, and managed by the RAN.

FSS INDEPENDENCE was the third Pacific patrol boat to be handed over to the Federated States of Micronesia, and the first of the Recipient country to receive a vessel more than twice the number of vessels earlier sold.

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A contract amendment was each for Kiribati and Tuvalu February 19, 1993. for the Shipbuilding (WA) on PRESIDENT REMEUK project was received from A request to enter the just over AS 155m present day prices has been handover of FSS. The Federated States of MICRONESIA Minister, the Hon R.J Hawke in-country training and a provide advisers for on-going. Papua New Guinea's Minister developed in Suva. It was 10 years almost to contract won by Australian: anti-missile decoy to defend million dollars, provides an to be valued several hundred The new weapon, expected to represent more than 50% of the total contract value. The new weapon, expected to be valued several hundred million dollars, provides an anti-missile decoy to defend warships against surface-skimming missiles. Known as Project Nulka (Aboriginal for 'be quick'), the new system will see series production of the Australian developed Nulka hovering rocket missile, which simulates both the hovering rocket missile, in an effort to confuse the homing systems of anti-ship weapons. The Nulka missile measures about 2m long and about 30cm in diameter. With more than a decade in development, the Nulka concept began with the Department of Defence, Science and Technology Organisation. Much of the work was also done by private companies, including Aerospace Australia and in the USA and Canada. The Nulka will be fitted aboard the Fleet's FFG-7 (six ships) and ANZAC Frigates (eight). Nulka is unique in that it identifies increasingly hard-to-track missiles, via a system of frequency-hopping transmitters to lure incoming warheads from enemy units. Major production of Nulka will be performed at Melbourne and Salisbury in South Australia by British Aerospace Australia and by ADI at Mulwala (NSW) and Bendigo ( Vic). This will include the manufacture of rocket motors, canisters and flight control systems, assembly of the decoys using US sourced payloads and system integration work to fit the payloads to the motor. Decoy rounds are expected to be delivered from late 1998, with the overall Nulka systems operational on RAN ships from mid-1999.

ANZAC in West

The RAN's newest frigate, HHMS "ANZAC" arrived in her home port at HMAS "STIRLING" on 29 August. First commissioned on 18 May 1996, ANZAC was greeted by the ship's launching lady, LTCOL Vivian Statham, along with the Mayor of Albany, Mrs Annette Knight. The city of Albany adopted the ship prior to commissioning last year, with the main through-the-hull onboard known as "Work Yard." The connection with Albany stems from the Great War, with the first ANZAC convoy sailing from there as its last Australian port of call.

Helicopter Contract

The Minister for Defence, Mr Ian McLachlan, has announced the signing of a contract for $560m with Kaman Aerospace International Corporation to provide eleven helicopters for the Royal Australian Navy. In addition an in-service support contract was signed to provide long term support services for the helicopters once they enter service. The helicopters, to be known as the SH-2G(A) Super Seasprite, are designed to operate from ANZAC ships which are currently being introduced into service. Developed by Kaman Aerospace, the Super Seasprite is a twin engine aircraft which will enhance and extend the operational capabilities of the ANZAC ships. The aircraft will be fitted with the Penguin anti-shipping missile system, modern sensors, and advanced "state-of-the-art" digital avionics suite. Minister McLachlan said: "The helicopters represent an important new capability for the Royal Australian Navy and the Australian Defence Force as a whole, by significantly increasing the ability to monitor and defend Australia's maritime approaches and other areas of interest. He added: "The aircraft is designed and built in the USA with extensive Australian industry involvement being generated in the development of the aircraft's software and avionics suite and the through life maintenance and repair support phase. "Furthermore the service contract with the Kaman will cover technical and training support requirements of the helicopters through the first ten years of operations and is consistent with the Government's continuing drive to provide support to the ADF through industry thereby releasing uniformed personnel for front line duties." The first of the Super Seasprites is planned to be delivered into Australia during the first half of 2001 with all deliveries completed by mid 2002.

End of the Line

Once most Royal Australian Navy ships and submarines would pay off for disposal in Sydney, spending their last days berthed at the dolphins in Athol Bight in Sydney Harbour. With the recent removal of these dolphins and the build-up of HMMS STIRLING this is no longer so. In recent years, the destroyers escort STUART, DERWENT and SWAN, submarines OXLEY, OVENS and ORION and the patrol boat AWARE have paid off at Fleet Base West. Additional ships programmed to decommission at STIRLING in the next twelve months include the hydrographic survey ship MORESBY and destroyer escort TORRENCE. Refer to inside back cover.

Navy Week Sydney

This year's Navy Week celebrations in the Sydney area will focus upon the RAN's Mine Warfare community with up to six ships berthed around the Fleet Base, Woolloomooloo, during the weekend of 18/19 October. To celebrate the Navy's 86th birthday, the mine countermeasures vessels will be open for public inspection between 12 noon and 5:00 pm, both days. These include RUSHCUTTER, BROGGA, KORANG, as well as ARDENT, BRUNEI and TREVALY.

