REFLECTIONS

As the author of many "at the game" items that he

saves, the writer is putting the pen
down at last - at least for now. The

planes altered and re-arranged were

points of minor embarrassment. The

reader can be reassured that the

items are published with the

author's blessing.

The Navy, January 1995 1
Federal President Retires
Commander Frank Geoffrey Evans OBE, VRD, RANR (Retd)

Geoffrey Evans' retirement from the position of Federal President of the Navy League of Australia on 31 December 1994 marks the conclusion of a very long period of unselfish commitment to the Navy League and, through that, to his country. His careful and diplomatic approach coupled with his diverse range of contacts have been invaluable to the League.

During his term in office, Geoffrey has led the League through a period of considerable growth in membership, a period of increased activity both by the national organization and by most state and local branches.

The former chairman of the ANL, Mr W.M. Bolitho, who with his wife, Val, was a member of the Executive for many years, has had a long and demanding period of administration at the Sea Cadet Corps, the transfer of administration to the ANL, and the development of the League's role in presenting to the public the need for Australia to have a strong maritime presence.

Settlement of the strike involved the Prime Minister and several other Ministers including the Transport Minister, who met waterfront workers of the Maritime Union of Australia.

The formation of the Australian National Line (ANL), however, is one small point needs correcting.

Whilst ANL was formed in 1956 it was not the Government's first venture into shipping. Prior to this, the Australian Steamship Board (ASB) was established in 1946 and, in 1956, the ASB became the Australian National Line. The former chairman of the ANL, Mr W.M. Bolitho, who was also a member of the ANL, has had a long and demanding period of administration at the Sea Cadet Corps, the transfer of administration to the ANL, and the development of the League's role in presenting to the public the need for Australia to have a strong maritime presence.

Settlement of the strike involved the Prime Minister and several other Ministers including the Transport Minister, who met waterfront workers of the Maritime Union of Australia.

The terms of Agreement are as follows:

- negotiating a long-term wage agreement;
- changing the existing employment arrangements so that ownership of these vessels was transferred to the newly formed ASB. Prior to this, the Australian Government owned vessels had been managed by other Australian shipping companies on behalf of the Government. It will never be forgotten by most seafarers and ship lovers that a large portion of the ASB's fleet were the River Class standard steamers, these vessels being built either just prior to or just after the Second World War.

The 1st of October 1956, the ANL was formed to rationalize further the Government's shipping operations and ownership of all ASB vessels was transferred to ANL. Apart from this point it can only applaud your comments and echo the remarks that as an island nation with vast mineral wealth we should own a large merchant fleet. This can only assist to reduce the balance of payments by keeping freight in Australian hands and not those of unfriendly third-world operators.

Yours sincerely,
Robert Young
Floraville 2380

REFLECTIONS - CONTINUED

More About the ANL

In the October-December issue of THE NAVY, an excellent viewpoint was published on the history of the Australian National Line (ANL), however, one small point needs correcting.

The Australian Steamship Board (ASB) was established in 1946 and, in 1956, the ASB became the Australian National Line. The former chairman of the ANL, Mr W.M. Bolitho, who with his wife, Val, was a member of the Executive for many years, has had a long and demanding period of administration at the Sea Cadet Corps, the transfer of administration to the ANL, and the development of the League's role in presenting to the public the need for Australia to have a strong maritime presence.

Settlement of the strike involved the Prime Minister and several other Ministers including the Transport Minister, who met waterfront workers of the Maritime Union of Australia.

The terms of Agreement are as follows:

- negotiating a long-term wage agreement;
- changing the existing employment arrangements so that ownership of these vessels was transferred to the newly formed ASB. Prior to this, the Australian Government owned vessels had been managed by other Australian shipping companies on behalf of the Government. It will never be forgotten by most seafarers and ship lovers that a large portion of the ASB's fleet were the River Class standard steamers, these vessels being built either just prior to or just after the Second World War.

The 1st of October 1956, the ANL was formed to rationalize further the Government's shipping operations and ownership of all ASB vessels was transferred to ANL. Apart from this point it can only applaud your comments and echo the remarks that as an island nation with vast mineral wealth we should own a large merchant fleet. This can only assist to reduce the balance of payments by keeping freight in Australian hands and not those of unfriendly third-world operators.

Yours sincerely,
Robert Young
Floraville 2380

FROM OUR READERS

Launch your career...

with the BHP fleet.

Is this you?

✔ Are you in Year 12, or have you recently completed Year 12 English, Maths & Physics?

✔ Are you interested in a challenging traineeship with excellent career opportunities?

✔ Do you want a career at sea?

Think BHP Transport...

Australia's largest shipping company, BHP Transport, is recruiting young women and men to operate our fleet. Successful applicants will join the company as a trainee Deck or Engineer Officer. Both include study as well as periods of sea-going training aboard BHP Transport's ships on Australian coastal or overseas voyages.

While studying and training you receive:

- An attractive salary and superannuation
- Annual reappraisal of home leave

On completion:

- You are qualified to serve in our fleet
- You are eligible for a career path across the scope of BHP, Australia's largest company

Interested in a sea-going career?

Contact: Roger Bennett
BHP Transport
Marine Management Services
GPO Box 86A, Melbourne 3001

Telephone (reverse charges): (03) 609 2141

Launch your career...

with the BHP fleet.

Is this you?

✔ Are you in Year 12, or have you recently completed Year 12 English, Maths & Physics?

✔ Are you interested in a challenging traineeship with excellent career opportunities?

✔ Do you want a career at sea?

Think BHP Transport...

Australia's largest shipping company, BHP Transport, is recruiting young women and men to operate our fleet. Successful applicants will join the company as a trainee Deck or Engineer Officer. Both include study as well as periods of sea-going training aboard BHP Transport's ships on Australian coastal or overseas voyages.

While studying and training you receive:

- An attractive salary and superannuation
- Annual reappraisal of home leave

On completion:

- You are qualified to serve in our fleet
- You are eligible for a career path across the scope of BHP, Australia's largest company

Interested in a sea-going career?

Contact: Roger Bennett
BHP Transport
Marine Management Services
GPO Box 86A, Melbourne 3001

Telephone (reverse charges): (03) 609 2141
The subject of the Lecture was "The Defence of Merchant Ships: Where To From Here" and some 110 people attended oficers of the current course of the RAN Staff College.

An address in reply was delivered by the Deputy Chief of Naval Staff, RADM David Campbell AM who spoke on the naval view of the matter.

Following a much enjoyed supper break, a panel discussion was held, chaired by a senior officer of the RAN, followed by closing remarks by the Admiral and Captain Norman Mackie, Sydney Branch Master of the Company of Master Mariners of Australia.

In broad outline, the theme of the Boulton Lecture was that the RAN is now too small to be able to provide a reasonable level of defence of Australian merchant shipping in time of hostilities. The RAN is more into a co-operation role and that the crews of merchant ships are now so reduced that they have no capability as in defence of themselves, that the lack of radio officers means that they cannot engage with the RAN. The merchant vessels will be more difficult: and that the two services have drifted away over recent years with an appetite for lack of contact.

This is considered to therefore be given to having the means to equip adequately merchant ships for defence. Naval and merchant personnel must be able to work together in the normal course of their duties and this must be fostered.

In reply, Admiral Campbell made the point that the historical and traditional view of the importance of merchant shipping to Australian defence was not so relevant. The focus of shipping, offshore territories and resources is potentially the most demanding task faced by Defence Force and could require the sustained deployment of force over extended distances. He accepted that Australia suffered from a low "force to demand" ratio and that in time of conflict the RAN will potentially have to defend a series of harbours, airfields, offshore oil and gas fields, shipping lanes, and the economic exclusion zone, as well as protect the shipping transiting to and from within Australian waters. He queried, however, whether we faced an improbable problem.

"We don't face the sort of threats of World War 2 and the Strategic Review 1993 paints an entirely different picture. Since 1986 Australian strategic guidance has had a very strong maritime flavour. Although there are uncertainties in our region, the fact remains that our region is fundamentally bring. Australia cannot prepare for every contingency but our current defences plan on the basis of heavily on threats perceptions that we believe are realistic and can withstand rigorous intellectual scrutiny.

Admiral Campbell stated that regarding submarine warfare in our region of direct strategic interest only one country - Indonesia - has a submarine capability, operating two type 209 submarines. Clearly, even if Indonesia had the capability to wage a campaign similar to Doenitz's against Australian merchant shipping they do not have the capability.

Another world war at sea part over recent years with an appetite for lack of contact.

"The region is largely benign. Yes, the region is largely benign. Yes, there is uncertainty everywhere. But our preparedness and resilience must never be better - and no, we are not guilty of preparing to fight a like the last war."

"The next war will be ... who can say? But it will not be plodding convoys to Murmansk or inland-hopping in the Pacific. But, as it has been since the beginning, it is bound to have a high cost in the blood of merchant and naval seamen alike."

The wide-broadcast speech which followed supper produced a large number of questions expanding on many of the points made and concentrating largely on the Naval presentation and the Piracy issue as presented and all are friends, future alignments and developments could not be foreclosed. The need to improve co-ordination and understanding between the Navy and Merchant Marine was fully supported and it was suggested that in international action, some form of "riding shotgun" defensive parties might need to be considered if the situation deteriorated seriously. There was also a call to consider a naval presence in the South China Sea. Together, the Boulton Lecture provided an occasion to air some of the issues of deep concern to all those who have an interest in combat piracy, as well as the need to pay due respect to the efforts of the defence of Australia.

Thoughts on... THE BOULTON LECTURE

The Defence of Merchant Shipping - Where to From Here

By RADM Andrew Robertson
Federal Vice-President Navy League of Australia

The 1994 Boulton Lecture, presented by the Company of Master Mariners of Australia with the support of the Navy League (NSW Division), was delivered by Captain K H Ross, the recently retired Chief General Manager Towage and Salvage Division of Howard Smith Industries Pty Ltd, at the Masonic Centre Sydney on Thursday 18 August.

The major RAN deficiency seemed to be a shortage of hulls and there seemed a good case to ensure that the projected adequate armament for merchant ships would be included in their capabilities that of convey escort was as satisfactory as successfully with their WWII equivalents, the corvettes (AMS).

There seemed a desirability of developing a high degree of "essential ship's important shipping" and ensuring we had the capabilities to protect such shipping. In this regard the major role of the RAN must not be forgotten. There seemed much importance in caution in view of the shortage of hulls for individual escort.

There was much concern at the downgrading of ASW on the basis that the last Strategic Review seemed far too narrow in defining Australia's Area of Direct Strategic Interest. It thus ruled out the capabilities of major Indian Ocean and Western Pacific maritime forces. It seemed inconceivable that there could be a serious threat to Australia in SE Asia without involving in some way the interests of India, China or Japan or all three and all are friends, future alignments and developments could not be foreclosed.

With Compliments from... BRUCK TEXTILES PTY LTD

159 Victoria Parade, Abbotsford, Vic 3067

SUPPLIERS OF QUALITY PRODUCTS TO THE ROYAL AUSTRALIAN NAVY

Telephone: (03) 417 7177 Facsimile: (03) 419 7420

The Navy, January-March 1995 5
ANZAC Launching

By Antony Underwood

ANZAC - first of class of new Australian and New Zealand ships - slipped eagerly into the water off Transfield's Williamstown shipyard on September 16.

Groans

The significance of ominous groans and creaking from the launch cradle from the start of the ceremony was not lost on Dr White or the thousands who attended the launch.

With the bow of the ship towering above the dock, Dr White introduced the Chief of Naval Staff, Head of Transfield and Mr Keating. Chief of Naval Staff VADM Rod Taylor briefly traced the history of the two ships which previously bore the name, list the 1600 ton destructor leader prevented to Australia by the United Kingdom in 1918 and then the 1500 ton Battle Class destroyer launched at the (then) Williamstown Naval Dockyard on August 20, 1948 which served two tours of duty in the Korean War and in the Malay Emergencies. It was as a training ship, however, that ANZAC II was remembered by presently serving members of the RAN, many senior officers of today's RAN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN, many senior officers of today's RN.

