Goodbye the RAN ‘Destroyer’, A tribute to HMAS BRISBANE and the DDGs

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The Magazine of the Navy League of Australia

Maritime Contribution to Joint Operations, RN style

The Creswell Oration

Australia’s Maritime Doctrine – Part 3

Australia’s Leading Naval Magazine Since 1938
The Royal Malaysian Navy Corvette LARSAMANA at anchor at the Royal Malaysian Navy’s Review at Langkawi as part of the defence expo Lima. The RMN can expect to take advantage of the upgrades the RN is doing to the vertical launched Sea Wolf as installed on this class (see Flash Traffic this edition). (Brian Morrison, Warships & Marine Corps Museum Int.)
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Front cover: The sun sets on HMAS BRISBANE and with it, the end of an era for the RAN. (John Mortimer)
Coalition remains in office

Following the re-election of the Howard government in November it could be assumed the Defence White Paper released twelve months earlier - Defence 2000: Our Future Defence Force - would continue to guide defence planners. Several events, however, quite unexpected, could alter priorities or vary the timing of approved projects.

The unexpected event was the devastating attack by terrorists on two well known symbols of American power and influence - the World Trade Centre in New York and the Pentagon in Washington. Linked, but only indirectly, was the anticipated arrival of "boat people" off northern Australia seeking asylum and a government decision to deny them entry. The decision, a surprise to most citizens, was made prior to the terrorist attacks.

Two events, placed a considerable strain on the ADF, particularly on the Navy which became involved with both local and overseas happenings within a short span of time. Navy was required to send its principle warships for policing duties in northern waters as well as to the Middle East. Accepting that ADF personnel working in the Middle East were to receive additional allowances and that the increased use of costly defence assets, e.g. keeping ships at sea for longer periods, flying personnel and equipment heavy and thither, involves greater than normal or planned expenditure, it stands to reason budgets must be re-assessed. It will be interesting to see which department of state pays for the increased activities of Australia's defence force.

A continuing worry for the Defence Department - and for Australia - fortunately, recognised in the Defence White Paper, are demographic changes forecast to reduce the size of the age-group from which the ADF recruits its future sailors, soldiers and airmen. This is a problem not confined to Australia but extends to most Western countries that rely on volunteers to man their defence forces.

It is possible, seemingly never-ending advances in technology will mean fewer and fewer personnel will be required; even so, unlike aircraft without pilots (UAVs) it is hard to visualise ships without sailors - avoiding collisions in confined waters, being berthed and secured to buoys etc., all by remote control. Virtually certain, the proportion of women in the defence force (at present about 15%) will increase, no doubt to the regret of the more chivalrous members of the community.

By Geoffrey Evans

THE NAVY LEAGUE OF AUSTRALIA - NOTICE OF MEETING

NOTICE IS HEREBY GIVEN that an Extraordinary General Meeting of The Navy League of Australia will be held at 7th Floor, 175 Macquarie Street, Sydney on Monday 4 February 2002 at 5.30 pm for the purpose of considering and if thought fit, passing the following resolution in special resolution:

RESOLUTION: That the Articles of Association of the Navy League of Australia are amended by inserting the following new Article 193A:

193A Special Purpose Branches of the League

Where in any particular city or town in Australia there is a branch of the League (whether incorporated or unincorporated) the principal purpose of which is the support of an Australian Navy Cadet Unit ('Unit') in that city or town, that branch may apply to the Executive Committee of the Division responsible for the State or Territory in which the city or town is located for official recognition ("Special Purpose Accreditation") as a Branch of the League and the following provisions shall apply:

(a) the Executive Committee shall make such enquiries as it deems necessary to satisfy itself as to the merits of the application for Special Purpose Accreditation as a Branch.
(b) if the Executive Committee is satisfied in its absolute discretion as to the strength and financial stability of the branch it shall thereupon request the Federal Council to issue a Certificate of Accreditation to the relevant Branch which shall be in such form as the Federal Council shall from time to time determine.
(c) the Federal Council may at any time revoke a Certificate of Accreditation on any one or more of the following grounds:

(i) such sum by way of an Accredited Branch administration fee as may be determined by the Federal Council based on the number of members of the Accredited Branch from time to time.

(ii) such sum for the supply of The Navy to the Accredited Branch as may be determined from time to time by the Federal Council.

(iii) the Federal Council may alter the conditions issued by the Federal Council to the Accredited Branch without notice to such branch.

The responsibility for the financial health of the Accredited Branch and its administration rests with the Branch itself. The Federal Council shall not assume any responsibility for the financial health of the Branch or for the proper administration of its affairs.

THE NAVY LEAGUE OF AUSTRALIA

Goodbye the RAN 'Destroyer',

A tribute to HMAS BRISBANE and the DDGs

Contributions by: Rear Admiral, Vice Admiral, Capt, Peter Jones, RAN.

HMAS BRISBANE and HOBART astern all. The three RAN DDGs will go down in naval history as amongst the best ships the RAN ever owned.

One will note from this image that the DDGs were not fitted with stabilisers, much to the displeasure of their crews. (RAN)
A Final Hurrah for Australia’s Last Destroyer

By Raveena Carroll, Defence Public Affairs

With the decommissioning of HMAS BRISBANE, the RAN’s last Charles F. Adams (Perth) class destroyers, the Navy looks back at why the RAN chose this class of ship and the options it was faced with. The DDGs were a first for the RAN in many ways. They were first major units of the RAN to be built in the US – Buy City Michigan, the first RAN ships to be built 182 metres above sea level and the first to be launched sideways.

The acquisition by the RAN of three Charles F. Adams class guided-missile destroyers (DDGs) from the United States in the 1960s has been seen by many as one of the most successful acquisitions in post-war RAN history. These ships introduced into the RAN new technologies that had a significant impact both on operations and capability.

This subject may be approached from a number of levels and the pioneering work on the DDG acquisition was undertaken by Dr Roy Wallace with his 1980 PhD thesis entitled ‘The Australian Purchase of Three United States Guided Missile Destroyers: A Study of the Defence Aspect of Australian-American Relations’. As the title of this work suggests, it examined primarily the implications of the sale on Australia-US relations. This paper will concentrate on the effect these ships had on the RAN. In researching this paper I had access to the Naval Board.
The appreciation at the time was that the aircraft replacement also involved a replacement for MELBOURNE. This made the re-equipment program even more of a fiscal burden. In December 1959, the Menzies government announced that the FAA would be disbanded in 1963. Even before the official decision, Admiral Burrell had instigated informal enquiries with the RN and the USN about Surface-to-Air Guided Weapon (SAGW) Escorts. Following the FAA decision, Admiral Burrell wrote a confidential minute to the Secretary of the Department of the Navy, Mr. Thomas H. Hawkins, which stated “the need for SAGW ships in the RAN is urgent as we will have no effective air defence for the Fleet, other than close range weapons, from the time our fighters phase out in 1963”.