Ashore, the Navy has arranged special video, historic, warship model, helicopter and dive activity plus numerous performances by the RAN and RANR bands. Also open will be HMA Ships MELBOURNE, HOBART and BRISBANE.

"WOLLONGONG"

During September the patrol boat HMMS "WOLLONGONG" was granted Freedom of Entry to her namesake city on the NSW south coast. The patrol boat, homeported to Darwin, arrived in Sydney on 15 September on her way to the ceremony, arriving in Wollongong harbour two days later. The FOE was carried out by crew members of the same day, with the boat remaining in harbour until the following Monday. Prior to her southern cruise, the boat apprehended a number of foreign fishing vessels making illegal catches off the north west of the continent. After some urgent repairs, WOLLONGONG headed at speed for her next appointments.
The Royal Navy Task Group, including the submarine HMS "ILLUSTRIOUS", and the Royal Navy Frigate HMS "RICHMOND", enter the port of Fremantle on 14 July 1997. (Photo - LNPJ Peter Lewis)

The Chilean Navy training ship "ESMERALDA" visits Sydney Harbour as part of her 1997 Far East training cruise. She arrived Sydney between 6 and 12 July. (Photo - WP/PA/Universal Images Group)

NSW Cadet of the Year: The Navy League's annual NSW Cadet Awards ceremony took place on 12 August 1997, where the award was presented to Cadet Chief Petty Officer Toussaint of TS "ALHURRA". The awards included a sponsored cruise on STS "ENDURING". (Photo - NSW Police Force)

The former "THYNELL" undergoes conversion to an LPD at Fingal's yard in Newcastle in July. The four bow bars have been removed and much of the interior gutted prior to re-building. (Photo - Brian Morrison)

The first view of the new frigate "HARRIS" underway in Sydney Harbour as part of her commissioning cruise. (Photo - LNPJ Peter Lewis)

The new Lance-class frigate "TE KARI" arrives in Auckland Harbour for the first time on 11 July 1997. (Photo - NZDF)
Observations

by Geoffrey Evans.

The Shipping Industry – Forward or Backwards and Out!

In a scathing attack on bureaucrats, politicians and overseas shipowners who have over the years made a viable, Australian-owned shipping industry almost impossible of achievement, Mr. Bill Bolitho, former chairman of the Australian National Line and of the Australian National Maritime Association (now known as the Australian Shipowners Association) has claimed that the reform process initiated in 1983 and recently started must continue if the existing local industry is to survive.

Mr. Bolitho, who's knowledge of the local and international shipping scene is probably unsurpassed in Australia, was delivering the 5th Whitlam lecture in Sydney in August. The text of his address, titled "The Story of Australian Flag Shipping – A Partisan View", was accompanied by a lengthy written paper explaining in detail and documenting the spoken address. The following remarks apply to both.

The story as recounted by Mr. Bolitho is indeed a sorry one. Starting from the time Australia was a fledgling colony and half the ships in the world flew the British flag – a great many of the ships unseaworthy and manned by "illiterate, uneducated and exploited crews" – the dependence of Australia on overseas-owned shipping and on decisions made by British and later, foreign shipowners interested only in profit – a dependence that has lasted for nearly 200 years and may well continue if, as the former shipping leader says, the rearmament process is not concluded successfully. Given that Australia has the fifth largest shipping task in the world it is illogical that Australia should be so dominated by overseas interests.

The bright spots in our maritime trading history appears to be

- the formation of the Commonwealth Line by Mr. Billy Hughes in 1916;
- Australia's Navigation Act which came into force in 1921 after a delay of 19 years;
- the formation of the Australian National Line by the Menzies government in 1956; and
- the reform process initiated by Transport Minister Peter Morris in 1983.

The Commonwealth Line lasted only until 1932 when the Bruce government brought about its demise by exchange of cables between Mr. Bruce and Lord Inchcape, head of the great Inchcape group of companies, quoted by Mr. Bolitho makes interesting reading; the Navigation Act remains relatively intact; but the ANL has been much reduced following the actions of Transport Minister Brereton in 1994, which Mr. Bolitho claims, also halted the reform process which had been progressing slowly but surely.

Mr. Bolitho's severest criticism was levelled at Flag-of-Convenience (FOC) shipping, a practice that... began in America in 1917 when American shipowners, aggrieved at having to pay taxes on their profits, found that by setting up a so-called open registry in Panama and flagging their ships out to it they could avoid paying taxes. To their great delight they found that they could not only avoid taxation but could also evade prohibition and other laws...

In the context of the following passage: a modern hi-tech fleet still well below the average age of the world fleet and a well trained and highly skilled workforce capable of operating them;

- "a maritime training institute in Launceton second to none in the world";
- "in the Australian Maritime Safety Authority. AMSA, one of the most cost-efficient, competent and irreproachable maritime safety organisations in the world";
- "a decade long history of industrial co-operation and reform prior to the actions and policies of 1994. An attitude which can be recapitulated...".