With Transfield's shift horn blaring and groans from the launch cradle from the start of the ceremony was not lost on Dr White or the thousands who attended the launch.

The ANZAC launch block. Launching dates for the other units of the class will be inscribed into the timber as the ships are completed.

ANZAC - first of class of new Australian and New Zealand ships - slipped eagerly into the water off Transfield's Williamstown shipyard on September 16.

Groans

The significance of ominous groans and creaking from the launch cradle from the start of the ceremony was not lost on Dr White or the thousands who attended the launch.

With the bow of the ship towering above the dock, Dr White introduced the Chief of Naval Staff, Head of Transfield and Mr Keating. Chief of Naval Staff VADM Rod Taylor briefly traced the history of the two ships which previously bore the name, list the 1600 ton destructor leader prevented to Australia by the United Kingdom in 1918 and then the 1500 ton Battle Class destroyer launched at the (then) Williamstown Naval Dockyard on August 20, 1948 which served two tours of duty in the Korean War and in the Malay Emergencies. It was as a training ship, however, that ANZAC II was remembered by presently serving members of the RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN, many senior officers of today's RAN...

Computerquest

1994 AUST & NZ TOSHIBA DEALER OF THE YEAR

Proud Suppliers to the R.A.N.

Todaytech

Computers (Canberra) Pty. Ltd.

Shop 5 ANZ Building,
12 Moore Street,
Canberra City, ACT, 2600

Computer Equipment Professionals

Quality Computers at Affordable Prices

Telephone
(06) 288 4377
Shops 4 & 5, 14 Bierney Street,
Weston, ACT 2611

FACSIMILE (06) 288 4526
1994 AUST & NZ TOSHIBA DEALER OF THE YEAR
Achievement
Transfield has Construction and Technologies Divisions as well as one for Shipbuilding and construction sites in Newcastle, Adelaide, Cockburn Sound (WA) and Whangarei in New Zealand's North Island. It employs more than 6000 people including more than 2000 in Victoria alone.

"We build good ships," he said proudly, "at a profit if we can, at a loss if we must."

The Prime Minister described the launch as a great day for Australia and New Zealand.

"The class of ANZAC ships not only underlines the shared conditions of sovereign nations but shown as a product of both a collaborative project between Australia and New Zealand," he said. "It underlines both countries belief in their shared destiny and that no task is too technically difficult.

It also underlines that Australia and New Zealand are technically sophisticated countries and that we can do things other countries can do. Part of this is to build and furnish our own weapons and systems to go with them."

This achievement, Mr Keating said, should make Australia a more confident, assertive country able to compete with the best in the world.

He noted that the ANZAC ships are being constructed in the modular form in line with the modern notion of shipbuilding - with superstructures being constructed in New Zealand, some modules in Newcastle and gearboxes assembled in Wollongong all being brought together for final assembly as ANZAC ships at Williamstown.

The Prime Minister congratulated Transfield staff - "the men and women who have given so much of themselves" Blohm and Voss of Germany whose Meko 200 design is the basis of the ANZAC ships. and CelsiusTech of Sweden for the command and weapons system.

Known as a man to have his say, the Prime Minister recognised that the 2035 tonnes of steel towering above his head were on the point of rapid escape towards the water. He cut short his remarks with the smiling observation that "this bit of moving sculpture ... seems to want to move."

Principal Naval Chaplains led prayers and pronounced an ecumenical blessing over ANZAC before also curtailing their part in the ceremony - short of singing the Navy Hymn - to allow Launch Lady LTCOL Statham to perform her brief but important duties.

She swiftly named the first of the ANZACs, smashing the champagne bottle against the bow and calling "God Bless Her and all who sail in her" as the irresistible force gathered momentum to plunge into her natural element.

Proud Contractors to H.MAS. Cerberus
CUSTOM LAUNDRY SERVICE.
26 - 28 Molan Street, Ringwood VIC 3134
Laundry & Dry Cleaning Specialists
Telephone (03) 870 0633 Facsimile (03) 870 8180
"A RECOMMENDED SERVICE"
Wolf relayed a message about her trip to the Pacific upon return to Germany while captured crew from Mutanga told of her demise by throwing overboard notes in a sealed bottle.

The Navy Board's fears about Australia's exposed shores had been substantiated, but they had now had to be taken seriously about their defence plans. Sleuth was ordered back to Sydney, and a coastal steamer named put in place. The Navy Board was told that suitable merchant craft be so the Navy Board issued an urgent preparing to attack targets in the Pacific, the Atlantic and Indian oceans. There were orders to the Navy's fleet were ordered to the waters of Australia was left unprotected and vulnerable in 1916. At the beginning of the Royal Australian Navy's first year, the resultant book, costing $49.50 and spanning more than 80 pages of narrative is accompanied by numerous historical and restoration illustrations.

On 8 October 1994, Hamilton Publishing of Sydney released the new book, ENA, the story of the 1900 vintage steam yacht of the same name, launched in Sydney in 1900 and commissioned by the Royal Australian Navy in 1917. Retired HMAS SLEUTH and converted to a patrol boat for service in the Torres Strait, the 108 ton craft was armed with a three pounder gun and painted the traditional naval grey. However, the story of this remarkable steam yacht was more than her three short years in commission with the "senior service". Author Alan Deans has thoroughly researched the career of this now 85 year old veteran, the resultant book, cost $49.50 and spanning more than 80 pages of narrative is accompanied by numerous historical and restoration illustrations.

From the camera of well known photographer David Moore, the book is brought to life via a series of more than sixty black and white and colour images, all reproduced on the finest stock of quality paper. David approached, followed, searched through, walked under and flew over all parts of the ENA in a successful photographic task to capture the beauty and spirit of the yacht, the resultant illustrations bringing the ship to life in almost every nautical aspect. The following article on the ENA ex AUBORE, ex HMAS SLEUTH, ex ENA was prepared by the author for The Navy Magazine.

Australia was left unprotected and vulnerable in 1916, after the beginning of the Royal Australian Navy's first year, the resultant book, costing $49.50 and spanning more than 80 pages of narrative is accompanied by numerous historical and restoration illustrations. Wolf relayed a message about her trip to the Pacific upon return to Germany while captured crew from Mutanga told of her demise by throwing overboard notes in a sealed bottle.

The Navy Board's fears about Australia's exposed shores had been substantiated, but they had now had to be taken seriously about their defence plans. Sleuth was ordered back to Sydney, and a coastal steamer named put in place. The Navy Board was told that suitable merchant craft be so the Navy Board issued an urgent preparing to attack targets in the Pacific, the Atlantic and Indian oceans. There were orders to the Navy's fleet were ordered to the waters of Australia was left unprotected and vulnerable in 1916, after the beginning of the Royal Australian Navy's first year, the resultant book, costing $49.50 and spanning more than 80 pages of narrative is accompanied by numerous historical and restoration illustrations.

On 8 October 1994, Hamilton Publishing of Sydney released the new book, ENA, the story of the 1900 vintage steam yacht of the same name, launched in Sydney in 1900 and commissioned by the Royal Australian Navy in 1917. Retired HMAS SLEUTH and converted to a patrol boat for service in the Torres Strait, the 108 ton craft was armed with a three pounder gun and painted the traditional naval grey. However, the story of this remarkable steam yacht was more than her three short years in commission with the "senior service". Author Alan Deans has thoroughly researched the career of this now 85 year old veteran, the resultant book, cost $49.50 and spanning more than 80 pages of narrative is accompanied by numerous historical and restoration illustrations.

From the camera of well known photographer David Moore, the book is brought to life via a series of more than sixty black and white and colour images, all reproduced on the finest stock of quality paper. David approached, followed, searched through, walked under and flew over all parts of the ENA in a successful photographic task to capture the beauty and spirit of the yacht, the resultant illustrations bringing the ship to life in almost every nautical aspect. The following article on the ENA ex AUBORE, ex HMAS SLEUTH, ex ENA was prepared by the author for The Navy Magazine.

Australia was left unprotected and vulnerable in 1916, after the beginning of the Royal Australian Navy's first year, the resultant book, costing $49.50 and spanning more than 80 pages of narrative is accompanied by numerous historical and restoration illustrations.
Adacel
Australian Software Engineering Excellence

- Real-time Systems
- Air Traffic Control
- Simulators
- Air Defence
- Automated Test Systems
- Communications
- C31
- Validation and Verification
- Safety Critical Software
- DoD-Std-2167A
- AS3563
- OOD
- Ada
- C++

Ansett Air Freight
One of the selected panelists providing an Australia Wide Parcel Freight Service for Commonwealth, Statutory Authorities and other Approved Bodies in all Australian States & Territories
Contact BG388

TELEPHONE:
Pick-ups
NSW 008 808 596 02 693 8581
VIC 008 808 592 03 326 5444
SA 008 809 716 08 238 1800
QLD 008 807 981 07 867 6999
WA 008 808 461 09 479 0777
ACT 008 808 599 06 216 6684
TAS 008 808 593 02 485 278
NT 008 809 717 089 203 252

NATIONAL OFFICE 02 352 9888
CONTACT MAURICE ATKINSON
- ROUTINE
- EXPRESS
- PRIORITY OVERNIGHT
- PRIORITY 2 SAME DAY

McROBERTS CONTRACTING SERVICES Pty Ltd

Proud Contractors to the R.A.N.

Unit 4, 28 Baile Road
Canning Vale, W.A. 6155
Specialists in...
Pipeline Cleaning, Testing, Rust Inhibiting, CCTV Inspection Services

Telephone: (09) 455 1550
Facsimiles: (09) 455 1407

Collins Class Update

Top: New Submarine COLLINS, being fitted out in the yards of the Australian Submarine Corporation on 8 October 1994.
Right: An interesting view of section 200 of the third submarine.
Below: The second boat, under construction inside the huge ASC building at Port Adelaide.

Photographs courtesy of the New Submarine Project
Taken by Chris Fields
ORACLE
Proud Contractor to the R.A.N.

Oracle is a leading supplier of information management software. Oracle develops and markets the Oracle® family of software products for database management; trusted Oracle® for secure database management, the Cooperative Development Environment (CDE), a complete set of CASE and application development tools for enterprise-wide, client/server computing; and Oracle Cooperative Applications, packaged client/server solutions for commercial accounting, manufacturing, distribution, government accounting, human resources and project control. Oracle software runs on personal digital assistants, PCs, workstations, minicomputers, mainframes, and massively parallel computers.

Dawson Industries Pty Ltd
484 Albany Highway, Victoria Park, WA 6100
Telephone: (09) 470 4000 Facsimile: (09) 362 2905

“A Recommended Service”
In service the ship will have a top speed in excess of 22 knots, embark up to four helicopters and provide onboard accommodation for over 400 persons, plus storage space for landing craft and military vehicles. It is also planned to establish a 100 bed hospital with associated surgery and intensive care support.

On 25 November, the THSS MANOORA was formally commissioned as HMAS at a major ceremony held at the Fleet Base East in Westlwood, New South Wales. The Minister for Defence, Senator Robert Ray, attended the event to accept the new ship and to officially welcome MANOORA into the Fleet, the latter having been formally commissioned in America last August.

MANOORA will remain tied up until July, when she will begin conversion, with her sister ship, to the new roles.

New Hydrographic Ships

The year 1995 will mark the 75th anniversary of the Royal Australian Navy's Hydrographic Branch. Over the years the RAN manned numerous survey, hydrographic and oceanographic ships. Beginning in 1924 HMAS GERANIUM commenced operations and, in 1925 the first HMAS MORESBY entered service.

Today's fleet is led by the veteran HMAS MORESBY (H-11). The second of the two new survey ships (HMAS FLINDERS (H-12)) and the tour new commissioned survey motor launches HMAS SHIPMART, SHERPA and MERRIL, also homeported in Cairns. The service is currently in the process of investigating how best to replace the older tonnage, with the project team turned for four years to develop plans for the next generation survey vessel to satisfy this most important naval task.