The effective replacement of the Sea Venoms by SAGW ships was ultimately represented in a requirement for 50% of all escorts to be fitted with SAGW. On 8 January 1960 Admiral Burrell and the Third Naval Member, Rear Admiral H.E. Unquhart, visited the United Kingdom, Canada and the United States to study possible designs. In an interview with the Sydney Morning Herald, Admiral Burrell stated his belief that the SAGW ships should be built in Australia and cited the success of the Daring class program as proof of Australia’s capabilities. The primary aim of the Canadian leg was to be briefed on RCN progress with helicopter operations from frigates. In 1957 the Canadians began helicopter trials off the frigate HMCS BUCKINGHAM. The RAN was interested in the feasibility of operating helicopters from the new destroyers because, although the primary mission of the new destroyers was to provide air defence to the fleet, these ships would also operate in a Navy without a carrier.

The Contenders

The three contenders for the contract were the Royal Navy’s 6,000 ton County class, the US Navy’s 4,500 ton Charles F. Adams class destroyer and the smaller 3,400 ton Brooke class frigate.

The Charles F. Adams Class

The lead ship of this American class was commissioned in September 1960. These ships were the first guided-missile destroyers purpose-built by the USN and attracted considerable priority in the naval building program. The primary armament of this class was the Tartar semi-active missile. Dr. Norman Friedman relates that “The need for missile ships was so urgent that Tartar DDGs were ordered before Tartar itself had flown in any form.” The main features of the Charles F. Adams class design were:

- The Tartar SAM missile which had two channels of fire;
- The radar suite which included the AN-SPS 52 three-dimensional radar;
- The gun armament of two 5-inch Mark 24 automatic gun systems.

The Brooke Class

The US Navy also offered the RAN the Tartar equipped Brooke class. A major drawback of this class was that the lead ship was not to be laid down until December 1962. The main features of the Brooke design were:

- Tartar system with a lightweight 16-round launcher (six 40 rounds in Charles F. Adams) with only a single channel of fire;
- One single 38 calibre 5-inch semi-automatic gun;
- AN/SPS-52 three-dimensional radar;
- Flight deck/hangar for a light helicopter of the DASH ASW drone type;
- The new long-range AN/SQS 26 sonar; and
- Single-shaft and speed of 27 knots.

Related Matters

Before examining the subsequent decision-making process it is relevant to touch on two other related aspects of the US proposal. First, the US Government offered an interest-free loan for the purchase of the SAGW ships. The eventual price of the Charles F. Adams was US$90 million for the initial two ships (including ammunition, spares and training). The initial repayment, however, amounted to only US$1.5 million with the other repayments paid over eight years. The cost of the County class ships without the added advantage of the interest-free loan was still 15% higher than the Charles F. Adams design.

The second aspect was US Navy’s search for a site somewhere in the Indian or Pacific Oceans for a submarine VLF communications station. Admiral Burrell was a keen supporter of an Australian location for this station. The perceived advantages of this siting were:
The relative effectiveness of Tartar and Seaslug was of central importance to the destroyer selection process. With the benefit of hindsight it can be seen that the RAN made the right decision. Seaslug was preceded by a Mark II variant which received only limited modernisation throughout its operational life. The increasingly scarce British research and development (R&D) resources were diverted to the succeeding Seadart system which entered service in 1973. Tartar on the other hand received substantial improvements before being superseded by the Standard SM-1MR missile which was compatible with the Tartar launcher.

The RAN's selection of the Tartar missile was by present standards based on incomplete if not sketchy information. The Australian Naval Attache in Washington was furnished with a hit probability of 85% for a single missile. Within some quarters of the RAN this figure, without provision of any trials data, was regarded "with great scepticism."

Tartar in fact was experiencing serious performance and serviceability problems. In February 1961, USS CHARLES F. ADAMS completed the Tartar technical evaluation but failed the subsequent operational evaluation in November of that year. In 1962 a sample of six Charles F. Adams ships reported a Tartar serviceability of only 38%. Finally a 1963 draft Presidential Memorandum on Fleet Air Defence noted the single-shot capabilities of Tartar as only 0.40.

The relative effectiveness of Tartar and Seaslug was of central importance to the destroyer selection process. With the increasing scarcity of Tartar the decision was to be the standard Scaslug County.

The Decision

On 29 June 1961 the Minister for Defence, Mr. A. G. Trowley, announced the selection of the Charles F. Adams class for the RAN's new SAGW destroyers. The details of the RAN variant of the Charles F. Adams class was still to be finalised and the Cabinet gave the Minister of Defence discretion to amend the order to include major modifications to the design. This modification was known as "Seaslug B" and was to be considered shortly. From examination of relevant files, it is apparent that Navy Office was concerned at least December 1960, on what Charles F. Adams variant would be sought. Before the possible Charles F. Adams options the reasons for the class's selection will be examined.

Following the public announcement of the Cabinet decision the Minister of the Navy, Senator John Gordon, stated "The main reason we bought from the United States was that Britain has no guided missile destroyers of this kind developed to this stage."

This comment was valid in two ways. Firstly, the Charles F. Adams were destined to enter service two years and two months ahead of HMAS DEVONSHIRE, and second, the missile technology of the Tartar system was superior. The reason given in the accompanying press reports was that the Charles F. Adams class possessed the range and air-conditioning suitable for Pacific operations. The range of the Counties in service was in fact to be greater than the Charles F. Adams. The elimination of the...
The Fitting of Ikara

The RAN was naturally keen to fit Ikara in place of ASROCs not only in terms of selecting the indigenous system but also because of its potential all-round superiority. This was potential because Ikara in 1960 was still under development and did not go to sea until until HMAS STUART commissioned in 1963. This created a dilemma for the RAN and a cut-off date of 22 May 1961 was set for the concept of Ikara to be proved. If a decision on Ikara could not be made then ASROCs would then have been selected for the DDGs.

Admiral Burrell’s reasons for recommending against Suggestion B were:
- The “strategic situation had worsened”;
- This situation made it necessary to retain the second 5-inch gun; and
- The inevitable construction delays with Suggestion B were unacceptable.

The strategic situation mentioned was, according to Wallace, the Confrontation crisis with Indonesia. At the time of the DDG decision the Soviet Navy was training an Indonesian crew to man the Sverdlov class cruiser BRIAN. This ship arrived in Indonesia in October 1962 to join a Navy that included five Skyra class destroyers. While the validity of Burrell’s recommendation is not questioned, it is interesting to consider the important implications the selection of Suggestion B would have had. Some of the effects would have been:
- The RAN would not have been deprived of anti-submarine helicopters at sea from the loss of the MELBOURNE in 1962 until the introduction of the Seahawk helicopter.
- The RAN’s anti-submarine capability would have been further enhanced by the introduction of a modern, variable depth sonar in the form of the SOS 15, and
- The RAN’s anti-aircraft ships would have most likely been modified in construction to operate the same helicopter as the DDG and would not have spent up to one third of their operational lives without an anti-submarine helicopter.

The effect on the RAN’s current operational capability would have been nothing short of profound.

The Third DDG

On 22 January 1963, it was announced that a third DDG would be built. The purchase of a third ship allowed for one DDG to be always fully operational and also another step towards the goal of 50% of escorts being fitted with a medium range SAGW. In order to meet the 50% figure it was planned that HMAS VOYAGER would be fitted with Tartar. Following her tragic loss, among the effects of the DDGs on the RAN are slightly less tangible. As has been the Indian experience with the introduction of Soviet ships into a British originated Fleet, there developed in the RAN almost two Navies. On one side were the DDGs known as the “American ships” with their crew, equipment, conversion not only in USN procedures but also the considerable jargon needed to crew a USN built ship. On the other side was the rest of the Fleet in the “steel ships”. It would be wrong to overemphasise this split, but it was evident. The division disappeared slowly with crew changes and personnel acceptance of the DDG as a vital element of the Fleet.