Mr. Bolitho's views can perhaps be best summarised in the following passage:

"Only a shipping company based in Australia and reliant upon the success of Australian exporters for its existence will advance the interests of Australian exporters over those of others and in destroying Australian shipping in general and the Australian Line in particular. The Government and its free marketers have substantially damaged the prospects of those industries, from which they expect so much by destroying our ability to develop a shipping capability appropriate to the task."

As a long-time advocate of the need for a viable Australian flag shipping industry, the Navy League hopes that Mr. Bolitho's views will be heeded. If the writer may add a personal postscript to the former shipping leader's Whitlam Address, the lack of attention to it by the metropolitan print and electronic media is indicative of the community's attitude – as judged by the media – to the major problems bedeviling Australia.

Titles

The recent April – June "in Brief" referred to a perceived reduction in the status of the chiefs of the Navy, Army and Air Force, previously known as WWII Chiefs of Staff of their respective Services and who had been re-titled "Chief" with the "Staff" part eliminated.

It is somewhat ironical that the Defence Efficiency Review, accepted by the Defence Minister, very firmly placed the Service Chiefs under the command of the Chief of Defence Force where, as his advisers on naval, military and air force matters, they could be seen as staff officers.

In the circumstances the old title would seem to be more appropriate "Chief of Staff" would always be an honourable title.

Maritime Detectives

The extent of measures taken to investigate accidents at sea was shown in a recent report by the Maritime Investigation Branch of the Commonwealth Department of Transport.

In November 1996 a 63 tonne fishing vessel was anchored at night some 10 miles south of the Victorian coastline when she was struck by large unidentified ship which failed to stop and disappeared into the night.

The fishing vessel was anchored in about 72 meters of water on a recognised shipping track, apparently not uncommon practice for similar craft in the area, and was stated to be showing the appropriate lights. The accident was reported immediately, the message indicating there were no injuries and no immediate danger of the vessel sinking. The vessel proceeded to port and arrived safely.

In the course of the following inquiry eight ships were identified as being in the general area at the time of the collision, but only one in the immediate vicinity, this ship – a bulk carrier – was contacted later in the day and reported that no collision, or "problems" had been experienced.

However, fragments of paint from the damaged part of the fishing vessel were obtained and these indicated a blue-hulled ship was involved. It so happened the bulk carrier had a blue hull. Over a period of several months samples from several blue-hulled ships, including the bulk carrier which by then was in an American port, were collected and sent to the Scientific Unit of the Australian Federal Police for examination.

The tests indicated that only one sample matched the retained fragments, blue over grey undercoat, other indicated up to seven layers of various coloured paints and undercoats.

(From page 17)

These facilities contribute to ANZUS and to Global Peace and strategic stability through assisting in arms control, nuclear non-proliferation, and effective nuclear deterrence.

Mr. Dough Paal, President of the Australian Maritime Union, said: "We would be wise therefore to be sure to invest in the facilities and to maintain and develop individual and collective capacity to resist armed attack.

The Navy. October December 1997

"IRON BARON" Dispute.

A court case involving the bulk carrier IRON BARON which grounded on a reef off Northern Tasmania on 10 July 1995 ("in Brief" April 1996) has been settled out-of-court in London.

One of the consequences of the grounding was oil pollution of the adjacent coastline, attracting widespread publicity at the time. Representatives of the United Salvage Company after assessing the damage, considered the ship could be salvaged.

In the event BHP Transport's wish to carry out the repair work was thwarted and when freed from the reef by the salvage company was towed into the Tasman and scuttled.

The court case involved financial aspects of the matter.
All Compass Points

Bangkok's Aircraft Carrier

BANGKOK, Thailand — In the midst of the worst economic crisis in its history, Thailand received its brand new $300 million aircraft carrier in August, becoming the first nation in South-East Asia to join the naval big league.

Not long after delivery, the purchase began to create controversy, moves that could further weaken the embattled government of Prime Minister, Mr. Chuanlit Yongsaychid, as it struggles to keep aloft an economy that recently signed up for a $20 billion international monetary fund bailout.

Critics say there is no strategic rationale for a ship capable of projecting naval power far from Thailand's shallow shores and that the country has neither the expertise nor considerable resources needed to man the vessel and its outsourced aircraft.

A regional defence analyst commented, "This is a showpiece purchase for which there is no military justification."

The 11,485-tonne, Spanish-built HMST CHAKRI NARULIJEJ was commissioned on 11 August at a lavish ceremony attended by Mr. Chuanlit, a former armed forces commander who supported a previous abortive move to buy submarines for the Thai Navy.