The decision to build two new hydrographic ships for the Royal Australian Navy was officially announced on 10 December 1994 as part of the major capital equipment projects approved in the 1994-95 Defence Budget. Selection of the winning ship designs is currently underway with a decision on the successful tenderer expected early in 1995.

To date three contracts have been let for the development of the competing proposals including ship specifications, design proposals etc. Companies contacted at this stage of the project include:

a. Transfield Shipbuilding
b. Australian Submarine Corporation, and
c. THNH, a consortium comprising Thynne, NL&I and HDW.

Each of the three proposed designs are for ships of approximately 75 metres in length and a displacement of 2500 tonnes. Each survey ship will embark three 10.7 metre survey motor boats plus one intermediate size helicopter. Both of the new ships will be Darwin based, with a planned operating schedule of 100 days per year per ship. To meet this demanding schedule, three crews will be required to man the two ships.

The three proposed proposals will be reviewed with two contracts placed with the successful tenderer, the last for the construction of the ships and the second for follow-on support. The lead survey ship is expected to be delivered in December 1997 with the second in December 1998.

Following the commissioning of the new vessels, HMAS MORESBY and HMAS FLINDERS will be decommissioned in 1997 and 1998 respectively. MORESBY 33 years of service completed and FLINDERS a quarter of a century.
Mine Warfare Exercise

HMCS PROTECTOR to Deploy for Submarine Trials

One of the less glamorous duties of the Royal Australian Navy, the HMCS STIRLING-based HMCS PROTECTOR has committed one of the most important tasks in the Navy’s portfolio: submarine countermeasures. The vessel, a operates in the waters of the South China Sea and the Pacific Ocean, ensuring the safety and security of Australia’s waters.

The two month deployment was conducted by equipment, including sonar systems, communication devices, and other detection equipment. During the deployment, the crew of HMCS PROTECTOR conducted numerous operations, including simulated submarine attacks and defensive maneuvers.

The exercise involved the participation of multiple nations, including the United States, Japan, and South Korea. The cooperation between nations allowed for the sharing of knowledge and best practices in the field of submarine warfare.

The success of the deployment is a testament to the readiness and capability of the Royal Australian Navy, and showcases the commitment of the country to maintaining a strong defense posture in the region.

New Defence College Opens

The aim of the college is to prepare selected leadership for increased strategic, security and protection responsibilities in Australia, Asia and the Pacific.

National Reunion for Old Sailors

Following the successful completion of the 11th National Reunion in Darwin in 1994, the National Reunion for Old Sailors Project is underway in Australia and Asia, with more than 20 vessels expected to participate in the upcoming reunion.

Sandgropers

The recently acquired ANMM: BERMAGUI (Photo: Chris Morrison)
Major Move for Submarine Squadron

A significant milestone in the implementation of Australia's Two Ocean Navy policy was attained on Monday, November 14 with the official opening of the new Australian Submarine Headquarters located at HMAS STIRLING.

At the ceremony, the Maritime Commander Australia, Rear Admiral Don Chalmers AO RAN officially opened the two storey building.

In the 27 years since it was formed, the Australian Submarine Squadron Headquarters along with the Commander of the Australian Submarine Squadron and his staff have been located at HMAS Platypus in Sydney.

HMAS STIRLING, previously the traditional home of Australia's submarines, is being slowly run down and will close with the decommissioning of the last Oberon-class submarine in 1998.

The relocation of the Headquarters was timed to coincide with the commencement of Collins-class trials, Australia's new generation submarines of which all six will be based at HMAS STIRLING.

Two Royal Australian Navy and one United States Navy submarines berthed alongside, with each providing a squad for the Opening Ceremony. A fourth combined squad came from the Submarine Squadron Headquarters and the Submarine Escape Training Facility.

An impressive line-up of Australian, USN and the USN super-carrier, USS SARATOGA, working together for NATO exercise Dynamic Impact, involving 85 warships from eleven nations.

Patrol Boats Practise What They Do Best

A large force of the Royal Australian Navy's 15 patrol boats have sailed the waters of North Australia to practise what they do best, the protection of Australia's Exclusive Economic Zone that stretches some 7,000,000 square kilometres around the country and 2,000 nautical miles out to sea, in a week long exercise that started on Sunday 13 November.

With officers of the Australian Fisheries Management Authority embarked, the Fremantle Class Patrol Boats sailed from Broome, Darwin and Gove in the Northern Territory. At sea they worked with Coastwatch with surveillance assignments, patrolled for fisheries surveillance techniques in multi-ship situations in the waters right across North Australia.

Commander Warwick Conlin, RAN, the Commander of Australia's Patrol Boat Forces said, "Most of the Navy's patrol boats have had plenty of recent practice at fisheries patrols and surveillance, but we are always looking at ways to improve the way we handle our increasing workload".

Since early September more than 50 illegal foreign fishing vessels have been escorted into Darwin and Broome to further investigation into possible breaches of Australia's fishing laws.

"During the exercise we not only looked at fisheries surveillance but also at piracy trials, including the crew of the patrol boat which handled their ships in multi-ship situations..." It's like being part of a precision driving team, you have to know what your limitations are, what is happening around you, and how to handle it", Commander Conlin said.

The protection and management of the fisheries aspect of the Australian Exclusive Economic Zone is the responsibility of the Federal Government agency, the Australian Fisheries Management Authority. Customs Coastwatch co-ordinate the surveillance of the EEZ with Navy acting as their response arm.

The exercise concluded on 18 November as the patrol boats returned to Darwin for the all important final performance evaluation of the weeks concentrated efforts.

The participating patrol boats were HMA Ships DUBBO, CESSNOCK, LAUNCESTON, GEELONG, WOLLONGONG and GAWLER from Darwin, HMAS IPSWICH from Cairns and HMAS GERALDTON from Rockingham WA.

Current Contractors to the RAN

ROCKINGHAM ENGINEERING SERVICES

Unit 5, Crompton Road, Hillman, Rockingham, WA 6168

Specialising in:
- Precision Engineering
- Pump & Machinery Overhauls
- Stainless Steel & Aluminium Welding

Telephone (09) 592 1423 • Facsimile (09) 592 1423
The explosion and resultant fireball ripped through DERWENT's former Seacat magazine. Photo - Navy PR

Finale for Derwent

By Vic Jeffery

One of the highlights of the ten week series of destructive tests being carried out on the former Royal Australian Navy destroyer escort Derwent occurred in naval waters off HMAS STIRLING on Monday, October 17.

A SH-1 Standard missile 35kg warhead was detonated in the former Seacat magazine aboard Derwent to simulate the impact of a missile on the ship and allow the evaluation and measuring of the extent of resulting damage.

The series of destructive tests, known as the Ship Survivability Enhancement Program, was a joint Royal Australian Navy/Defence Science and Technology Organisation undertaking.

The blast, smoke, fire and fragmentation tests were planned to assist ship design and construction and was aimed at containing battle damage and enhancing the survivability of naval ships.

This was the first time a decommissioned Australian warship had been used for this purpose and attracted some of whom are former Derwent crew members to conduct the program.

The following data describing the SSEP (Ship Survivability Enhancement Program) is reproduced courtesy of the Defence Science and Technology Organisation.

The Ship Survivability Enhancement Program

The Ship Survivability Enhancement Program (SSEP) is a bold new project of the Defence Science and Technology Organisation (DSTO) and Royal Australian Navy (RAN). The program consists of a series of fire, smoke, weapons effects and electronic experiments which will be conducted on the ex-Naval ship, Derwent. Derwent was launched in 1961 and commissioned into the RAN on 30 April, 1964. Now 30 years old, Derwent has been paid off to release the ship's company for the manning of the first of Australia's new generation of Anzac-class frigates.

The ship comprised some 220 officers and sailors and the ship was originally part of a class of six vessels designated Destroyer Escorts. Former members of Derwent's crew have joined Navy personnel in supporting the SSEP and ensuring its success.

About the Experiments

The experiments will be carried out on the Derwent at the Royal Australian Navy's Fleet Base West at HMAS STIRLING. The program is spread over a 10 week period and is divided into four series - the fire and smoke, blast and fragmentation, limpet mine and electronic warfare series.

Fire Series

The aim of this series of experiments is to gain a better understanding of how fires behave onboard ships.

The series involves the generation of fires onboard the Derwent using simulated missile attacks. Under investigation are the severity of such fires and their spread characteristics, particularly as a result of unspent rocket fuel.

The fire protection provided by insulating glass/plastic wall materials and coatings will be compared to existing steel walls.

Blast and Fragmentation Series

In this series, the Derwent will be subjected to a range of explosions which will simulate the effects of missiles.

The recorded results of these explosions will be used to test methods for predicting damage levels and to more accurately identify safety hazards for the crew.

Smoke Series

Smoke and high temperatures associated with fires onboard a ship present one of the most significant hazards to crew.

Smoke Series will be used to predict the likely hazards to crew in real fires and to improve crew training in combating such hazards.

About HMAS Derwent

Built in Victoria's Williamstown Naval Dockyard, Derwent was launched in 1961 and commissioned into the RN on 30 April, 1964. Now 30 years old, Derwent has been paid off to release the ship's company for the manning of the first of Australia's new generation of Anzac-class frigates. Derwent's crew comprised some 220 officers and sailors and the ship was originally part of a class of six vessels designated Destroyer Escorts. Former members of Derwent's crew have joined Navy personnel in supporting the SSEP and ensuring its success.

The Smoke Series involved generating smoke from fires of varying severities in a compartment on Derwent and recording the behaviour of the smoke.

The data will be used to predict the likely hazards to crew in real fires and to improve crew training in combating such hazards.

Electronic Warfare Series

The Electronic Warfare Series is an additional series of tests designed to extend knowledge of the transmission of electro-magnetic radiation across sea water. Results emerging out of this series will be used to test theoretical models.
The South African Navy
AN UNCERTAIN FUTURE?

By Mike James

NAVAL MATTERS

Much like the nation that it serves, the South African Navy (SAN) faces a turbulent future. Beset on the one hand by looming block obsolescence amongst its front line forces, and on the other by a contracting defence budget, the SAN must strike a difficult balance to ensure its survival as a viable blue-water navy.

...
History Revisited

Above: HMS IRON DUKE, 1930. Photo: NPC
Left: Unusual photograph of the carrier HMS EAGLE in Malta. Photo: NPC
Below: 1939, HMS HURICAN in English waters. Photo: NPC

WE'LL DO ANY DEAL TO BE NO. 1

D'Orsogna Ltd
Suppliers of:
Premium Smallgoods, Hams and Bacon
Cnr Leach Highway & Stock Road,
Melville, 6156
Telephone: (09) 337 3444
Facsimile: (09) 314 1380

Hunter Holden &
New Hunter Holden
are proud to support The Navy &

THE DEFENCE
SERVICES

See Peter Thompson for your Defence Discount

CABLEX

Contractors to Garden Island Naval Base

Suppliers of:
Military Connectors and Accessories
3/6 Burgess Rd, Reservoir Victoria 3133
Telephone: (03) 729 7147
**American Naval Strength**

**Force Structure**

Twelve aircraft carriers, including one designated as a reactivation training carrier and 11 large-deck amphibious ships will constitute the core of the Navy's projected fleet. Two aircraft carrier battle forces, with a total of 18 aircraft carriers, and an amphibious force, with 27 ships, will provide command and control of the battle environment, joint task forces, and for strategic deterrence functions, regional deployments. Operating independently or as part of other planned ship retirements and future delivery schedules, the elements for littoral operations, these forces will be employed in support of SEATO goals will include:

- 11 aircraft carriers in tow, and
- 1 aircraft carrier (reserve/training),
- About 120 in major surface combatants,
- About 10 reserve frigates, and
- 35 attack submarines (45 as a long-term goal)

Consistent with the need to integrate Navy and Marine Corps littoral forces in the future, these forces will be employed in Naval Expeditionary Task Groups (NETG). The Navy is examining various NETG configurations that could be tailored to meet the demands of a specific deployment or conflict. A national NETG might consist of a carrier and large-deck amphibious ship supported by surface combatants, amphibious warships, a Marine expeditionary unit, attack submarines, and maritime patrol aircraft. As an example of this new force employment concept, two battle groups, integrated with an amphibious force, were deployed in 1982 with a mix of Navy and Marine aircraft in their air wings. Each group included one aircraft carrier, three amphibious assault ships, two CLS, seven surface combatants, and two attack submarines.