The DDGs – Negative Aspects

Although the DDGs have been extremely successful ships in service there have been a number of longer term penalties incurred with their acquisition. This is a largely unexplored area of academic research and evidence is largely circumstantial. For this reason this article will only flag the following points worthy of future exploration:
- The DDGs ended the post-war practice of building destroyers in Australia. In so doing this introduced a boom or bust cycle into Australian shipbuilding;
- The DDGs increased the number of overseas weapon systems in the RAN;
- From the time of the DDGs commissioning Australia did not produce another naval weapons system, despite Ikara’s success; and
- The DDGs introduced a second (albeit superior) logistic support system which added considerably to Fleet operating costs.

The announcement that the DDGs would be constructed outside Australia was adversely received in some sections of the Australian community and, of course, the trade unions. Senator Gorton defended the decision by pointing to the construction period of over nine years for one of the Daring class destroyers and estimated that construction of a DDG in Australia would take over ten years.

In 1960 Australia was faced with the requirement to rebuild the RAN to operate in the missile age with scarce fiscal resources. The situation which faced Senator Gorton and his naval staff can be compared with that faced by the RAN today. The acquisition of the three DDGs was achieved through a combination of high-level consultation, personal connections, and a prevailing sense of urgency. The small band of senior officers involved in the project, supported by Senator Gorton, relied on their professional judgment supplemented by “a feeling in the water” where the former fell short. The well-intentioned hindrances of large project offices, exhaustive evaluations and the committee system, were but a feature of future construction programs.

This article was first published as a chapter in 1991 book, Reflections on the RAN by P.R. Fraser. (J. Figg and P. J. J. Jones)

CAPTION. Greyhounds of the sea, no longer. From L to R HMAS Ships HOBART, PERTH and BRISBANE.
The sea was a lifeline for the nation a century ago, the maritime environment far better known and understood than it is today and the Navy, its guardian and protector, appreciated, respected and supported in a way it is not fond of Australians of today to realise. The sea was the key to international power and influence.

The Creswell Oration

By CDRE Jim Dickson, AM, MBE, RAN (Rid)

On Friday 10 September 2001, 100 guests of the Navy League's Victorian Division heard CDRE Jim Dickson AM, MBE, RAN (Rid) give the inaugural Australian Navy Foundation Day address, herein known as 'The Creswell Oration'. CDRE Dickson's speech to the audience told of how the Australian Navy is actually 100 years-old and that its birth was not when the term 'Royal' was added to the name.

Notwithstanding the paucity of men-o-war, the Navy was the primary instrument of defence, a fact recognised by populace and politicians (how times have changed).

So, what did Australia have by way of maritime defence assets in 1901? Not much. New South Wales had two decrepit second-class torpedo boats. Victoria had the CERBERUS and five torpedo boats. South Australia had the cruiser PROTECTOR and one torpedo boat. Queensland had two gun boats, one torpedo boat and a picket boat. From the earliest days of settlement Britain (the British) interests. The Colonies viewed this with different rights. Others were happy to leave the responsibility to the States Naval Brigades under a national authority. Some politicians of vision, notably Alfred Deakin and Andrew Fisher, supported Creswell in his desire to establish a naval force independent of the Royal Navy, able to safeguard the Commonwealth's interests in its own right. Others were happy to leave the responsibility to the Royal Navy and see the Commonwealth's meagre economic resources used for the development of matters other than defence. It is interesting to note that New South Wales, which had always enjoyed protection from the Royal Navy, was very happy to continue to rely on themother Navy.

In 1907, Creswell submitted revised proposals for a flotilla of nine first class torpedo boats and six submarines but could not get the Australian Government to agree although Prime Minister Deakin put aside sufficient funds to build the boats if and when parliament finally agreed.

In 1908, Andrew Fisher replaced Alfred Deakin as Prime Minister and ordered the first two destroyers built in England. CNS PARRAMATTA and YARRA, which arrived in Australia in 1910. In the following year His Majesty King George V consented to naval forces of Canada and Australia having the prefix Royal.

That Australia moved with increased momentum from 1911 onwards proved very fortuitous - but it in no way justifies the fact that the years of frustrating endeavour between 1901 and 1911 have been virtually banished from the nation's history.

Alfred Deakin and Andrew Fisher, Prime Ministers several times in the first decade of the Commonwealth, were both very strong advocates of the development of an independent national defence capability (i.e. that we now call self-reliance).

The sea was a lifeline for the nation a century ago, the maritime environment far better known and understood than it is today and the Navy, its guardian and protector, appreciated, respected and supported in a way it is not fond of Australians of today to realise. The sea was the key to international power and influence.

At the time of Federation, William Rooke Creswell, was Naval Commandant of Queensland yet as early as 1899 he had gone on record advocating the centralising of the States Naval Brigades under a national authority. He grew in influence and gave frequent voice to his opinions in the early years of Federation. One can only look back with awe and amazement that one man could survive for 14 years the innumerable changes of political masters and the bureaucratic in fighting which must have attended the nation's early years as the competing factions jostled for a share of the meagre resources available. When he retired in 1919, after eight years as the Royal Australian Navy's first chief of Naval Staff, he had set the Navy on a very firm foundation.

Secondly, the Australian Navy aped its parent unbelievably for the first-half of last century - well into the 1950s. It is only when one grows up and realises the opportunities missed that one reflects on how idiotic it all was.

Thirdly, by the last-quarter of the 20th century there was a need to take every opportunity to gather publicity wherever one could. This was one factor which led to the concept of the fleet review in Sydney Harbour in 1986, billed and put before the public as the 75th Anniversary for the RAN.

This belief that the Australian Navy's history began in 1911, as well as being inaccurate and misleading, is in my view an insult to those who laid the foundations of the service from 1901 through 1910 and fought the bureaucratic battles which enabled the service to play the significant part it did in World War I, which broke out so soon thereafter.

Of the Navy's effort in that conflict, Billy Hughes, the then Prime Minister, said that "but for the Navy, the great cities of Australia would have been reduced to ruins, coastwise shipping sunk and communications with the outside world cut off". (a full version of this speech is available from the NLA Web page: www.netspace.net.au/navy/taeg)
Penguin ASM rolled out for RAN
The first operational Penguin Mk 2 Mod 7 Anti-Ship Missiles acquired for the RAN under Project Sea 1414 have been delivered to the RAN at a ceremony at Defence Establishment Orchard Hills, NSW.

The Penguin missile will be fitted to the RAN's Super Seaprog helicopters, and will act as a significant offensive weapon for the ANZAC class frigates.

Delivery of the missiles is expected to be completed by September 2003.

New amphibious watercraft for Army
Newcastle shipbuilder ADI Limited has been selected as the preferred tenderer to build six Amphibious Watercraft for the Australian Army.

The acquisition and set up cost of the project is approximately $30 million dollars. The through life support costs will be an estimated $15 million dollars (approx). The project will create 40 jobs in the Newcastle area.