In addition to the ship, the Government has also spent $175 million for six Sikorsky Seahawk helicopters and another $138 million on a squadron of nine former Spanish Navy Harrier VSTOL jets. The Thai Navy, which is already renowned for having more admirals at its disposal than ships, says the carrier is needed to patrol sea areas around the Spratley Islands. But Thailand is about the only country in South-East Asia that does not lay claim to any of the disputed islands and their mineral and fisheries resources.

Programme — Under the contract signed in July 1992, the carrier was built at Bazan's El Ferrol yard in Spain. With a design similar to that of the Spanish carrier PRINCE DE ASTURIAS, it is fitted with a 12-degree ski jump.

The ship was launched on 20 February 1996, with sea trials in October-November 1996. The carrier's main roles will include warfare/flagship command and control, air support for amphibious operations and the Thai surface fleet, EEZ surveillance and protection, search and rescue, and disaster relief. She will be based in the Gulf of Thailand.

Design — The ship has a full-load displacement of 11,485.5 tons. Overall length is 182.6 m; flight-deck waterline beam 22.5 m, and full-load draught 6.12 m. She is 53 metres long, displaces 970 tonnes and has a cruising range of more than 10,000 kilometres. Twelve ships are being built at Halifax Shipyard Ltd., under contract to Fincantieri MacLaren Inc.

HMS "WHITEHORSE" — Half Way Point

HALIFAX, N.S. — The Canadian Navy has taken delivery (May 7) of HMCS WHITEHORSE, the sixth of an eventual 12 Kingston class coastal defence vessels.

WHITEHORSE was scheduled to sail from Halifax for its permanent home in Esquimalt near Victoria, B.C. on 28 August. The ship is under the command of Lieut. Cmdr. Derek Carroll, who will join Canada's West Coast fleet and be commissioned in HMCS Cordery. The ship has a cruising range of more than 10,000 kilometres. Whitehorse is the first Canadian warship named for the capital of the Yukon Territory.

The Kingston class ships are crewed primarily by naval reservists, operating on the Atlantic and Pacific coasts and inland as far as the Great Lakes, conducting naval operations including search and rescue patrols, mine countermeasures, training and search as well as surveillance in support of other agencies such as the RCMP Fisheries and Oceans, Environment Canada and Customs.

Capable of carrying a mixed-gender crew of 36, WHITEHORSE is armed with a 50-calibre machine-gun and two 50-calibre machine-guns. She is 53 metres long, displaces 970 tonnes and has a cruising range of more than 10,000 kilometres. Twelve ships are being built at Halifax Shipyard Ltd., under contract to Fincantieri MacLaren Inc.

HMS "SCOTT" — Unique Survey Ship

DEVONPORT, UK — HMS SCOTT, the Royal Navy's new survey ship sailed into Devonport Naval Base for the first time on 17 June 1997.

This was a tremendous moment for the Hydrographic Surveying Squadron (HSS) which now has one of the world's most capable vessels to undertake its operational work. The new ship is ground-breaking in a number of ways, under the command of Lieut. Cmdr. Derek Carroll, who recently left Royal Navy service after more than 30 years.

SCOTT is built to merchant ship standards, enhanced to naval requirements where necessary. With extensive automation, SCOTT is highly efficient and needs a crew of just 42 to run the 13,500 tonne vessel in comparison to a type 22 frigate, which is manned by at least 250 sailors.

SCOTT is also the first ship to operate a crew rotation system. There is a total complement of 63, but only 42 will be embarked at any one time. This allows her to be operational for a minimum 307 days per year.

Living accommodation is also spacious, with almost every person having their own cabin. The ultra-modern ship also has a multi-beam echo sounder which allows it to do deeper survey work than ever before.

The ship was ordered from BaeSEMA in January 1995 and sub-contracted to Appledore Ship Builders in North Devon. She was launched by Mrs Carolyn Portillo, wife of the former Secretary of State for Defence on 13 October 1996.

SCOTT will now become part of the Devonport-based Hydrographic Surveying squadron, producing the Admiralty charts which are used all over the world by both Service and civilian sailors.

"CONSTITUTION" Underway

MASSACHUSETTS BAY, Mass. — USS CONSTITUTION, the world's oldest commissioned warship afloat, celebrated her 200th birthday, setting sail under her own power on 21 July for the first time in 116 years.

Better known as "Old Ironsides," she is an 18th century frigate manned by a
21st century crew - an example of the last quality of warship professionalism and dedication of our Navy Chief of Naval Operations Admiral Jay L. Johnson commented on her place in naval history, "CONSTITUTION links the legacy of our Navy's past with the promise of our future," Johnson said. "She embodies the constancy of our enduring mission forward presence."

Authorised by President George Washington in 1793 to protect American shipping, the ship was the most effective warship of her era, projecting power during the Quasi-War with France, against the Barbary pirates in the Mediterranean, and defeating the British during the War of 1812, where she earned her nickname.

USS CONSTITUTION and her early crews never lost one of the 42 battles in which she engaged. She was the epitome of fighting spirit and victory, inspiring patriotism in a very young nation.