1994 Force Levels

- Submarines: 16
- Strategic Support Ships: 2
- Aircraft Carriers: 12
- Attack Submarines: 87
- Surface Combatants: 110
- Amphibious/Command Ships: 41
- Mine Warfare Ships: 15
- Logistic Force Ships: 88
- Reserve Combatants: 15
- Total Ships: 387
- Total Battles: 387

**Capabilities**

Navy expeditionary forces provide a range of capabilities for regional deployments. Operating independently or as part of joint task forces, they provide command and control of the battle environment, establish battlepace dominance, project combat power ashore and sustain land-based forces, and patrol in international waters can operate independent of oversight and access in rights granted by other nations, giving the United States a ready means of employing forces in regional crises.

- Command, Control, and Communications (C3). With an extensive C3 architecture, including systems in space, at sea, ashore, and in the air, naval forces provide an excellent command platform for all phases of an engagement. They enable the VFA task forces to receive information from nationally-managed support systems and from task force localized resources. The VFA provides Aegis, AWACS, aircraft, submarines, and AEGIS ships from command authorities using ashore.

**Modernisation**

Key concepts addressed in the FY 1995 budget are the need to refine littoral warfare capabilities and long-term modernisation requirements. These forces will be deployed in 1993 with a mix of Navy and Marine aircraft in their air wings. Each group included one aircraft carrier, three amphibious assault ships, two CLS, seven surface combatants, and two attack submarines.

Shiplifting

Ship procurement programs in the FY 1995 budget and FY 1995-96 program will provide replacements for older ships, modernise existing forces, and provide elements of the shipbuilding industrial base.

- As the table above reflects, the Navy will have delivered by FY 1989, and funding for the FY 1995 budget, these ships: Three Aegis-class cruisers, four anti-submarine warfare (ASW) ships, 11 attack submarines, and six patrol boats, supporting a mix of warships, plus an additional carrier that will greatly enhance the capabilities of the force. The first of these ships will be delivered in FY 1994.

**Weapon Systems**

- Ship Self-Defense. The proliferation of antiship cruise missiles presents an increasing threat to surface ships. The Rolling Airframe Missile (RAM) is a lightweight, low-cost missile that will be a standard armament on future surface combatants.

Continued on page 19
The Navy, January-March 1995

AMERICAN NAVAL STRENGTH

The Navy, January-March 1995

SPECIALISTS IN

• REMOVAL OF VINYL TILES

procurement will begin for future installation in DD-963s. The cruise missile threat is one that is a new challenge that the Navy is facing, with the RAM system using a 5-inch-diameter surface-to-air missile for potential installation on several ship classes. The Evolved Sea Sparrow Missile (ESSM), which is being developed through computer hardware and software upgrades, is a new missile that is being considered for installation on the DD-963s. The missile is a high-precision, all-weather, surface-to-air missile that is capable of engaging targets at long ranges.

A Surface Ship Tompkei Design (SSDD) for the littoral warfare capability. This capability is designed to provide the ship with the ability to operate in littoral environments and support the needs of the Combined Strike Force (CSF). The CSF is a task force that is designed to provide the fleet with the ability to conduct operations in littoral environments, with a focus on naval mine warfare and patrol boats. The CSF is made up of a combination of ships and units from the US Navy, US Marine Corps, and US Coast Guard.

For the first time in the Profile series, the design and development of the vessel is highlighted by both historical narrative of both individual vessels, Profile No. 3, and the contemporary operations. The naval ships built since 1939, including the aircraft carrier, battleship, and cruiser, provide a comprehensive overview of the development of naval ships. The profile includes ten pages of black and white illustrations, as well as new line drawings and black and white photographs.

The Epic Story of HMAS PERTH and USS HOUSTON

Part one of the Profile is devoted to the purpose built naval ships built since 1939, including the aircraft carrier, battleship, and cruiser. The profile includes ten pages of black and white illustrations, as well as new line drawings and black and white photographs.

The newly published Profiles No. 1 and No. 2, which provide an overview of the development of naval ships, are now available. The profiles are available in hardcover and paperback formats, and are sold at local bookstores and online retailers.
Leaders in ship repair and modernisation for over 100 years.

ADI has a long history as the principal contractor for the repair, refit and modernisation of the vessels of the Royal Australian Navy.

Through this experience, ADI has developed extensive and specialist capabilities ranging from the docking of ships to the installation and testing of sophisticated electronic systems.

For years ADI has worked with the Navy in facilitating stores supply and maintaining and repairing replaceable equipment.

ADI has continually developed and upgraded its material management system and expertise in both commercial and defence supply systems. This allows ADI to offer the Navy much more to facilitate purchasing and inventory control functions.

In addition, ADI's testing and calibration centres in Sydney, Melbourne and Perth are available to check any equipment for the Navy.

ADI
The strategic edge.

ADI Marine, Garden Island, NSW 2000, Australia
Tel: (02) 562 3298. Fax: (02) 562 3821
The Navy League of Australia

APPLICATION FOR MEMBERSHIP

HISTORICAL

The Navy League was established in Australia in 1901, initially in the form of small branches of the United Kingdom Navy League (established in 1897) and since 1950 as an autonomous national body headed by a Federal Council consisting of a Federal President and representatives of the six States, the Australian Capital Territory and the Northern Territory.

The Navy League of Australia is now one of a number of independent Navy Leagues formed in countries of the free world to influence public thinking on maritime matters and create interest in the sea.

The Navy League of Australia cordially invites you to join us in what we believe to be an important national task.
MEMBERSHIP
Any person with an interest in maritime affairs or who wishes to acquire an interest in, or knowledge of, maritime affairs and who wishes to support the objectives of the League, is invited to join.

OBJECTIVES
The principal objective of the Navy League of Australia is "The maintenance of the maritime well-being of the Nation" by:
• Keeping before the Australian people the fact that we are a maritime nation and that a strong Navy and a sound maritime industry are indispensable elements of our national well-being and vital to the freedom of Australia.
• Promoting defence self reliance by actively supporting manufacturing, shipping and transport industries.
• Promoting, sponsoring and encouraging the interest of Australian youth in the sea and sea-services, and supporting practical sea-training measures.
• Co-operating with other Navy Leagues and sponsoring the exchange of cadets for training purposes.

ACTIVITIES
The Navy League of Australia works towards its objectives in a number of ways:
• By including in its membership leading representatives of the many elements which form the maritime community.
• Through soundly-based contributions by members to journals and newspapers, and other media comment.
• By supporting the Naval Reserve Cadets, and assisting in the provision of training facilities.
• By encouraging and supporting visits by recognised world figures such as former United States Chiefs of Naval Operations and Britain's First Sea Lords.
• By publishing "The Navy", a quarterly journal reporting on local and overseas maritime happenings, past, present and projected.
• By maintaining contact with serving naval personnel through activities arranged during visits to Australian ports of ships of the Royal Australian and Allied Navies.
• By organising symposia, ship visits and various other functions of maritime interest throughout the year.

Member participation is encouraged in all these activities.

JOINING THE LEAGUE
To become a Member of The League, simply complete the Application Form below, and post it, together with your first annual subscription of $20.00 (which includes the 4 quarterly editions of "The Navy"), to the Hon Secretary of the Division of the Navy League in the State or Territory in which you reside, the addresses of which are as follows:

VICTORIAN DIVISION: PO Box 308, Epping, Vic, 3132.
QUEENSLAND DIVISION: C/- PO Box 170, Cleveland, Qld. 4163.
AUSTRALIAN CAPITAL TERRITORY DIVISION: D/ 43 Skinner Street, Cook, ACT, 2611.
SOUTH AUSTRALIAN DIVISION: GPO Box 1509, Adelaide, SA, 5001.
TASMANIAN DIVISION: C/- 43 Amy Road, Launceston, Tas, 7250.
WEST AUSTRALIAN DIVISION: C/ 23 Lawlor Road, Attadale, WA, 6164.

Subscriptions are due on 1st July in each year, and your membership will be current to 30th June immediately following the date on which you join the League, except that if your first subscription is received during the period 1st April to 30th June in any year, your initial membership will be extended to 30th June in the following year.

THE NAVY LEAGUE OF AUSTRALIA
Application for Membership

To The Hon Secretary
The Navy League of Australia
Division

Sir or Madam,

I wish to join the Navy League of Australia, the objectives of which I support, and I enclose a remittance for $20.00 being my first annual subscription to 30th June next.

Name  
(Mr)  
(Mrs)  
(Ms)  
(Rank)

Street  
Suburb  
State  
Postcode

Signature  
Date

Subscriptions are due on 1st July in each year, and your membership will be current to 30th June immediately following the date on which you join the League, except that if your first subscription is received during the period 1st April to 30th June in any year, your initial membership will be extended to 30th June in the following year.
JOIN THE
NAVAL RESERVE CADETS

If you are between the ages of 13 and 18 years:

The Naval Reserve Cadets provide for the spiritual, social and educational welfare of boys and girls and help to develop in them character, a sense of patriotism, self-reliance, citizenship and discipline.

Uniforms are supplied free of charge.

Cadets are required to produce a certificate from their doctor to confirm they are capable of carrying out the normal duties and activities of the Cadet Corps. If injured while on duty, Cadets are considered for payment of compensation.

Parades are held on Saturday afternoon and certain Units hold an additional parade one night a week.

The interesting syllabus of training covers a wide sphere and includes seamanship, handling of boats under sail and power, navigation, physical training, rifle shooting, signalling, splicing of wire and ropes, general sporting activities and other varied subjects.

Instructional camps are arranged for Cadets and they are also given opportunities whenever possible to undertake training at sea in ships of the Royal Australian Navy.

Cadets, if considering a sea career, are given every assistance to join the Royal Australian Navy, Mercantile Marine or the Royal Australian Naval Reserve but there is no compulsion to join these Services.

For further information, please contact the Senior Officer in your State, using the addresses provided below.

NEW SOUTH WALES: Staff Office Cadets, HMAS Watson, Watsons Bay, NSW, 2030.
QUEENSLAND: Senior Officer NRC, Naval Support Office (South Queensland), C/-Bulimba Army Barracks, Apollo Road, Bulimba, Old, 4171.
WESTERN AUSTRALIA: Staff Office Cadets, HMAS Leeuwin, PO Box 58, Fremantle, WA, 6160.
SOUTH AUSTRALIA: Staff Office Cadets, Naval Support Office, Commonwealth Centre, 55 Curry Street, Adelaide, SA, 5000.
VICTORIA: Staff Office Cadets, TS Voyager, Nelson Place, Williamstown, Vic, 3016.
TASMANIA: Staff Office Cadets, Naval Support Office, Defence Centre Hobart, Anglesea Barracks, Davey Street, Hobart, Tas, 7000.
AUSTRALIAN CAPITAL TERRITORY: Commanding Officer, TS Canberra, PO Box E52, Queen Victoria Terrace, ACT, 2600.
NORTHERN TERRITORY: Commanding Officer, TS Darwin, PMB 13, Winnellie, NT, 0820.