The Watercraft are lightweight, but extremely strong, vessels powered by two diesel engines and waterjet propulsion.

They will be carried on the decks of the RAN's transport ships HMAS MELBOURNE and KANIMULA.

The Watercraft will provide the Australian Army with an important new capacity to move tanks, vehicles, soldiers and supplies to a beach in a significantly shorter time than can presently be achieved.

ADI Defence is own design of an aluminium Watercraft which was a clear winner, with its very large carrying capacity and shallow draught.

Defence and ADI will now enter into contract negotiations to finalise the project.

The first Amphibious Watercraft will enter service in early 2003.

OTAMA to call Hastings home
The decommissioned RAN Oberon class Submarine, OTAMA, is to be gifted to the town of Hastings.

Speaking from Hastings, the former Parliamentary Secretary to the Minister for Defence, Dr Nelson, recognised the 'passionate enthusiasm' of the Western Port Oberon Association, which had been supported by a detailed three-volume submission. The Association will pay $50,000 for the submarine.

Although Hastings was the only bidder for this remarkable piece of Australian naval history, it was subjected to rigorous examination by a panel within Defence, headed by Commodore Denis Mole, a former Captain of OTAMA.

"I can think of no finer place for it to be displayed for the education and enjoyment of future generations of Australians" he said.

"In this centenary of federation year, it is appropriate that $500,000 of Defence federation funds be committed to this project as a means of preserving Australian naval heritage in a community that has worked so hard to acquire it", said Dr Nelson.

Dr Nelson said that $500,000 will be granted to the Western Port Oberon Association to assist it with the considerable costs of moving OTAMA from RMS SHRILLING in Western Australia and moving it onto its waterfront land-handled.

Mr Max Bryant, President of the Western Port Oberon Association, received from Dr Nelson OTAMA's Bell and Clinometer as the first symbolic handing over. The submarine will be the centerpiece of a Naval Memorial Park.

"Securing OTAMA has given Hastings the centrepiece for a world class tourist attraction", said Mr Bryant. "It will not only ensure the memory of HMS OTAMA will be preserved but will create significant employment and business opportunities in the Hastings area in addition to increasing tourism on the Mornington Peninsula."

Greece frigate transfer deal completed
Greece has taken over five Kortenaer-class frigate from the Netherlands under US$38m agreement signed in Athens in June of last year.

The transfer of the ship, the former HrMs PIETER FLORIS/ (F-826), includes a training and spare parts package incorporating at least one spare Rolls-Royce Tyne gas turbine engine. It brings the total of Kortenaer-class frigates operated by the Hellenic Navy (HN) to seven (two vessels were procured new in 1980-81).

The ex-Netherlands ship, to be renamed HS BOUBOULINA, is to be in service in Greece by the end of this year.

ANZAC Class in service enhancements formalised
The Australian Government. Ten Defence Systems and Saab Systems have signed the ANZAC Ship Alliance Contract to provide for in-service enhancements to the ANZAC Class. Ten ANZAC Class frigates have been ordered, eight for Australia and two for New Zealand.

Under a Master Alliance Agreement the three participants will form a joint Alliance Management Team which will be eventually located in Western Australia with the ANZAC Ship System Project Office. An Alliance General Manager will be ultimately responsible to an Alliance Board for the day-to-day operation of the Alliance.

The Alliance is designed to deliver responsive change to the ANZAC Class as directed by the RAN, and to consistently achieve higher than expected results. Ten and Saab were selected to ensure the Alliance through their ongoing commitment to the ANZAC Ship build project and their current activity under the respective Platform and Combat System In-Service Support Contracts.

Individual projects will be developed under separate Project Alliance Agreements having the same basic terms and conditions as the Master Alliance Agreement. Initial tasks, which will be managed by the Alliance, include the Underwater and Surface Warfighting Upgrade Project (USWUP), communications projects and other platform and combat system tasks directed by the RAN.

Once approved, the Alliance will also manage the ANZAC Ship Anti-Ship Missile Defence (ASMD) upgrade, which is foreseen in the Defence 2000 White Paper.

F-124 SACHSEN at Sea
After the successful testing of navigation systems off Helgoland, the first-of-class F-124 frigate, SACHSEN, continues her trials in the Mediterranean Sea.

The yard trial comprises an extensive programme with a main focus on the marine equipment. In addition, the first tests of the command and weapons control system are being carried out.

Besides the propulsion plant, most of the other marine systems have been successfully tested. During the testing of the command and weapons control system - using Tomahawk fighters and helicopters of the German Federal Navy - the newly developed long-range radar SMART-L reliably detected numerous air targets within a radius of several hundred kilometres.

The new-developed APAR radar produced excellent results as well.

USSE COLE afloat again
The USS COLE (DDG-67) has been re-launched at the Northrop Grumman Corporation's Pascagoula shipyard in the US.

The USS COLE, crippled in a terrorist attack in the Port of Aden, Yemen, on Oct. 12, 2000, returned to her construction shipyard on the deck of the Norwegian heavy lift ship BLUE MARLIN in December 2000 (see THE NAVY Vol 61 No.4). It was moved onto land in January into a construction bay near where it was originally built.

Capt. PETER N. Johnson, USN, supervisor of Shipbuilding, Pascagoula, said that work to date aboard the USS COLE has consisted of more than 550 tons of steel structural repairs to replace the damaged area's exterior plating. He added that the re-launching of COLE represents completion of all structural repairs and restoration.

Other completed work includes the replacement of damaged and unserviceable equipment, and removal, evaluation and re-certification of critical systems such as shafting and propellers. The repair process is moving along as scheduled.

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The new-developed APAR radar produced excellent results as well.

USSE COLE afloat again
The USS COLE (DDG-67) has been re-launched at the Northrop Grumman Corporation's Pascagoula shipyard in the US.

The USS COLE, crippled in a terrorist attack in the Port of Aden, Yemen, on Oct. 12, 2000, returned to her construction shipyard on the deck of the Norwegian heavy lift ship BLUE MARLIN in December 2000 (see THE NAVY Vol 61 No.4). It was moved onto land in January into a construction bay near where it was originally built.

Capt. PETER N. Johnson, USN, supervisor of Shipbuilding, Pascagoula, said that work to date aboard the USS COLE has consisted of more than 550 tons of steel structural repairs to replace the damaged area's exterior plating. He added that the re-launching of COLE represents completion of all structural repairs and restoration.

Other completed work includes the replacement of damaged and unserviceable equipment, and removal, evaluation and re-certification of critical systems such as shafting and propellers. The repair process is moving along as scheduled.
Sovremenny-class destroyers from Russia to supplement the two existing ships.

Beijing signed a contract in September 1996 for two Sovremenny destroyers, the first of which was delivered in February 2000 and the second a year later. These were unfinished hulls originally laid down at the North Yard in St Petersburg in the late 1980s, and some sources suggest that deleted Russian units of the class may have been cannibalised for some equipment.

Talks involving a second batch of two Sovremennys for the Chinese People's Liberation Army/Navy (PLAN) became known two years ago (see THE NAVY Vol 62 No.3). These have yet to produce any result, although negotiations over the first contract were protracted.