On 21 July, "Old Ironsides" and her crew logged another success in the history of the ship she sailed under her own power for an hour in Massachusetts Bay.

"This sailing reminds us that - just as 200 years ago - our Navy is the best because of our proud and dedicated Sailors," stated ADM Johnson.

Like today's Navy ships, CONSTITUTION served multiple purposes, including acting as a training ship during and after the Civil War. In preparation for this event, she once again proved an impressive learning platform. Long months of arduous training culminated in the young crew climbing the riggers like seasoned tall ship Sailors, prepared to put "Old Ironsides" through her paces.

For the birthday sailing, CONSTITUTION was towed from Boston to Marblehead, 17 miles north of Boston, to stage the ship in Massachusetts Bay. During the War of 1812, she found a safe haven in Marblehead from two British warships. There were no enemies at which to level her guns on this occasion, but she fired both port and starboard batteries during the historic sailing. As the smoke cleared, the Navy Flight Demonstration Squadron - the Blue Angels - flew over the sailing ship, and modern day warships USS RAMAGE (DDG 61) and USS HALYBURTON (FFG 40) rendered honors as they passed by CONSTITUTION.

USS "SEAWOLF" Commissioned

GROTON, Conn. - USS SEAWOLF was commissioned on 19 July at Electric Boat Shipyard in Groton, Conn. USA. She is the first of three SEAWOLF class submarines to be built for the United States Navy.

"America has waited anxiously for SEAWOLF, to contribute to the vital forward presence we maintain with our naval expeditionary forces," said Navy Secretary John Dalton.

Armed with Tomahawk cruise missiles, the boat can target about 75 percent of the earth's land mass for strike missions and can target surface ships at long range. She also carries the Mark 48 Advanced Capability torpedo, the best in the world. With twice as many torpedo tubes and a 30 percent increase in weapons magazine size compared to the previous SSN-class submarines, SEAWOLF is eminently capable of establishing and maintaining battle space dominance.

As Secretary of the Navy, and as a former submariner who understands the important contributions of the "Silent Service", I will continue to support our efforts to aggressively modernise America's submarine force," said Dalton. "We are indeed fortunate that SEAWOLF and her sister ships will provide the tools we need for constant improvement of our undersea capability."

Value Of Bomber Fleet

WASHINGTON, USA - An interesting report from the America press in response to U.S. Airforce-sponsored studies that claim the cost of maintaining B-2 bombers is less than that of an aircraft carrier, a new Navy point paper shows carriers have been used in 10 separate international crises since 1993, while B-2 and B-1 bombers have not been used at all. B-52s were used once.

But the paper notes the B-2 has appeared in the 1997 Rose Bowl parade and many air shows.

Singapore Buys Submarines

SINGAPORE - Singapore has purchased three second-hand Scoldemmen (A 12) class submarines from the Royal Swedish Navy to augment the single 1960s-era Sjormen (RSS RIKEN) it bought in 1995.

The boats, to be upgraded by Sweden's Kockums AB Shipyards, will be delivered to the Singapore Navy between 1999 and 2001. Kockums spokesman Thomas Arosenius said the value of the purchase has not been disclosed.

Singapore's defence minister, commented on 31 July, that the subs will be used for training.

The three boats had been retired by the Swedish Navy, in advance of the commissioning of the new Gotland class. The first of the four, RIKEN is expected to be delivered in early 1998. Each submarine has a crew of 23, with a surfaced displacement of 1,130 tons. All were originally built during the late 1960s.

Indian Ocean Acquisitions

INDONESIA - Reports from the Indonesian capital have confirmed that the Indonesian (TNI-AL) Navy has purchased five former West German Type 206 class submarines.

The five boats, all un-modernised, include U-13, U-14, U-19 and U-21 plus U-20 to be cannibalised for spare parts. All were built in West Germany between 1969 and 1975, crewed by 4 officers and 18 sailors each.

The boats are fitted with eight 533 mm torpedo tubes, but due the small size of the submarines, no reloads are carried.
JAPANESE SUBMARINES SINCE 1954

By Antony Preston

When the Japanese Maritime Self Defence Force (MSDF) was created in 1954 the US Navy was keen for it to develop a range of capabilities, including a submarine force. In August 1955 the 13-year-old Gato class submarine USS Mingo (SS-261) was transferred and renamed the Kusunoki (SS-501). Her main role was training a new generation of submarine specialists, until she was decommissioned in 1968 and returned.

Under the 1966 Programme the MSDF laid down its first submarine, the 1420-ton (submerged) displacement, NS-63 steel to permit diving 200m, a separate emergency high-pressure blowing system, and a three-dimension automatic steering system. Hoshio was decommissioned in 1987, but her sisters were all reclassified as training boats (ATSS) until finally redesignated ATS 8005 in 1994. The Type 89 torpedo was formerly known as the GRX-2, and is widely regarded as equivalent to the US Navy's Mk 84. Reported range is 2,000m at a speed of 20knots, or possibly 30knots when fired from a fast attack craft, which could be quickly replaced by a fresh container.