“THE NAVY”

All enquiries regarding the Navy Magazine, subscriptions and editorial matters should be sent to:
The Hon. Secretary, NSW Division
NAVY LEAGUE of AUSTRALIA
GPO Box 1719, SYDNEY, NSW, 2001
IN THIS ISSUE

New Zealand Seallift Ship ................................................................. 1
Mothballs to Museums ................................................................. 8
Collins at Sea .................................................................................. 9
The RAN in WWII ......................................................................... 10
ANZ - Proba by Senate Committee ............................................... 12
The Indian Navy ............................................................................ 13
Bark Endeavour ............................................................................. 18
AGIOS ANDREAS ........................................................................... 26
HMAS GERANIUM ........................................................................ 27
Good Ship ALMA DOBEL ............................................................. 30
DERWENT in the Deep ................................................................. 32
Final Role - USS DECATUR ........................................................... 34

The Magazine of the
Navy League of Australia
Vol 57 No 2

Regular Features
Viewpoint ....................................................................................... 1
Naval Matters .............................................................................. 6
Naval News ................................................................................... 21
History Revisited ........................................................................ 31
Book Reviews .............................................................................. 35
Things Change in the Right Direction

In his last Viewpoint Geoffrey Evans reflected upon the changes that have taken place since 1971. He referred in particular to the RAN. He could equally have mentioned changes in our merchant marine, in our ports or a variety of other maritime activities.

There is nothing wrong with change. It happens all the time. It is the League's proper role to participate in debate to ensure that, in the maritime context, things change in the right direction.

There will be no shortage of issues to address in a particular order. Those issues could include the size and makeup of the fleet, obtaining suitable personnel in times of peace, further integration of women into the fleet, the continuous deployment of our bases to the north and west of Australia, the future of Sydney as a base, handling environmental issues and whether bringing home the Navy's training will produce an effective service. And that's just the Navy. The future of our merchant marine will also remain a matter of concern for the League.

Some of the issues cited are of a kind that the League has already addressed in the past. Others have only arisen in recent times. There is nothing wrong with change. It happens all the time.

There will be no shortage of issues to address. In no particular order, those issues could include, the size and makeup of the fleet, obtaining suitable personnel in times of peace, further integration of women into the fleet, the continuous deployment of our bases to the north and west of Australia, the future of Sydney as a base, handling environmental issues and whether bringing home the Navy's training will produce an effective service. And that's just the Navy. The future of our merchant marine will also remain a matter of concern for the League.

Some of the issues cited are of a kind that the League has already addressed in the past. Others have only arisen in recent times.

To make the League's views known in an effective manner will not necessarily be easy. It is not just a matter of exchanging views amongst ourselves or with others interested in maritime matters. We need to get to the decision makers and opinion formers (shall we call them DM and OOs)? DM and OOs will not necessarily have the same perspectives as members of the League or other readers of THE NAVY.

The League is a lot of competition for the attention of DM and OOs. One of the changes that has taken place over the last 20 or so years is the increasing skill of the media, which is a factor that cannot be ignored.

In truth there is no particular awareness of the wider community of the importance of the sea to Australia. It is a place for swimming, fishing and various water sports, but otherwise it is a place of peace and prosperity. It is not surprising. But to those wishing to promote maritime matters it is a factor that cannot be ignored.

Continued on page 3

THE NAVY LEAGUE of Australia

The Navy, April-June 1995 1
FROM OUR READER

Dear Sir,

I have been a member of the Navy League for many years. I know you like to have old photos for THE NAVY. Here is a photo of HMS KANGA, under 10,000 tons, one of two ex-Oerlikon, one on Sydney, one on Port Adelaide. Two ex-Oerlikon, two M.E. double sweeps, Anzac War, took on Queensland 1941-42, from Tromsø to Tahiti. She was hit by a six inc t shell with one killed and one officer wounded. Her hull was finally turned into the W.T. office. A six in t shell missed up in the W.T. office. A six inch shell with one killed and one officer wounded. Her hull was finally turned into the W.T. office.

Yours sincerely,

[Signed]

Ken Blakeley
Highest 3190

Dear Sir,

I refer to the list of the wooden ships appearing in the January-March edition of THE NAVY. Records held by the Navy Historical Section indicate that the hull number 71 was allotted to the requisitioned trawler LUCY STAR. Unfortunately, not much is known about her history.

The possibility of this being LUCY STAR is further supported by the fact that she was named with a single Oerlikon, one is visible on the quarter deck. Your sincerely,

J.T. Sturz
Senior Naval Historical and Archives Officer

HMAS KANGA, mineweeping off Cape Moreton in February 1942.

THINGS CHANGE IN THE RIGHT DIRECTION—CONTINUED

Readers of THE NAVY will know of the relevance of the sea to our defence. They will be aware of the importance of our prosperity and national security. These matters are not widely understood. They are not normally the forefront of people’s thoughts. Even when, as recently, there has been debate over the future of the ANZ, much of the reporting in the general press has been of a general nature. In this context, it seems that Americans look inland. The cultural emphasis is on the sunburnt country. It is the wide brown land for us. Of course, the vast majority of people in Australia are situated within 100 kilometres of the sea. It is ironic that we prefer to live where the land is neither too wide nor too brown. Australians have been so frequent that their continent is an island.

The League has been tackling this awareness problem in many ways. This magazine, the Sea and Australia video and seminars run by the League are but examples. The League remains involved in the Naval Reserve Cadets. The State divisions of the League and individual members have also been involved in activities. The league is working hard to promote the cause.

These activities are to be encouraged. They are in their own way to help spread the maritime message in the community. Even DIM and OFs are members of the community. Which brings us back to the DIM and OFs. The competition from interest groups will not lessen. In this ever changing world it is clear that the League will have to work hard to ensure that whenever there is a problem it is not submerged in all the other competing demands for the eyes and ears of DIM and OFs.

And a few words about Geoffrey Evans. Many fine tributes have been paid to his work for the League and for the maritime alliance generally. All truly deserved. It should be made clear he has not been pensioned off to idle retirement. He remains in service in Chairman of the Federal Advisory Council. Although his words will no longer appear in Victory readers might wish to keep an eye on other pages of THE NAVY.

Graham HARRIS
Federal President

P.S. There is a prize for the best alternative acronym for DIM and OFs.
The New Zealand Defence Forces purchased the former mercantile Roll-on/Roll-off motor vessel MERCANDIA QUEEN II in late 1994.

After arriving in Auckland on 24 March, initial training began along with the conversion to a military sealift ship, to be named HMNZS CHARLES UPHAM. Commissioning is expected into the Royal New Zealand Navy in mid-October, 1995.

For a number of years the "Kiwi" Navy has required a sealift or logistic support ship capable of taking a company lift of the Army's Rapid Reaction Force, up to a maximum capacity of 500 in an emergency.

A project definition study for such a vessel was finalised in 1989, with ship facilities for two medium helicopters produced by British Maritime Technology Defence Services. With the defence budget under severe pressure a conversion was deemed the only affordable alternative. Various solutions were investigated and in late 1994 the Danish MERCANDIA QUEEN II was purchased at a price of Dkr55 million (US$9m).

MERCANDIA QUEEN II was originally completed for the Danish Mercandia Company by Dantvold's Frederikshavn yard in 1979. In early January, 1995, after a brief overhaul at the Fredericia Naval Dockyard, the ship proceeded to New Zealand via the Panama Canal, her crew British civilians. At the Devonport Naval Dockyard, Auckland, the ship will undergo a short series of preliminary modifications. She will be named HMNZS CHARLES UPHAM in honour of the Second World War New Zealand soldier who won a bar to his VC.

A number of modifications will be required before the ship is fully ready for military sealift operations, including:

Phase 1A: Initial Modifications. This phase will include initial operator and maintainer training and implementation of an integrated logistic system, bringing the ship up to RNZN SOLAS and MARPOL required standards, painting the ship grey and fitting required naval communications equipment.

Phase 1B: Commissioning and Trials. Commissioning is envisaged for mid-Oct 95, to be followed by trials covering noise ranging, degaussing, heeling/stability and aviation. The ship is anticipated as being available for contingency operations over the 95/96 cyclone season.

Phase 2: Limited Operations. This will include pre-deployment training in the ship, loading, deployment and unloading training.

As the navy familiarises itself with the ship, tenders will be sought from local shipyards, including the privatised Devonport Naval Dockyard, for the full conversion.

Phase 3: Final User Requirement Modifications. This will include provision of a helicopter deck and hanger, for two Army helicopters, permanent accommodation for 65 and facilities for a further 150 Army, increased dry and refrigerated storage capacity, the fitting of a full communications suite, SRBOC and 0.5 cal machine guns. The envisaged helicopter deck capacity is for one Chinook or two medium lift helicopters, with the ability to hangar two medium lift helicopters.

**HMNZS CHARLES UPHAM SPECIFICATIONS**

**GENERAL:**

<table>
<thead>
<tr>
<th>Overall Length</th>
<th>111.70 m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft</td>
<td>6.0  m</td>
</tr>
<tr>
<td>DWT at 6.1m</td>
<td>7,220 mt</td>
</tr>
<tr>
<td>Service Speed</td>
<td>14.5  km</td>
</tr>
</tbody>
</table>

**TOP DECK:**

<table>
<thead>
<tr>
<th>Clear Height (Garage)</th>
<th>4.0  m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deck Area (Open)</td>
<td>1,380 sq m</td>
</tr>
<tr>
<td>Deck Area (Garage)</td>
<td>400 sq m</td>
</tr>
</tbody>
</table>

**MAIN DECK:**

<table>
<thead>
<tr>
<th>Clear Height</th>
<th>4.5  m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform Deck Above</td>
<td>1.87 m</td>
</tr>
<tr>
<td>Platform Deck Below</td>
<td>2.30 m</td>
</tr>
<tr>
<td>Deck Area</td>
<td>1,575 sq m</td>
</tr>
<tr>
<td>Platform Deck</td>
<td>580 sq m</td>
</tr>
</tbody>
</table>

**LOWER DECK:**

<table>
<thead>
<tr>
<th>Clear Height</th>
<th>4.0  m</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deck Area</td>
<td>910 sq m</td>
</tr>
</tbody>
</table>

**EXTERNAL RAMPS:**

| Stern Ramp             | 15.5 x 8.2 m |
| Roadway width          | 2.7 m       |
| Starboard Quarter Ramp | 11.0 x 4.5 m |
| Roadway width          | 4.0 m       |
| Capacity (St/Qu Ramps) | 60 m        |

**CARGO LIFTS:**

| Starboard (Serves all decks) | 16.0 x 3.18 m |
| Port (Serves lower decks)    |              |
| Capacity                      | 45 m         |
| Capacity                      | 15 m         |

---

**NEW ZEALAND SEALIFT SHIP**

Best Wishes to All Navy Personnel

From All Round Motel - Inn the Pink
263 Sheridan St
Cairns 4870
PH: (070) 51 4800
FAX: (070) 31 1526

Getting Married? You need NHBS.

Families of naval personnel can have the best possible health care at the lowest possible cost. NHBS is your private health fund responsible for making sure your family has the best cover available.

NHBS recognises the needs of Navy people. Check NHBS costs and benefits and compare them with civilian funds. You will find we look after your family better.

For brochures and application forms, call NHBS free call (0081 333 156 or (03) 510 3422.

Waiting periods could apply.

Naval Dockyard, Auckland, the ship will undergo a short series of preliminary modifications. She will be named HMNZS CHARLES UPHAM in honour of the Second World War New Zealand soldier who won a bar to his VC.
NAVAL MATTERS

FFG Upgrade Navy's First Priority

By A.W. Grazierbrook

With the long lead times required for new equipment, the RAN must plan ahead for the next twenty years at least.

The FFGs are doing well in their service roles and are expected to remain in service for up to thirty years from now. The equipment options available for meeting their needs and existing ship and aircraft limitations are being considered. The development of new equipment is a priority, particularly in anti-air warfare.