Sources familiar with Russia's shipbuilding industry say the delay reflects technical problems rather than any disagreement over cost, financing or weapons fit. Moscow is unable to build new vessels of this type, and China is hesitating to obtain second-hand ships.

Russia built 17 Sovremenny-class destroyers for its own use, including 14 of the Type 956 model and three of the Type 956A model. Seven remain operational, including the three Type 956A, and 10 have been decommissioned or are non-operational. One other hull sits unfinished. The first Type 956 destroyer was commissioned in 1990 and the first Type 956A in 1993, but China's preference is for a newer design.

First Super Hornet delivered

Boring has delivered its first full-rate production F/A-18E/F Super Hornet to the US Navy. It is the first to be equipped with the Joint Helmet-Mounted Cueing System, which allows aircrews to visually guide weapons and sensors. The system also enables users to track and attack targets more quickly.

Russia eyes Ukraine cruiser

Russia is reported to be looking to buy the Project 1164 cruiser UKRAINA, currently lying unfinished at the 61 Kommuny yard in Mykolayiv, Ukraine. The ship is 95% complete, but the Ukrainian Ministry of Defence is unable to find the remaining US$28 million required to finish construction.

Laid down in 1983 for the then Soviet Navy, UKRAINA (ex-ADMARIL LOBOV) is the fourth Project 1164 Slava-class cruiser to be built at the 61 Kommuny yard. Of its three sister ships, MOSKVA (ex-SLV) is flagship of the Russian Black Sea Fleet. MARSHAL USTINOV serves with the Northern Fleet, and VARVARA (ex-CHERVONA UKRAINA) with the Pacific Fleet.

Although launched in 1990, UKRAINA's fitting out has been protracted as a result of disputes over the division of the former Soviet Black Sea Fleet between Russia and Ukraine, and lately by Ukraine's inability to fund the vessel's commissioning. The ship was in fact transferred to Russia in 1995 but taken back by Ukraine in early 1999. Shipyard managers at 61 Kommuny insist the ship will not be sold. Chief designer Mykhaylo Zhelko said that the Ukrainian Government had made a commitment to UKRAINA's completion, and that talk of the ship being sold was just rumours.

However, the mayor of Mykolayiv, Volodymyr Chayka, who recently returned from a visit to Moscow, claimed that the Russian Government was seriously considering the purchase of the UKRAINA. Chayka added that the cruiser's role as a major blue water combatant is not consistent with the 'regional containment and peacekeeping role for which Ukraine's forces are being graded.'
systems aboard its Type 23 frigates under a series of interrelated efforts. These include the mid-life update to the Javelin surface-to-air missile, the purchase of additional (Block II) rounds and updates to the associated shipboard systems.

The MRAASeasword Enhanced Low-Level (SWEll) dual-mode (radar/infra-red) fuze is due to enter service this year. The MRAA includes improvements to the tracker radar processing and the addition of an electro-optical (EO) tracking channel, both of which are intended to enhance performance against land-based targets. Alenia Marconi Systems is integrating the EO channel, using sensors supplied by Sagem.

Block II missiles, due for service entry in 2004-05, will have essentially the same performance as Block I rounds with the dual-mode fuze. Several obsolescent components are being replaced, however, and the missiles will be very much cheaper.

HMAS ADELAIDE, one of three RAN frigates assigned to the war on terrorism, is due to leave for the Middle East on October 17. Around 1,550 ADF personnel in total are involved. Approximately 400 of them are from the RAN. Mr Howard told the nation, "The Governments of Australia and the United States have consulted fully about our commitment to support the international coalition against terrorism."

He continued, "Australian forces will operate under Australian national command and in support of the coalition, and in operational tasks will be placed under the operational control of the appropriate coalition commander for agreed tasks."

I wish to confirm that the Government has decided to make available to the coalition by deploying overseas the following military forces:

- Two RAAF Orions
- Australian special forces detachment in conjunction with coalition force commanders.

"In addition we will continue to maintain the presence of one guided missile frigate to support the Multinational Interception Force implementing UN Security Council resolutions.

"It is possible that, after consultation, the tasks assigned to HMAS SYDNEY may extend beyond the current interdiction duties."

The Prime Minister said that the four RAAF Hornet aircraft provided will conduct air defence support for coalition forces based in the Indian Ocean.

These deployments, in addition to our current operations in East Timor and elsewhere, will add to the operational tempo of the Australian Defence Force but I am satisfied, on the advice of the Chief of the Defence Force, that the deployments are within the capability of the ADF without jeopardising the capabilities required for other tasks." Mr Howard said.

Canada contributes to War on Terror

As part of Canada's contribution, Maritime Forces Pacific has been tasked to provide HMCS VANCOUVER with an air detachment from 443 Sqn to join a United States Navy Battlegroup.

Canada will also send four other warships in addition to HMCS HALIFAX, currently operating with the US Navy in the East Coast Task Group consisting of one frigate, one destroyer and one replenishment ship including air defence, HMCS HALIFAX will be being withdrawn from NATO standing force Atlantic and ordered to the Persian Gulf. In addition, Canada will contribute two C-130 Hercules aircraft, two aurora surveillance aircraft and one airbus. The total Canadian contribution will be approx 2000 personnel.

US Navy drops DD-21, announces new programme

The US Navy will issue a revised Request for Proposal (RFP) for the Future Surface Combatant Program. Formerly known as DD-21, the programme will now be called "DD(X)" to reflect the programme purpose more accurately, that is to produce a family of advanced technology surface combatants, not a single ship class.

The Deputy Secretary of Defense, Paul Wolfowitz, approved the revised programme focus and reaffirmed the Department's support for the Future Surface Combatant Program.

"President Bush has made transformation of the Department of Defense a priority. Through DD(X), the Navy has charted a course to transformation that will provide capability across the full spectrum of naval warfare. The Navy's strategy supports assured access to littoral areas and also develops the capability to defeat the air and missile defence threats the nation's national forces will face in the future."

US Under Secretary of Defense for Acquisition, Technology and Logistics, Pete Aldridge, said that "the new programme focus and new RFP would enable the Navy to fully leverage the work already done by the two industry teams, continue risk mitigation measures and permit appropriate spiral development of technology and engineering to support a range of future surface ships to meet our Nation's maritime requirements well into the 21st century. The DD(X) programme will be the technology driver for the surface fleet of the future."

"With the approval of this revised programme, the Navy has defined its surface combatant roadmap for the future in a manner which ensures all maritime missions can be accomplished. Through DD(x), we are taking a significant step toward providing improved combat capability for our Sailors and Marines," said Navy Secretary Gordon England.

Chief of Naval Operations ADM Vern Clark said the DD(X) programme reflects an awareness of the need to effectively defeat future threats, while accomplishing naval missions, will require a range of naval capabilities and different surface platforms.

"One size fits all will not work on the future battlefield," Clark said. "We must continue to exploit the robust R&D effort made on DD-21 even as we focus our research and technology funding of other approaches such as the Littoral Combat Ship concept."

The DD(X) programme will provide a baseline for spiral development of the DD(X) and the future cruiser or CGX with emphasis on common hullform and technology development. The Navy will use the advanced technology and networking capabilities from DD(X) and CGX in the development of the Littoral Combat Ship with the objective being a survivable, capable near-shore platform to deal with threats in the 21st century. It is in innovatively combine the transformational technologies developed in the DD(X) programme with the many ongoing R&D efforts involving mission focused surface ships to produce a state-of-the-art surface combatant to defeat adversary threats in the near term and beyond."