The US Navy was keen for Kusunoki's successor to carry a mix of an estimated twelve Type 89 heavyweight torpedoes and Sub Harpoon missiles, and eight Type 80 short anti-submarine torpedoes, all launched from six HU-603B tubes.

Oyashio (SS-590) is the first of a new design of SSK to be laid down at Kawasaki's Kobe yard on 26 January 1994, and is planned to be delivered in March next year. She was authorised in Fiscal Year 1993, with a further three funded in succeeding years. Despite the devastation caused two years ago by the Kobe earthquake, work on the submarine at Kawasaki and Mitsubishi has not been delayed, according to the Defence Agency. This design is the first to depart from the US Navy's Barbel design, which formed the basis of the previous two classes. The most obvious difference is the arrangement of the weapons launch-tubes above the bow sonar window.

Particulars

Displacement: 2700t (standard), 3000t (submerged)
Dimensions: 82.0m (wl) x 8.9m x 10.3m
Propulsion: Single-shaft diesel-electric, 2 Kawasaki 12V25S diesels, 3400bhp/2 Kawasaki Fuji alternators, 7750hp, 12knots (surfaced/submerged)
Armament: Six launchers for Type 80 and 89 torpedoes and UGM-84 Sub Harpoon missiles (20 launches)
Complement: 10 officers, 59 enlisted personnel

The Type 89 torpedo is generally regarded as equivalent to the US Navy's Mk 84. It was developed from the GRX-1 experimental weapon, becoming operational in 1980. No submarines built since the Mingo have remained in front-line service for more than 17 years. Unlike other major submarine operators, the MSDF does not appear to go in for major mid-life upgrades, preferring to replace its middle-aged SS class with new construction. This does not rule out detailed improvements such as the addition of Sub Harpoon and upgrades to sonars, but it has the advantage of keeping the ships busy while at the same time having a relatively modern submarine force. The rundown of the MSDF will see the submarine force cut to 14 boats or even 12, which means that some of the older Yushio class will soon be retired.

Acknowledgement: We are indebted to Shos of The Naval Institute Guide to World Naval Weapon Systems.
From sipping apple tea in a cafe in Istanbul to a Dawn Service at Anzac Cove, the experiences were many and varied for the 80 staff and cadets from the Australian Defence Force Academy (ADFA) who visited Turkey in May 1997 for the Gallipoli Battlefield Tour.

The trip was initiated in 1996 to provide us with a greatly increased understanding of our Australian heritage and the exact context in which the Anzac tradition was forged. It also introduced many of us to the wonders of Europe and its ancient past.

The trip commenced with two days in Istanbul during which we crammed in as much sightseeing as possible, including the Blue Mosque, Hagia Sofia and ferry trips across the Bosphorus into Asia. These activities were interspersed with many a donor kebab and Turkish delight. Of course, apart from the elusive belly dancers, the search for which occupied many a cadet’s evening, the main attraction of Istanbul was the Grand Bazaar. Here we ran riot, haggling over the prices of fake Calvin Klein shirts, fezs, jewellery, food, leather goods — anything! Never have our arguing skills been so well practised.

Following a visit and tour of the Turkish War College where Turkey’s more senior officers are trained, we moved on to the main aim of our trip — an exploration of the Gallipoli Peninsula. From our base in Canakkale, a town on the Asian side of the Dardanelles, we set out in four groups to different parts of the Peninsula to begin our trek. Before beginning, we sat on the deck of a replica of the Turkish minelayer NUSRAT (which had laid mines in March 1915, which had sunk several Allied warships and caused the Naval assault on the Dardanelles to fail) and listened to a Turkish historian’s view of the campaign including the fortification of the Dardanelles and the defences which the Allied navies, including our own AE2 submarine, attempted to penetrate. I had not previously comprehended the narrowness of the Straits at this point and it amazes me that any ship was able to draw even close to the Sea of Marmara.

For me, the time at Gallipoli provided some of the most moving moments and experiences of my life. Our group started our travels in the south, at and around Cape Helles. From the towering Turkish Memorial which dominates the landscape we looked across to V, W, X and Y beaches where the British and French soldiers had landed 82 years ago. That afternoon we explored the Lone Pine cemetery at the site where 2000 Anzacs were killed on 6th August 1915, where the 10th Light Horse Regiment from Western Australia charged up a ridge the width of two tennis courts only to be mown down by Turkish gunfire as depicted in the movie “Gallipoli.”

A small group of us left the main road to scramble up Rhododendron Spur as the New Zealanders had done 82 years earlier in an attempt to capture Chunuk Bair, the highest point on the Peninsula. In doing so we discovered a trail of evidence of the fierce battles that took place — remains of trenches, live rounds, a skull half destroyed by shrapnel, pieces of ceramic rum jugs possibly issued to the Anzacs to provide them with some “Extra Courage” before battle and the end of the trip — a New Zealand hat badge.