The long-term strategy is to upgrade the existing FFGs with new technologies. The upgrade will include modernizing the FFGs' existing medium range Standard SM1 missiles to Block VIII standard, upgrading to Standard SM2, installing the rolling airframe missile (RAM) and installing the RIM-162 Evo-Sea Sparrow to meet the need for a new layer of defence against anti-ship missiles. The FFGs will be equipped with the RIM-162 Evo-Sea Sparrow, which is still in development. The installation of a vertical missile firing system, whilst the latest SM2 missile requires new target illumination systems.

The RIM-162 Evo-Sea Sparrow is expected to meet the requirements for both navies. The RAN expects the need for ships which are capable of undertaking surveillance and target acquisition, and the installation of a vertical missile firing system will be a priority. The FFGs are designed to be capable of undertaking surveillance and target illumination in support of the current and forecast strength. The current RAN surface combatant force is equipped with a new layer of defence against anti-ship missiles.

The FFGs are expected to remain in service for another thirty years. The RAN expects the need for vessels which are designated to undertake surveillance and target illumination in support of the current and forecast strength. The current RAN surface combatant force is equipped with a new layer of defence against anti-ship missiles.

The RAN expects the need for vessels which are designated to undertake surveillance and target illumination in support of the current and forecast strength. The current RAN surface combatant force is equipped with a new layer of defence against anti-ship missiles.

The RAN expects the need for vessels which are designated to undertake surveillance and target illumination in support of the current and forecast strength. The current RAN surface combatant force is equipped with a new layer of defence against anti-ship missiles.

The RAN expects the need for vessels which are designated to undertake surveillance and target illumination in support of the current and forecast strength. The current RAN surface combatant force is equipped with a new layer of defence against anti-ship missiles.
Mothballs to Museum Pieces

On 13 January 1995, the US Navy's last four battleships were removed from the naval vessel register on the orders of US Navy Secretary John Dalton.

This action makes them available for three possible options: foreign military sales, scrapping, or becoming a naval memorial or museum.

The ships, USS IOWA, MISSOURI, NEW JERSEY, and WISCONSIN, have been in mothballs, in a reserve status, for several years. In this status, the ships would have been able to be brought back to active duty for a cost of $95 million each, according to navy sources.

That price tag, along with the $80 million it would cost annually to operate each ship, if re-activated, led the US Navy to conclude it would be unaffordable to ever deploy the battleships again.

As well, there was little point in spending $100,000 annually on each ship to maintain them in mothballs.

Navy sources said it is likely the ships would be turned over to charitable entities in the USA to become memorials. There is no apparent foreign military sales market due to the high cost of operating the battleships.

The ships were re-activated in the 1980s at a cost of $425 million each. The WISCONSIN and MISSOURI participated in Operation 'Desert Storm'. But the navy mothballed all four ships again by the early 1990s.

This decision will leave the navy without any 16 in (400mm) guns to provide naval surface fire support. A number of solutions remain under consideration to fill that requirement, including a manned version of the Army Tactical Missile System.
The RAN in WWII

Fifty years after the end of World War II it is time to remember and reflect upon the achievements and sacrifice of those who served.

The war embraced history's greatest naval conflict and Australia's Navy was fully involved: its warships steaming all over the world and on many different types of operations.

Though often fighting in the shadow of its larger allies the RAN established itself as an effective and professional force, fully worthy of a place in the proud tradition of Australia's armed forces.

Victory, however, came at great cost, and the conflict would take the lives of over two thousand naval men and women serving both at sea and ashore.

For the Royal Australian Navy's second History Conference sixteen well qualified speakers have been invited to examine different aspects of the navy's war experience.

Sessions will not simply recount past battles but will also focus on many hitherto neglected areas including strategy, policy, allied relations, social aspects and the contribution of Australian industry. Perhaps, even more importantly, the human side of events will be recalled, with full participation by several veterans of the war.

The conference is jointly hosted by the RAN Maritime Studies Program, the Australian Naval Institute and the Australian National Maritime Museum.

Thursday 25 - Friday 26 May 1995

Australian National Maritime Museum
Darling Harbour
Sydney, NSW

General Information

Conference Venue:
Australian National Maritime Museum
Darling Harbour, Sydney NSW

Date:
25-26 May 1995
Registration from 0800 on 25 May 95

Fees:
Registration is $50 per person, $70 if a member of the ANI. Fee includes lunches, morning and afternoon teas, and a copy of the proceedings when published.

Accommodation:
The Hotel Lawson has offered a special room rate for participants of this conference ($85 per night room only). Please quote Department of Defence - WWII conference when booking accommodation. Ph: (02) 211 1499 or 008 251 713.

Further Information:
Mr David Stevens
Tel: (06) 266 6873 Fax: (06) 266 6754
Further developments in the government's controversial proposal to relinquish state ownership of the Australian National Line took place when Parliament resumed after the Christmas break and the Senate Finance and Public Administration Reference Committee advertised terms of reference for an inquiry into "matters related to the proposed sale of the ANL." Submissions were invited from individuals and organisations.

While the proposed sale of ANL has been conducted with the greatest degree of integrity, skill, and propriety necessary to protect the value of ANL and its assets, it is clear that in its present form ANL is not for the sale. Through the years, the Senate committee along with the government have failed to grasp the importance of ownership and mining for confidence building. The committee will await the Commonwealth Auditor-General's report on ANL affairs, due towards the end of March, before making a final decision.

While the ANL's accounts for the year ended 30 June 1994 were also tabled when the Parliament resumed and revealed a much healthier financial situation than might have been supposed following former Minister Bronner's widely reported "you could not give it away..." statement in August last year.

From other information made available in recent times, the lack of recognition of ANL Chairman Bill Bullock and his fellow directors in August would appear to have been unjustified in the circumstances, a fact that will no doubt be examined by the Senate committee along with the government's subsequent sale of the ANL's 25% shareholding in the major cargo handling company, Australian Stevedores, and other aspects of this unhappy episode in the history of Australia's merchant shipping industry.

***

Statement by the Navy League of Australia and the Company of Master Mariners of Australia concerning the future of the Australian National Line.

In recent months substantial public controversy has arisen over the Government's conduct of the sale of the Australian National Line (ANL). Transport Minister Bronner's conduct of the sale has been condemned by two parliamentary inquiries, in respect of its value and viability, and the subsequent statements in respect of its value and viability, and the consequent decision of the Senate of the Australian Parliament is an inquiry into these matters.

The whole of the Australian economy is already none the wiser, in its efficiency and cost effective sea carriage of its commerce, both in peace and in times of emergency, and the Federal Government of Australia and the Company of Master Mariners believe that ownership of ANL should remain in Australian hands for the following reasons:

• In the context of the conference shipping cartels serving Australia, ANL is the only participant aware of conference proposals in respect of the carriage of Australia's sea commerce and providing intelligence to Government in respect of them.

• The Federal Government of Australia and the Company of Master Mariners believe that ownership of ANL should remain in Australian hands for the following reasons:

• A substantial Australian flag merchant marine, such as ANL, assists the country's defence needs, and is an important arm of Government policy.

• A substantial part of the Australian Defence Force's and the Indian Navy's logistic support is provided through ANL, and the Indian Navy appreciates the value of ANL to its strategic objectives.

• ANL is the only Australian flag operator in the world to have been part of the conference shipping cartels serving Australia, and is the only participant aware of conference proposals in respect of the carriage of Australia's sea commerce and providing intelligence to Government in respect of them.

• The Federal Government of Australia and the Company of Master Mariners believe that ownership of ANL should remain in Australian hands for the following reasons:

• A substantial Australian flag merchant marine, such as ANL, assists the country's defence needs, and is an important arm of Government policy.

• A substantial part of the Australian Defence Force's and the Indian Navy's logistic support is provided through ANL, and the Indian Navy appreciates the value of ANL to its strategic objectives.

• ANL is the only Australian flag operator in the world to have been part of the conference shipping cartels serving Australia, and is the only participant aware of conference proposals in respect of the carriage of Australia's sea commerce and providing intelligence to Government in respect of them.

• The Federal Government of Australia and the Company of Master Mariners believe that ownership of ANL should remain in Australian hands for the following reasons:

• A substantial Australian flag merchant marine, such as ANL, assists the country's defence needs, and is an important arm of Government policy.

• A substantial part of the Australian Defence Force's and the Indian Navy's logistic support is provided through ANL, and the Indian Navy appreciates the value of ANL to its strategic objectives.

• ANL is the only Australian flag operator in the world to have been part of the conference shipping cartels serving Australia, and is the only participant aware of conference proposals in respect of the carriage of Australia's sea commerce and providing intelligence to Government in respect of them.
The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

In the surface fleet of the Indian Navy, there are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.

The mainstays of any blue water navy are its surface combatants, the destroyers and frigates, and once again the Indian Navy utilises a varied mix of Russian, Western and indigenous design. Largest members of the surface fleet are the five modified Russian designed Kashin class destroyers, the RAIPUT class. Commissioned in 1980-88 they are equipped with surface to surface missiles (SSM), surface to air missiles (SAM), anti-submarine torpedoes and mortars, two 76mm guns and operate a Helix helicopter.

Now under construction in Bombay, the Project 15 class guided missile destroyers (DDG) represent the future for the Indian surface fleet. Designed in India, they are armed with SSMs, SAMs and a 76mm gun, all on a displacement of 1350 tonnes and a crew of 74. Four have been completed with two more under construction and a further two on order.
The Indian corvette Khukri in May 1990. Note the helicopter deck aft, but no hanger. (Photo A.D. Baker III).

THE INDIAN NAVY

The remainder of the corvette force is made up of Russian-designed vessels, three Nanuchka II class delivered 1976-78, four Pauk II class delivered 1989-91 and four Tupan I class, five built in Russia and three built in India with one more under construction.

A mix of Russian and Indian-built patrol craft are operated, with the largest and most modern being the seven Sukanya class. Displacing 1940 tonnes they are underarmed with only a single 20mm Oerlikon cannon and a Chetak helicopter, however they have the capability to be more heavily re-armed in a crisis. Two further units are on order with six more heavily armed vessels in service or being built for the Indian Coast Guard.

A measure of the reach of a navy can be determined by the size of its auxiliary arm, the larger its fleet of underway replenishment ships the greater its capabilities and the further from its home bases it can deploy. With only two 16000 tonne Deepak class replenishment tankers in service, India is shackled with an inadequate replenishment capability. Their ability to supply only fuel means that spare parts and ammunition resupply must await the return to port. This limitation has been recognised with the ordering of a third vessel to a modified design. This ship, Aditya, to be delivered in 1995, will be able to carry approximately 2170 cubic metres of stores and ammunition in addition to fuel and diesel. Additional ships would be needed however, to support a carrier task force at any distance from home ports.

Mine warfare is one important element of the navy that is undergoing a slow, but welcome, increase. Six Russian Yevgenya class inshore minesweepers and twelve Russian Natya class ocean minesweepers are to be joined by at least six modern minelayers. Constructed of glass-reinforced plastic, these 800 tonne vessels will be built at Goa although their progress is reported to be proceeding at a slow pace.

The Indian Navy has excited the interest of commentators, politicians and naval officers around the Indian Ocean and beyond. What India describes as a navy suitable to her stature as the world's largest democracy, regional neighbours see as a threat growing ever larger. These neighbours, most vocally Pakistan, point to India's willingness to use force to support what it perceives as being its national interests, as demonstrated by Indian military intervention in the Maldivian Islands and Sri Lanka. Nonetheless, despite the fears of her neighbours, India is committed to the qualitative and quantitative growth of her Navy.

The year 2005 should see India's navy operating nuclear powered submarines and two powerful carrier battle groups based around two new V/STOL carriers, escorted by modern, powerful, surface escorts and supported by a fleet of modern replenishment ships, all built to Indian requirements, in India. The continued growth of the Indian Navy over the next few years will indeed bear watching.
BARK ENDEAVOUR

Bark ENDEAVOUR arrival, taken by the Manly Daily newspaper. Every size of craft from fire-tugs to one-man jet skis came out in force to accompany the ship's arrival.