The revision of the programme is based on the Navy's continued careful examination of DD-21 as it reached the point of decision. Technology and engineering work already done by the two industry teams, continue risk mitigation measures and permit appropriate spiral development of technology and engineering to support a range of future surface ships to meet our Nation's maritime requirements well into the 21st century. The DD(X) programme will be the technology driver for the surface fleet of the future."

US approves Harpoon Block II to UAE

The US Department of Defense has approved the sale of 12 Boeing RGM-84L Harpoon Block II anti-ship missiles to the UAE under an FMS proposal to the United Arab Emirates (UAE). The deal, worth about US$40 million, would be conducted under the DoD's Foreign Military Sales programme. The missiles will equip the UAE's two Korten-class frigates, ABU DHABI and AL-EMIRAT.

India to lease 'Backfire'

The Indian Navy (IN) is to lease four Russian aircraft to counter neighbouring Pakistan's P-3C Orion and Atlantique 1 maritime patrol aircraft and to bolster its assets in the Indian Ocean region.

The Indian Government is also negotiating with Russia to upgrade its eight Tu-142M (Bear-P) maritime patrol aircraft by equipping them with anti-ship missiles, advanced navigation equipment and an electronic warfare system that would link each aircraft with the country's proposed nuclear command centre.

The Tu-142s are likely to be fitted with the Sea Dragon anti-ship warfare system, anti-submarine missiles and the GOES 321 day/night pilot and observation system. The contract is estimated to be worth US$100 million.

Defence Minister George Fernandes said he might soon finalise the purchase of the 44,500-tonne Soviet-built aircraft carrier ADMIRAL GORSHKOV, being offered for the price of its refit estimated at around US$740 million. India had signed an agreement for the carrier during Russian President Vladimir Putin’s visit in 2000 but bureaucratic delays and price renegotiations delayed the final agreement (Jane's Defence Weekly 11 October, 2000).
Protection for RN sunken warships

Dr Lewis Mooney MP the UK Under Secretary of State for Defence announced on 9 November 2001, that greater protection would be given to military wrecks and maritime graves, following rising concern over disturbance and trophy hunting by an irresponsible minority of divers.

The Protection of Military Remains Act was passed in 1986. But its application to wrecks and sea graves has not previously been enforced. Following extensive consultation with both veterans' organisations and the diving community, some wrecks will be designated Controlled Sites, with all community, some wrecks will be designated Protected Places. The Ministry of Defence is now undertaking a rolling review of all known British military wrecks, and designated as appropriate.

The sixteen wrecks to be designated as Controlled Sites are:
- **HMS ROYAL OAK**. Sunk at anchor in Scapa Flow on 14 October 1919 by U-47 with the loss of 833 lives. She is to be protected fromAttributeName hunters.
- **HMS NORTHERN LIGHTS**. A submarine lost to an unknown accident in 1951 off the Isle of Wight, with all 75 crew.
- **HMS BULWARK**. A battleship, she blew up at anchor at Sheerness on 26 November 1914, with the loss of 730. Faulty ammunition is believed to have been responsible.
- **HMS DASHER**. An escort carrier, she was lost 27 March 1943, on an accident caused a catastrophic fuel explosion during operational training in the Clyde. 39 lost their lives.
- **HMS EXMOOUTH**. A destroyer, sunk by a U-boat in the Moray Firth on 21 January 1940, with the loss of 109 lives.
- **HMS FORMIDABLE**. A battleship, sunk off Devon with the loss of 547 men, by a U-boat on 30 December 1914.
- **HMS HS**. Sunk in collision on 6 March 1918, off Anglesey. Thirteen lost included a US naval officer.
- **HMS HAMPSHIRE**. An armoured cruiser, sunk by mine 5 June 1916, off Scapa Flow whilst taking Lord Kitchener to a meeting in Russia. He was among the 650 who were lost.
- **HMS NATAL**. An armoured cruiser which blew up in Cromarty Harbour with the loss of 421 officers and men, after a fire spread to a magazine.
- **HMS ROYAL OAK**. A battleship, sunk at anchor in Scapa Flow on 14 October 1939, by U-47 with the loss of 833 lives.
- **HMS VANGUARD**. A battleship, she blew up on 9 July 1917, at Scapa Flow. There were only three survivors from the 670 aboard. The cause of the blast was never ascertained.
- **HMS SHEFFIELD**. A Type 42 destroyer, hit by an Exocet missile on 4 May 1982, off the Falklands, twenty losing their lives. The ship finally sank on 9 May 1982.
- **HMS COVENTRY**. A Type 42 destroyer, sunk by bombs off Pebble Island in the Falklands on 25 May 1982. Nineteen lives lost.
- **HMS ANTELOPE**. A Type 21 frigate, hit by bombs on 23 May 1982, in San Carlos Water, Falklands. The bombs failed to explode on impact, but one detonated whilst being defused. Two lives were lost.
- **HMS ARDENT**. A Type 21 frigate, sunk after being hit by multiple bombs and rockets on 21 May 1982, off the Falklands. 22 lives lost.
- **A German U-boat.** The German Government has been invited to nominate a U-boat sunk in British waters to be classified as a Controlled Site.
- **The five wrecks to be designated Protected Places are**:
  - **RAF SIR GALAHAD**. A Royal Fleet Auxiliary landing ship, hit by air attack off Fittouy in the Falklands on 8 June 1982, with the loss of 50 lives.
  - **HMS GLOUCESTER**. A cruiser sunk off Crete on 22 May 1941 by dive-bombers with the loss of 736.
  - **HMS HOOD**. Battlecruiser, famously destroyed in action against BISMARCK and PRINZ EUGEN in the Denmark Straits on 24 May 1941. 1,418 lost, only three crew members surviving.
  - **HMS PRINCE OF WALES**. Battleship, sunk by Japanese aircraft off Malaya on 10 December 1941.
  - **HMS REPULSE**. Battlecruiser, sunk in company with PRINCE OF WALES.

**Lockheed Martin team gets JSF contract, F-35 to fly**

Lockheed Martin and its partners Northrop Grumman and BAE SYSTEMS have won the Multi-national JSF contract bearing a rival team headed by Boeing. The Pentagon announced that the team's X-35 would be the chosen design for the next stage of the JSF programme, designated System Development and Demonstration (SDD), in a contract worth US$14 billion. All told the programme is valued at around US$225 billion. The first F-35 should roll off the production line and into service in 2008.

The programme will deliver a number of variants of the basic airframe. These consist of a conventional take off and landing aircraft, a controlled take off and landing and a vertical/short take off and landing variant. Customers include the USAF, USN USMC and RAF. The F-35 will replace F-16, A-10, F-18 (except the E/F model), AV-8B, Sea Harrier and the GR5/7 Harrier.

**US Navy Remembers**

A father wrote to the US Navy asking them to remember his daughter. Colleen Ann Meehan Barkow, who died in the World Trade Center on September 11, 2001. The US Navy did. The crew of the aircraft carrier CARL VINSON wrote her name on a laser-guided bomb before it scored a bull's-eye on an enemy target in Afghanistan. The ship's public affairs officer e-mailed the father a note and a picture of the signed ordnance.