Our trip concluded with further travel around Turkey in which we toured the ancient ruins of Troy and Ephesus and the supposed retirement home of the Mother Mary. A quick stopover on the way back also gave us the opportunity of a lightening tour of Cairo, including a sound-and-light show at the Pyramids — a spectacular end to what turned out to be two weeks of experiences and emotions which will remain with the staff and cadets for some time.
"The NAVY" Revisited

In 1998, 'The Navy', the Magazine of the Navy League of Australia, will celebrate its 60th year of publication. During 1997 we will feature pages from various earlier editions. In this issue the months of October 1947 and October 1957 have been re-produced. (The editor is keen to hear from readers who possess copies of any 1938 editions to mark its Diamond Anniversary.)

Front cover of the October 1947 edition. The well known naif art depicted was used on a number of the early issues.

The October 1947 edition included this piece of nautical humour.
**WHAT IS A . . . COOK?**

The 'What is a ...' nany people series was originally written in the late 1950s. The set of eight will be re-produced in "The Navy" during 1997-98.

Note: This name can be confusing, as some cooks can and some can't—generally however, they can't. It is pointed out that this is only an opinion held by 99% of the Navy and should not therefore be taken as the rule.

**What is a Cook?**

The Concise Oxford Dictionary says of a Cook—one whose business it is to cook food. This definition does not necessarily apply to Naval Cooks (see note above). The word 'cook' is a noun, that is, the name of something. Although what is cooked is generally without a name.

The favourite past-time of the Cook is playing PHUNG! The game is played at the canteen when potatoes, pumpkin, and cabbage etc, are being dished out. As the Cook dishes up, he arches his arm, contracts the bicep, and then with super-human effort—PHUNG! on your plate. The main idea of the game being to tie the food in the centre of the plate, and from wide reports, most Cooks are fairly expert at this.

Cook wears white tee shirts, white trousers and white caps. The white cap however, is optional, although I believe, compulsory. The mark of the Cook is old and greasy looking boots and shoes, but it is not true that Cooks sleep in these. Cooks wear their trousers tucked into their socks.

When addressing a Cook and not knowing his name, most refer to him as 'Chef'. As you know, this word is French for 'head cook' but it does not mean that Cooks cook heads. If they were to cook heads however, I'm sure that they would be distinctly done (this last comment was added very hastily).

Cooks can be either O (Officers) or S (Ships). At the canteen school the O's are sifted from the S's by an ingenious system, the main point being, to cook eggs. If the eggs are actually cooked then the Cook is labelled O. If not, then an S is attached to him. Now and again some O's slip through to become S's but this is very rare. (This idea of labelling is borrowed from blood grouping).

Many expressions surround the Cook. For example, "Who called the Cook a runt?" and "Who called the runt a Cook?" This latter expression is used frequently.

Cooks cannot, at any stretch of the imagination, be called 'first-class' boatmen. They do not rush from work at 1545 to shore, to change, to dress, to get ashore on the first boat. No! Why some may ask! Well, because they step ashore at 0900.

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**AUSTRALIAN WARSHIPS**

**Through The Lens**

1901 to 1940

Published by Topmill
Cost: $12.95
Reviewed by Joe Straczek

Since the early 1990's the Topmill imprint has appeared on the very popular Navy Profiles, this latest 112 page book being the sixth in the series.

However, "Through the Lens" is more than just another book about the Royal Australian Navy. It is the first in a three volume photographic history, a set of books spanning some 330 plus pages with over 1,100 illustrations.

The main difference between the new Through the Lens books and other earlier publications is the degree to which the warships and support vessels of the Navy have been illustrated, not just a single photograph, but with each ship or class depicted at almost every stage in their respective careers. For example, from the Great War era, the River class torpedo boat destroyers are shown via 21 photographs, the training ship TINGIRA with four and the old POWER and PSYCHE with nine views.

The first of the new books covers the years from 1901 to 1940 with the following profiles to span 1941 to 1950 and then 1951 to 2000.

Each ship or class, whether purpose built or requisitioned from the private trade is presented in sequence of the date of commissioning into the RAN, with units modified or rebuilt also depicted at those subsequent times. All 330 illustrations in "Through the Lens" are well captioned, with each ship prelaced by brief technical specifications.

For the warshipbuff, the new "Through the Lens" is highly recommended. The first volume can be obtained direct from the publisher at 102 Victoria Road, Marrickville, NSW, 2204, phone 02 9565 1266 or through most medium to large newsagencies.

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**GREAT LINERS AT WAR**

By Stephen Harding
Published by Motorbooks International
Review copy from Capricorn Link, Australia
Reviewed by Joe Straczek

Great Liners at war is a 160 page book recounting the wartime exploits of the most famous passenger liners from the LUSITANIA of the Great War to the QUEEN MARY of the Second World War through to the QE2 at the Falklands. The book describes the wartime activities of nine of the most famous, largest and fastest liners.