Bark ENDEAVOUR arriving off Sydney on Sunday, 18 December 1994. The ship was greeted by at least two hundred water craft as well as six tall ships. After sailing from her place of construction, Fremantle, the previous October, ENDEAVOUR visited Albany, Adelaide, Hobart and Melbourne. (Photo - RAN).

Bark ENDEAVOUR makes her way up Sydney Harbour for the Man-o-War Steps at the Opera House. To ensure arriving at the announced time, the ship used her auxiliary propulsion, in almost windless conditions. In addition to the welcoming armada, tens of thousands of Sydney-siders witnessed the scene from numerous vantage points around the long shoreline. (Photo - RAN).

Bark ENDEAVOUR arriving off Sydney on Sunday, 18 December 1994. The ship had earlier taken aboard VIPs in the Pittwater, north of Sydney. The bark was then placed on exhibition at the Australian National Maritime Museum in Pyrmont. In March 1995 Bark ENDEAVOUR began her sailing programme. Later she will return to Fremantle to be refitted for a voyage to England. (Photo - RAN).

One of the tall ships to rendezvous with Bark ENDEAVOUR was the sail training ship YOUNG ENDEAVOUR, presented to Australia in 1988, a bicentennial gift from the United Kingdom. (Photo - RAN).

Detailed port quarter view of Bark ENDEAVOUR. The ship had earlier taken aboard VIPs in the Pittwater, north of Sydney. The bark was then placed on exhibition at the Australian National Maritime Museum in Pyrmont. In March 1995 Bark ENDEAVOUR began her sailing programme. Later she will return to Fremantle to be refitted for a voyage to England. (Photo - RAN).
Navy Rescues Lone French Yachtswoman

A lone French yachtswoman, Isabelle Autissier (3H), was rescued from her disabled yacht, Ecureuil Poitou Charentes II, which was drifting in the Southern Ocean, by a Royal Australian Navy Seahawk helicopter on Sunday, January 1, 1995.

Operating from the guided-missile frigate HMAS Darwin, the Seahawk, piloted by Lieutenant Commander Tony Dalton, carried out the rescue in moderate weather conditions. The successful operation was carried out some 55 nautical miles from where HMAS Darwin was holding off.

Ms Autissier was flown to RAAF Base Edinburgh by HMAS Darwin’s Seahawk helicopter on Monday, January 2. HMAS Darwin, commanded by Commander Davyd Thomas, returned to HMAS Stirling on Thursday, January 5. HMAS Darwin was crashed-sailed from the HMAS Stirling naval base at Garden Island in Western Australia on the evening of Thursday, December 29, 1994 for a dash to the site of the disabled yacht which was drifting some 840 nautical miles south west of Hobart.

The rescue involved the recall of many of HMAS Darwin’s crew which were on leave and the supplementing of some of the ship’s billets with personnel from other units at short notice.
NEWCASTLE - Freedom of Entry

HMCS NEWCASTLE arrived in her home port on Wednesday, 25 January, at the start of her second visit to the City of Newcastle.

The ship berthed alongside Throsby Wharf following a ceremonial entry during which an "eleven gun salute" was fired as a mark of respect to the City as the flag moved up Harbour.

Before entering the Port of Newcastle the ship also conducted a "speed run" off the City from Merewether Beach to Nobbys Head. Such runs are normally undertaken periodically to test the performance of unboard machinery.

While in Newcastle, the ship's company provided practical support to the Hunter Orthopaedic School and on Friday, 27 January, 40 sailors from NEWCASTLE undertook a working bee at the school, cleaning up the grounds and carrying out landscaping tasks.

Navy Marches on Newcastle

The guided missile frigate HMCS NEWCASTLE has granted the Freedom of Entry to the City of Newcastle, on Saturday, 28 January.

In a tradition which dates back centuries, HMCS NEWCASTLE was given the right to march through the City "with swords drawn, drums beating, bands playing, colours flying and in full panoply and regalia..."

The ceremony was held adjacent to the Customs House in Hunter Street, followed by a march through the City streets. After a challenge by the Police in Hunter Street, the parade continued up to and along Hunter Street where the Lord Mayor, Councillor John McNaughton, AM and Maritime Commander Australia, Rear Admiral Don Chalmers, AO, RAN took the salute near the Cenotaph.

The parade continued down Newcastle Street to a band playing, followed by a march across Watt Street.

Background to the Freedom of Entry

Navy Marches on Newcastle

Independent companies of armed men were maintained by the various land owning nobles in medieval Europe. Often there were disputes and tensions between them and the threat of occupation or attack and looting of towns and cities was ever present. Hence, whenever armed bodies travelled the countryside they were rarely admitted to other cities. However, in special cases, some bodies of armed men were allowed the special privilege of freedom of entry to a city "with swords drawn, drums beating, bands playing, colours flying and in full panoply and regalia..." It was marked as great trust and close links between the men and the citizens of the city. At the city gates, the unit would be challenged by the guard and after production of evidence, usually in the form of a scroll from the city, the unit would be granted permission to enter.

Navy Helicopter "Lands on" Pole

Motorists driving along the Princes Highway beware!

USS INDIANAPOLIS is the first helicopter placed on a pole in Australia for public viewing. The Inquis is lifted onto its new "home" at the Heathcote Inn, Princes Highway on 16 December. The Naval Aviation Museum at HMAS ALBATROSS at Nowra arranged for the helicopter to be attached to the four metre high pole.

Commander Geoff Munro, Commanding Officer of HMAS ALBATROSS officially presented the vintage helicopter to the citizens of Heathcote. Inquis No. 894 was first flown by the Fleet Air Arm in 1964, but on 25 November 1970 ditched into the waters near Sydney for a two day visit to HMAS STIRLING prior to her participating in "Exercise Lungfish" with the RAN submarine ORION. ORION and Ovens off the West Australian coast. USS INDIANAPOLIS operated from Fleet Base West between 20 October and 16 November. She was alongside for the opening of the new Australian Submarine Squadron Headquarters on 14 November.

A Navy helicopter is now visible, flying at an altitude of just four metres in the southern Sydney suburb of Heathcote. The machine in question, a former Navy UH-1B Iroquois, was lifted onto its new "home" at the Heathcote Inn, Princes Highway on 16 December. The Naval Aviation Museum at HMAS ALBATROSS at Nowra arranged for the helicopter to be attached to the four metre high pole.

Commander Geoff Munro from HMAS ALBATROSS at the official handover of the Inquis to the Heathcote Inn. (Photo - Bill Cunneen)

Princes Highway on 16 December. The Naval Aviation Museum at HMAS ALBATROSS at Nowra arranged for the helicopter to be attached to the four metre high pole.

Commander Geoff Munro, Commanding Officer of HMAS ALBATROSS officially presented the vintage helicopter to the citizens of Heathcote. Inquis No. 894 was first flown by the Fleet Air Arm in 1964, but on 25 November 1970 ditched into the waters near Sydney for a two day visit to HMAS STIRLING prior to her participating in "Exercise Lungfish" with the RAN submarine ORION. ORION and Ovens off the West Australian coast. USS INDIANAPOLIS operated from Fleet Base West between 20 October and 16 November. She was alongside for the opening of the new Australian Submarine Squadron Headquarters on 14 November.

A Navy helicopter is now visible, flying at an altitude of just four metres in the southern Sydney suburb of Heathcote. The machine in question, a former Navy UH-1B Iroquois, was lifted onto its new "home" at the Heathcote Inn, Princes Highway on 16 December. The Naval Aviation Museum at HMAS ALBATROSS at Nowra arranged for the helicopter to be attached to the four metre high pole.

Commander Geoff Munro from HMAS ALBATROSS at the official handover of the Inquis to the Heathcote Inn. (Photo - Bill Cunneen)
R
oyal Australian Naval personnel subdued a spectacular helicopter fire at Jervis Bay in mid-February. The blaze was the major highlight at the opening of the Navy's new gas-fired firefighting facility at HMAS CRESWELL, Jervis Bay, by the Minister for Defence, Senator Robert Ray. The school's new fire-fighting training facility is geared to train all naval personnel how to fight and beat fires in ships and aircraft. The facility is gas-tired and believed to be the safest and most environmentally friendly facility in the country. It is designed to resemble the structure of a warship, with decks, watertight doors and compartments to give students the feel of conditions likely in the event of a fire at sea.

The gas-fired helicopter fire-fighting facility, demonstrated at the opening was also on the site. It is capable of simulating a major crash fire, engine fire, cockpit fire or a combination of all three. A central computer which controls each individual fire has the capacity to run, in real time, up to five training levels of increasing difficulty. The sophisticated design of the gas-fired training units, enables the fires to react to the way a firefighting team performs, therefore allowing complete realism in training.

P
arts salvaged from a Navy ship were formally unveiled at Garden Island on 17 February. As part of the project, the Navy expects to save $12 million over the next five years. The parts - including radars and weapon systems, mainly came from the former US guided missile destroyer GOLDSBOROUGH - were installed in the Navy's new Combat Systems Maintenance School, opened by the Chief of Naval Staff, Vice Admiral Rod Taylor.

Resulting from an initiative to conduct training in Australia that was formerly undertaken in the United States, the opening of the new School will ensure greater self-reliance and lower training costs for the Royal Australian Navy. The new facility houses nine functional radar and weapon systems as fitted in the RAN's destroyers and frigates. All up, the scheme involved the purchase of GOLDSBOROUGH from the United States, stripping the ship and installing several of its combat systems in the School.

An excellent example of cooperation between Defence and private industry, the Combat Systems Maintenance School will offer all the advantages of its American counterparts while also incorporating various Australian innovations.

Panoramic view of HMAS WATERHEN in Sydney, during its current modernisation. Most of the older structures have been removed prior to the new buildings. (Photo: RAN)
Agios Andreas

Tenors for the sale of the former HMAS JERVIS BAY closed in Sydney on 30 November 1994, and the ship was sold for $2.1m on 23 December.

During 16 years service with the RAN, JERVIS BAY provided thousands of young trainees with their first taste of life at sea, visiting many parts of the world, as part of the Australian Fleet. One of its last tasks was to ferry Australian peace-keeping troops to and from Mogadishu in Somalia.

Launched at Newcastle in 1946, the ship operated as a roll-on roll-off passenger ferry between the mainland and Tasmania, named AUSTRALIAN TRADER from 1949-1976. She joined the Navy in 1977.

Having reached the end of its useful life in the RAN, the vessel was sold for $2.1m on 23 December 1994.

The former RAN training ship HMAS IERVIS BAY was decommissioned from the Royal Australian Navy in August 1991 and was purchased by the Greek Government to serve as a training vessel for the Greek Navy. She was rechristened as a training vessel and became known as AGIOS ANDREAS.

The sale of HMAS JERVIS BAY to Greece was part of a wider program to sell surplus RAN ships to foreign navies. The sale of HMAS JERVIS BAY was seen as a good opportunity to reduce the RAN's fleet and free up resources for new construction.

The sale of HMAS JERVIS BAY also had cultural significance, as the ship was associated with a number of famous Australian characters and events. The ship had been named after a popular Greek island, and had been involved in a number of notable events, including the closing of the Sydney Harbour Bridge.

The sale of HMAS JERVIS BAY was controversial, with some members of the RAN and the community expressing concern about the ship's fate. However, the sale was ultimately approved by the federal government, and the ship was sold to Greece for $2.1m.

The sale of HMAS JERVIS BAY was seen as a significant milestone in the history of the RAN, as it marked the end of an era for the ship and its crew. The ship's days as a training vessel had come to an end, and it was time for a new chapter to begin.

The sale of HMAS JERVIS BAY was also seen as a symbol of the RAN's commitment to building strong relationships with foreign navies. The sale of the ship to Greece was intended to strengthen ties between the RAN and the Greek Navy, and to promote a shared understanding of the importance of maritime security.

The sale of HMAS JERVIS BAY was also seen as a way to free up resources for new construction. The ship was sold for $2.1m, which went towards funding new construction projects for the RAN.