(From the Washington Times, November 2, 2001, Pg. 10)
ANZAC earns high praise

Senior United States defence officials have given HMAS ANZAC the highest praise for her commitment and professionalism during her time in the Gulf since July 01.

General Frank, Commander in Chief, United States Central Command, said "ANZAC is uniquely versatile and well-versed in all facets of boardings. Her performance contributed directly and substantially to 268 sanctioned boardings and record lows for oil smuggling."

"ANZAC's successful execution of every assigned mission during this deployment was due in large part to unparalleled allegiance, steadfast devotion to assigned duties and responsibilities, and the superb combat readiness of the Royal Australian Navy".

Vice Admiral Moore, Commander United States 5th Fleet, said "I salute ANZAC's hard work, dedication, and selfless service. It has been an honour and a pleasure serving beside the professionals in HMAS ANZAC."

"ANZAC's superb combat readiness and outstanding performance exemplified the historic traditions of the Royal Australian Navy".

The guided missile frigate HMAS SYDNEY has already replaced ANZAC in the Gulf and commenced operations enforcing sanctions against Iraq.

**Navy League Meets**

On Friday 16 November 2001, the Navy League's State and Federal executives met in Canberra for the League's Annual General Meeting. The AGM started with an interesting brief by the Chief of Navy, Vice Admiral David Shackleton and a number of his senior staff about the state of the RAN today and its future. After that was done it was down to business with State Presidents/representatives giving reports on their State's activities for the past year.

The next day saw a number of motions discussed. The League's Policy Statement (located at the end of every issue of THE NAVY) was altered to recognise the need for organic fleet air defence, capable sea going patrol boats and Precision Guided Munitions. A further motion saw League support for the acquisition of the Global Hawk UAV for maritime surveillance tasks. The NSW Division also tabled a motion to alter the League's constitution regarding Branch status. This was uncontested and is the subject of a special meeting in Sydney on 4 February 2002 (see page 2 this edition for details).

TH: THE NAVY's manager, Mr Otto Albert, reported that the magazine was going from strength to strength but expressed concern about the financial year's advertising revenue declining sharply.

**COASTWATCH AND THE REFUGEES**

In the light of the Howard government's re-election in November it is unlikely the present surveillance/interdiction arrangements - a senior RAN officer seconded from Defence to co-ordinate operations under the administrative umbrella of the Customs Department - will undergo major change in the foreseeable future; after all, the Howard government brought Coastwatch into being. It may however, be better resourced as a result of changes in the Government's refugee policy, introduced prior to the election.

A policy of denying access to the Australian mainland to people fleeing their homelands for whatever reason and approaching the country in small vessels was introduced in August 2001, prior to this decision so-called "boat people" were intercepted by RAN or Customs patrol boats and escorted to Darwin or some other North Australian port where they were questioned and despatched to centres where their claims for residence in Australia were processed.

The new policy required intercepting vessels to send incoming refugee carrying craft, fishing boats and the like, back whence they came; this was often not possible due to either the unseaworthiness of the craft or the refusal of their crews to obey orders to 'turn around'. Some sank or were allowed to develop between differing cultures and religions, between rich and poor countries, the haves and have-nots, to the extent that a country like Australia, once considered relatively isolated and with an essentially homogenous population must hide a section of the community - the Armed Forces - to avoid provocation and possible harm to members of an honourable profession.

"Globalisation" has not been entirely beneficial...

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In the event the flexibility of Coastwatch and its links with the RAN enabled the Navy's larger ships - frigates and in particular the LPA MANGORA - to be despatched to northern waters to enforce the Government's new policy. Even so, vessels are not equipped to deal with large numbers, including women and children, for lengthy periods and uncertainty concerning a destination where the refugees could be processed did not help those at sea. In the time of writing the duration of the Navy's principle ships involvement in policing duties is not known, at least not to the Australian public; there can be no doubt however, that together with the decision to send several RAN ships to the Middle East following the September 11 terrorist attacks on New York and Washington, a considerable logistical strain was imposed on the Royal Australian Navy.

**SAILORS IN DISGUISE**

One of the regrettable consequences of terrorist attacks in the United States was an instruction to ADF personnel not to wear uniforms in public. A similar instruction was in force for a short time during the Gulf War. So far as the writer recalls, at no stage during World War II were Australian servicemen and women stopped from wearing uniform - indeed it was considered something to be proud of and encouraged.

It is a sad commentary on the way divisions have been allowed to develop between differing cultures and religions, between rich and poor countries, the haves and have-nots, to the extent that a country like Australia, once considered relatively isolated and with an essentially homogenous population must hide a section of the community - the Armed Forces - to avoid provocation and possible harm to members of an honourable profession.

"Globalisation" has not been entirely beneficial...
The invasion of the Falkland Islands by Argentina in the spring of 1982 had provided a diversion into an expeditious warfare. It gave the Royal Manner a chance to spend a real land battle, with the sinking of the BELGRANO, had proved British submarines were as lethal as ever. The attention rate among British surface ships was as severe as WWII, so it is as just as well the conflict lasted only a few months. The Falklands War was a brief diversion that was soon forgotten and the Royal Navy returned to its standoff with the Russians. The UK’s Navy took some consolation from the victory over Argentina, in that proved British sea power could still have global reach. But, it was the hammer of desperate East Berliners that charged everything.

Within a few years of the Berlin wall being knocked down, the Warsaw Pact had gone and the Russian Navy’s submarines and warships were almost all confined to port, roosting at their moorings through lack of money to properly maintain them or send them to sea. Suddenly the Royal Navy’s main mission looked rather forlorn, with the RAF and Army similarly benefit of an opponent to justify their existence. Then, in August 1990, Iraq invaded Kuwait.

Some believed the subsequence victory in the Gulf, that saw Saddam’s troops booted out of Kuwait by an American-led coalition, heralded the establishment of a New World Order. In reality it was the uncooking of the battle, letting an evil genie loose to spread a New World Disorder. Far-sighted senior officers in the Royal Navy recognised that the key to defence of the United Kingdom, her best interests worldwide and those of the international community, had to be sea power and a new strategic concept was needed. How had the Gulf War demonstrated that? Firstly, the arena of conflict was far from home. Most of the region was just a day’s flight away from bases in the Gulf. As it was, the Royal Navy’s surface vessels and those flying and supporting RAF aircraft had to fly from their home bases over 4,000 miles to get into the fight.

The Royal Navy’s main mission looked rather forlorn, with the RAF and Army similarly benefit of an opponent to justify their existence. But, the British fleet could only watch in wonder as the British force being made available for action in theatre. Mr Ingram did not mention the Special Forces contribution, as it is not UK Government policy to comment on their operations. However, the Armed Forces Minister did tell MPs: “The House will recognise that the deployment of our Armed Forces is a grave step. We do it in the confident knowledge that, killing so we can depend upon them to make a difference. Our Armed Forces are special and we are deservedly proud of them. We ask a lot from them and they will not let us down.”

Before the Cold War ended a decade ago the primary focus of British naval power was countering the threat posed by the Warsaw Pact. The chilly waters of the Black Sea and the frozen northern flank, spending their winters learning to stay hidden and keep their heads down, the Warsaw Pact had gone and the Russian Navy’s main mission looked rather forlorn, with the RAF and Army similarly benefit of an opponent to justify their existence. Then, in August 1990, Iraq invaded Kuwait.