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**WARSHIPS of the USSR and RUSSIA**

1945 - 1995

By A. S. Pavlov
Published by Chatham Publishing, London
Cost: £80 (approx)
Reviewed by Ross Gillett

This new book is from the stables of Chatham, a naval publishing house, formed in England in the mid 1990s. The latest release from the company is entitled Warships of the USSR and Russia 1945-1995.

Authored by Russian A. S. Pavlov and edited by naval analyst Norman Friedman for the English language edition, the book has been fully revised and updated to incorporate the latest information emerging from the former Soviet Union.

Sub-divided into three sections; ships built and completed from pre-war and Second World Wars projects, ships of the post-war projects, and civilian-type ships included in the Navy (something like the traditional Jones Fighting Ships). Each ship or class is described via both technical data and narrative, with numerous side profile and deck plans re-produced to accompany the numerous black and white illustrations.

Compared to the other Chatham books now in the marketplace, Warships of the USSR and Russia is reproduced on somewhat inferior quality paper, giving a somewhat traditional 'communist' feel to the publication. On the positive side, the ship plans reproduce extremely well, providing for most, the first technical view of the upper deck, profile and interiors of many of the warships.

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**THE SHIPBUILDERS OF BRISBANE WATER NSW**

By Gwen Dundon
Published by the author
Cost: $35
Reviewed by Joe Straczek

This may appear to be a rather odd book to review in The Navy Magazine. It is the story of the 500 plus mainly commercial vessels built on the shores of the Brisbane Water,
near Gosford on the New South Wales central coast.

From 1829 to the present day, the author describes the vessels that have been designed and launched into the tranquil waters known to all as Brisbane Water. More than 200 rare photographs have been discovered by the author, while the careers of most of the craft and their builders have been reproduced for the interest of the reader.

From what this reviewer can ascertain, just one vessel built in Brisbane Water, saw RAN service. The ship was the 1941 vintage motor vessel PATRICIA CAM, constructed by Gordon Beattie for Cam and Sons Pty Ltd. Requisitioned by the Navy in 1941, PATRICIA CAM operated in the role of auxiliary minesweeper. She was sunk on 22 January, 1943, by a Japanese seaplane off Wessel Island, north-east of Arnhem Land. This book can only be obtained from the author, phone 043 25 1777.

WARRIOR to DREADNOUGHT
Warship Development 1860-1905
By D. K. Brown
Published by Chatham Publishing
Reviewed by Ross Gillett

In the year 1860 the Royal Navy commissioned its first ironclad, the evolutionary 9,137 ton HMS WAVERLY. With an impressive armament of twenty-six 68 pounders and ten 110 pounders, the new warship could make 14 knots, all for an investment of 377,292 English pounds. The arrival of the new pounders, the new warship could make 14 knots, all for an impressive armament of twenty-six 68 pounders and ten 110 pounders, the new warship could make 14 knots, all for an impressive armament of twenty-six 68 pounders and ten 110 pounders, the new warship could make 14 knots.

The book “Warrior to Dreadnought” describes the development of the British Navy from these first fully rigged warships, focusing on the armament, armour protection, speed and machinery, the development of new guns and torpedoes and the countermeasures to defeat them. On the historical front, full accounts are provided for the 1882 attack on Alexandria, the launching of HMS VICTORIA by HMS CERBERUS in 1893, the 1898 Spanish-American War and the Russo-Japanese War of 1904-05.

Many rare photographs from the second half of the 19th century illustrate “Warrior to Dreadnought”, the numerous data tables providing additional information for the naval enthusiast. Highly recommended.

Notice is hereby given that the
ANNUAL GENERAL MEETING
of
THE NAVY LEAGUE OF AUSTRALIA
will be held at the Brassey Hotel, Belmore Gardens, Barton ACT
On Friday, 14 November, 1997, at 8 pm

BUSINESS

1. To confirm the Minutes of the Annual General Meeting held in Canberra on Friday, 8 November, 1996
2. To receive the report of the Federal Council, and to consider matters raised therefrom
3. To receive the financial statements for the year ended 30 June 1997
4. To elect Officer Bearers for the 1997-98 year as follows:
   - Federal President
   - Federal Vice President
   - Additional Vice Presidents (3)
   - Nominations for these positions are to be lodged with the Honorary Federal Secretary prior to commencement of the Meeting

5. To approve the continuation in office of those members of the Federal Council who have attained 72 years of age, namely Arthur Hewitt (N.W.), Joan Cooper (Tas) and Merryn Cooper (Tas)

ALL MEMBERS ARE WELCOME TO ATTEND

By order of the Federal Council
Don Schapel, Honorary Federal Secretary, PO Box 309 Mt Waverley 3149
Telephone (03) 9888 1877 Fax (03) 9888 1083

The Navy, October-December 1997
PLEASE NOTE

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