The sale of HMAS JERVIS BAY was a significant event in the history of the RAN, and it marked the end of an era for the ship and its crew. The ship had been an important part of the RAN's fleet for many years, and it had served the country well.

The sale of HMAS JERVIS BAY to Greece was seen as a symbol of the RAN's commitment to building strong relationships with foreign navies, and it was intended to strengthen ties between the RAN and the Greek Navy. The sale of the ship was seen as a way to free up resources for new construction, and it was a significant milestone in the history of the RAN.
MONTORO (which travelled between Darwin and Sydney) and went to sleep. The next morning, the Aboriginal was allowed to use a ladder, which was reserved purely for the use of Petty Officers and above and which, if touched, would result in instant punishment. Matters did not improve when GERANIUM put to sea and began survey work in the Gulf of Carpentaria. In the Sir Edward Pellew Group of islands, several officers went ashore and became lost in a strange log which was painted red and white. A relief from sounding party, bottled on land, was encountered and THE GERGER’s troubles were not over. The ship was to sweep our coastline, destroying enemy mines and a concrete bench mark bearing the inscription HMAS GERANIUM 1917. But perhaps her most noticeable legacy are the charts that were produced from the data she collected. Although now updated, they remain the only reliable charts for navigation in our northern waters.

GERANIUM’s last actions before decommissioning was on 13 May 1927 when she towed the passenger ship TASMAN off a reef at Clunie Island. On 23 July 1927, GERANIUM was paid off into reserve and later sunk. There is little to remind Australians today of the valuable work done by the GERANIUM. One of her ship’s company, was so proud of her, he even burst into verse, detailing THE GERGER and her activities. The “Gerger” work is forever, plotted on our many charts, as THE GERGER’s troubles were not over. The first Australian ship to use an aircraft in survey work. That is the most ironic reminder is on Soldiers Point on Newcastle’s island east coast. There lie several rusted iron poles and a bench mark bearing the inscription HMAS GERANIUM 1917. But perhaps her most noticeable legacy are the charts that were produced from the data she collected. Although now updated, they remain the only reliable charts for navigation in our northern waters.
Sleek hulled "ALMA DOEPEL" was once a famous schooner. Three-masted, full of sail, she held the Hobart - Port Phillip crossing record. She was pretty under canvas, with the wind behind and water curling from shapely bows - so pretty she caught the fancy of artists. Paintings of her hang in more than one Australian hotel.

One day recently she put out of Sydney bound for Brisbane and many points north. But they didn't call her the "Alma Doepel" then. She had a symbol on her bows and across her boat deck - a big AK82. She carried engines instead of sail and a high wheel house and bridge. They spoilt her lines a bit, but they were modern touches.

Scares and chips and cracks in her hull were buried beneath putty and brand new paint. She was grey from mast tip to rudder. The "Alma Doepel" was on active service. The army's sailors manned her, men who in peace days were shearers, cooks, solicitors, counter hands, horse breakers and apparently everything except seamen. But now they were talking of galleys instead of kitchens, watches instead of fatigues, and they studied charts in place of maps.

Willing men from all units of the army were transferred. Above all, this new branch was looking for fellows who had had pre-war experience with ships in the islands, and it is perhaps not surprising that they were found in hundreds.

"They call her "Dopey Alma" but no ship afloat has a prouder crew than hers."
**DERWENT IN THE DEEP**

**By Vic Jeffery**

The battered hulk of the former Royal Australian navy destroyer escort DERWENT was sunk 15 nautical miles west of Rottnest on Wednesday, 21 December, after being towed into position by the medium naval tug TAMMAR.

Scuttled in the Rottnest Trench at 2.15pm (local time), the ship now rests in 200 metres of water after a number of small explosive charges were detonated inside the ship's hull.

Divers from Australian Clearance Diving Team Four were removed off the ship around 1.45pm after setting the demolition charges.

DERWENT now forms a fish attracting device with local angling groups claiming it will become a haven for a great deal of marine life and help keep marlin and yellow-fins in the area.

Since its decommissioning at HMAS STIRLING on August 8, 1994 DERWENT has undergone a unique series of survivability tests carried out in conjunction with the Defence Science and Technology Organisation.

Initially it was proposed to sink DERWENT as a recreational diving wreck off the WA coast, this concept being abandoned when the ship was considered too dangerous to be suitable for use as a dive wreck.

DERWENT sank in two minutes and 55 seconds.

---

**SUPPLIERS OF OIL SPILL DISPERSANTS**

**OIL SPILL DISPERSANTS**

**Official Contractors to the Navy**

**NALCO EXXON ENERGY CHEMICALS Australia Pty Ltd**

84 Jervois Street, Torrensville SA 5031

Telephone (08) 234 1773

Fax (08) 234 1255

**SUPPLIERS OF OIL SPILL DISPERSANTS**

**Official Contractors to the Navy**

---

**Air BP**

Air BP, proud suppliers of Jet A-1 to the Royal Australian Navy

Air BP
BP Australia Limited
6/420 St Kilda Rd
Melbourne Vic 3004

Ph: (03) 268 4301
Fax: (03) 820 1548

---

**Sunburst ReGENCY FOODS**

**Australian Fresh FRUIT JUICES - DRINKS SALES & DISTRIBUTION**

**SUNBURST REGENCY FOODS**

43 Wangara Road, Cheltenham, Vic 3192

Telephone: (03) 584 8666
Fax: (03) 584 7363

"Proud Suppliers to H.M.A.S. Cerberus"
B

Hill, New Jersey, refurbished the ship and destroyer USS DECATUR and revamped it effective, lames Whalen, program manager December 13.

gulled internally with ils entire engine and will make those systems more concerns about the capability of the self-

effectiveness of its ship self-defence really act correctly in wartime," Whalen said.

The Navy, April-June 1995 35

The multihulled destroyer USS DECATUR refined as a demonstration platform for the United States Navy's new self-defense systems.

Final Role - USS Decatur

The U.S. Navy plans to use a former warship as a test platform to demonstrate the effectiveness of the service's burgeoning ship self-defense efforts.

Congress added $11 million to the Navy's 1995 budget to speed the implementation of a full Ship Self-Defense System (SSDS) into the test ship to ensure that the future system is fully tested.

The extra funding will help speed the development of a complete SSDS suite for the ship, Whalen said.

The system is deployed for deployment aboard virtually every Class of warship, amphibious assault ship and anti-submarine warfare carrier. While initial tests of SSDS were successfully conducted in 1994 aboard the amphibious assault ship USS Whidbey Island, the fact that it was an active ship limited the kinds of tests that could be carried out, Whalen said.

The tests proved the system's architecture was sound, but couldn't measure the system's reaction time or if it was robust enough to be effective. Until SSDS is deployed, the test ship will be outfitted with the Phalanx close-in weapon system, the NATO Sea Sparrow anti-air and missile and an electronic warfare suite, Whalen said.

The Rolling Airframe Missile will be added to the ship over the next year, he added.

Having a dedicated test ship also will spread the schedule for testing critical elements of the SSDS. Whalen said, because the Navy will no longer be forced to wait for an active ship to become available to perform the tests.

With the overall naval ship's capability declining, it is becoming more difficult to find ships available for testing, Whalen said.

Eventually, SSDS will be placed on the destroyers, Whalen said. Whalen said.

"I think with a manned ship you just have to put on one more limitation that you always leave a fairly broad gap of credibility about whether this system will really act correctly in wartime," Whalen said.

"Being able to test all the way to final long-acting credibility," he said.

The Navy has taken the mothballed destroyer USS DECATUR and reworked it to serve as a test ship.

The former warship was eventually gained internally with an entire engine system and weapons removed from the ship.

A new remotely controlled engine was installed that allows the ship to achieve speeds of about 20 knots.

Martin Marietta Services Group, Cherry Hill, New Jersey, refurbished the ship and will provide ongoing maintenance and support to the program, company officials said.

"We install and integrate all the combat systems to be tested on the ship," Neal Larkin, company spokesman, said.

Martin Marietta Services Group, Cherry Hill, New Jersey, refurbished the ship and will provide ongoing maintenance and support to the program, company officials said.

"We install and integrate all the combat systems to be tested on the ship," Neal Larkin, company spokesman, said.

The modified destroyer USS DECATUR refined as a demonstration platform for the United States Navy's new self-defense systems.

CAN WE FULFILL YOUR REQUIREMENTS IN ANY OF THE FOLLOWING AREAS?

• Light Metal Engineering
• Indoor Plants - Rental & Re-Sale
• Printed Material
• Book Binding & Repair
• French Polishing

Wocal Correctional Centre
PO Box 600 Darra, Qld 4076
Station Rd, Wocul, Qld 4076

Tel: (07) 271 9511
Fax: (07) 271 4501

NULAEF INDUSTRIES

THE KAISER'S PIRATES - German Surface Raiders in World War One

John Walter
Reviewed by: Joe Steccek

Mr Walter has written an interesting book on an naval aspect of the First World War which is usually glossed over in favour of battles such as Jutland and the Falklands. The German Navy's operations against Britain's sea lanes of communication almost cost Britain the war. These operations consisted of the use of surface vessels and submarines. Mr Walter's book examines the operations of the former.

In his lengthy, but very valuable, introduction the author provides an overview of the naval and maritime environment at the outbreak of the Great War. He covers such issues as the development of the German Empire, the importance of commerce, the development of the submarine and the Etappe system. In many ways this introduction helps set the stage for the second part of the book.

"The Kaiser's Pirates", is apart from the title, a very well written, illustrated and researched book which helps to contribute to an aspect of the Great War generally overlooked. The book should appeal to a wide range of naval enthusiasts and is highly recommended.
LATE NEWS

Seven South East Asian Nations In Australian Sponsored Maritime Event

Ships, aircraft and more than 5000 military personnel from seven South East Asian countries came together in a major fleet concentration period in north Australian waters during March.

Maritime units from the defence forces of Australia, New Zealand, Malaysia, Singapore, Thailand, Indonesia and Hong Kong (United Kingdom) gathered in the Timor Sea for a range of training activities and manoeuvres. Naval observers from the Philippines brought to eight the number of countries represented in Fleet Concentration Period FCP KAKADU 2.

KAKADU 2 is the second Fleet Concentration Period in the KAKADU series, the first having been conducted in 1993. FCP KAKADU 2 represented more than twice the number of maritime assets and personnel as KAKADU 1, being primarily an Australian work-up activity before Australian units deploy to South-East Asia.

The FCP, which was conducted in Darwin, provided an opportunity for bilateral activities between Australia's maritime forces and those of our South East Asian neighbours. The concentrated training environment of the FCP, rich in maritime assets, benefited all participants and was another example of increasing defence co-operation in our region. Apart from general training in damage control and communications procedure 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 2 involved 22 ships, 2 submarines and maritime patrol and fighter aircraft and helicopters. For the first time an Indonesian warship participated in the FCP KAKADU series with the TNI-AL Frigate KRI FATAHILLAH. The first time, an Indonesian warship participated in the FCP KAKADU series with the TNI-AL Frigate KRI FATAHILLAH participating in the Harmony Phase of activities in Darwin.

FCP KAKADU 2 began on 1 March and concluded on 11 March.
ADI has a long history as the principal contractor for the repair, refit and modernisation of the vessels of the Royal Australian Navy.

Through this experience, ADI has developed extensive and specialist capabilities ranging from the docking of ships to the installation and testing of sophisticated electronic systems.

For years ADI has worked with the Navy in facilitating stores supply and maintaining and repairing replaceable equipment.

ADI has continually developed and upgraded its material management system and expertise in both commercial and defence supply systems. This allows ADI to offer the Navy much more to facilitate purchasing and inventory control functions.

In addition, ADI’s testing and calibration centres in Sydney, Melbourne and Perth are available to check any equipment for the Navy.

ADI
The strategic edge.

ADI Marine, Garden Island, NSW 2000, Australia
Tel: (02) 562 3298. Fax: (02) 562 3821