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Acquisition was the keystone in the foundations for MCJO. United States Navy unleashed its huge firepower. RAF heavy-lift Chinooks have become a familiar sight on the flight decks of Royal Navy (RN) vessels poised off Kuwait - assault carriers and landing craft battalions. From the sea, they were able to offer a broad range of support to the army ashore. Anti-Submarine Warfare helicopters embarked on the carriers have been reduced, although those carried by Royal Fleet Auxiliary support ships in any task group have been boosted.

The dust of the Omani desert was everywhere - attracted to the skin of the men, it caused them to itch and scratch. The extreme operating conditions were harsh, but the Royal Marines were determined to make the most of the opportunity to train and prepare for future operations. The heat and dust of the Omani desert were lough on personnel and equipment. The dust of the desert region was so thick that it could be seen settling on the ground and the sand dunes that surrounded the carrier

The heat and dust of the Omani desert were lough on personnel and equipment. The dust of the desert region was so thick that it could be seen settling on the ground and the sand dunes that surrounded the carrier. The dust of the desert region was so thick that it could be seen settling on the ground and the sand dunes that surrounded the carrier. The dust of the desert region was so thick that it could be seen settling on the ground and the sand dunes that surrounded the carrier. The dust of the desert region was so thick that it could be seen settling on the ground and the sand dunes that surrounded the carrier.
deployment is a superb showcase for MCIO,” he agreed, looking for fights with other Navies. Certainly in terms of land. The Royal Navy no longer just roams the seas. Sareea was Rear Admiral James Burncll-Nugent, a veteran. ILLUSTRIOUS disembarked her air group to a land base in order to take on the role of Royal Marine helicopter assault ship. Here four Royal Marine Strike Squadrons loaded onto ILLUSTRIOUS to act as the command ship for British land operations in Afghanistan (RAN). The commander of British naval forces involved in Sareea was Rear Admiral James Burncll-Nugent, a veteran of two tense deployments to the Gulf in the late 1990s, as captain of the carrier HMS INvincible. “Yes, this deployment is a superb showcase for MCIO,” he agreed, when interviewed aboard ILLUSTRIOUS. “Navies have a crucial contribution to make in shaping events on land. The Royal Navy no longer just roams the seas looking for fights with other Navies. Certainly in terms of deploying a task force 4,000 miles from home, with all the key strike elements of MCIO in place – armpower, amphibious warfare units and nuclear submarines – Sareea has been a great success. The attacks against America did make everyone in the task force sharpen up. But, the gathering of US Navy power in these waters has impacted on the exercise as much as its operation with American aircraft movements throughout the areas where we are operating with Oman forces.”

Together with sister ship HMS INTREPID, now retired from service, HMS FEARLESS was crucial to British victory in the Falklands War 20 years ago – today she could be vital to success in the war against terrorism. The decision to use the 36-year-old assault ship as the launch platform for action against Afghanistan by British commando forces, gives the old lady an unexpected MCIO starring role in the twilight of her career. Only a year ago HMS FEARLESS suffered a severe engine room fire that could easily had destroyed her. But, luck, together with swift and efficient damage control, saved her. Returning to Portsmouth Naval Base, she underwent major repairs and was returned to service not long before leaving for Sareea. “It was really coming down to the wire to get her out here,” said her commanding officer, Captain Tom Cunningham. “It involved a lot of hard work by the ship’s crew and Fleet Support Limited who carried out the repairs.”

At the conclusion of the Anglo-Omani Exercise Saff Sareea (South West) and several other ships remained on station in the Arabian Sea to put the war on terrorism. For this role ILLUSTRIOUS’ helicopter arm is given a land base in order to take on the role of Royal Marine helicopter assault ship. Here four Royal Marine Strike Squadrons loaded onto ILLUSTRIOUS to support Special Forces onshore inside Afghanistan (RAN). FEARLESS is packed with modern command and control equipment, which is why she is the flagship of the UK’s Amphibious Ready Group. She is due to run on in service until 2003 when the new state-of-the-art assault ship HMS ALBION will replace her. HMS OCEAN, the new helicopter carrier that is the ARG’s other principal vessel, has returned to the UK for scheduled maintenance and may come back to relieve FEARLESS in the New Year. The 200 Royal Marine commandos that have been put aboard the assault ship as the spearhead of the UK’s overt contribution to any raids into Afghanistan were due to be ready for action at the end of last month (November). Like other key Royal Navy commanders in the region for Sareea, Commander Amphibious Task Group (COMATG), Commodore James Miller, has found himself switching easily from present warfare to preparing for the real thing. “We always expect the unexpected,” he said when interviewed aboard FEARLESS during the exercise. “UK armed forces are very highly trained and flexible. They are ready to do anything that is asked of them, from fighting to providing humanitarian aid.” But if flexibility, and the MCIO concept as a whole, are obviously now being put to the test as the US-led coalition heads into a potentially treacherous winter war in Afghanistan.

The FFG HMAS CANBERRA With the decommissioning of the DDGs for the FFGs take on the role of ASW ships. In 1999, however, a very important upgrade they will be able to not only support the DDGs capability but provide a greater level of sea control (RAN).

Chapter 5

MARITIME STRATEGIC CONCEPTS

The Origins of Maritime Strategic Thought

The development of strategic theory for maritime warfare was a phenomenon of the late eighteenth century. The motivations of many of the early theorists are the subject of continuing scholarly debate. What is certain is that they were influenced by the land oriented works on the study of war by Carl van Clausewitz and Antoine Henri de Jomini (1779-1869) and that their efforts collectively produced a systematic approach to explaining and understanding the workings of maritime strategy. The most important early actors in this process were the British historian Sir John Knox Laughton (1830-1915) and the naval officer and analyst Vice Admiral Philip Craven (1831-1899). Their work was considerably extended by Rear Admiral Alfred Thayer Mahan (1840-1914) of the United States Navy in his seminal book, The Influence of Sea Power upon History 1860-1873, which sought to analyse the relative success of France and Britain in exploiting sea power during their long contest for supremacy in the seventeenth and eighteenth centuries. Mahan’s efforts were followed by Sir Julian Corbett (1854-1912) and Admiral Sir Herbert Richmond (1871-1946), as well as the French strategist Admiral Raoul Castex (1878-1960).

The Pugwash Conference

In 1954, the Pugwash Conference was held in Canada. The conference was held to discuss the role of nuclear weapons in world affairs. The participants included many prominent figures from various countries, including the United States, the United Kingdom, and the Soviet Union.

The Conference resulted in a Declaration of Principles which called for a complete nuclear disarmament and the peaceful use of nuclear energy. The declaration was signed by 120 scientists and policymakers from around the world, including the Nobel laureate and former Secretary-General of the United Nations, Dag Hammarskjöld.

The Conference was also a major turning point in the history of nuclear disarmament. It marked the beginning of a new phase in the nuclear arms control process, one that would eventually lead to the signing of the Non-Proliferation Treaty in 1968 and the Comprehensive Test Ban Treaty in 1996. The Pugwash Conference continues to be an important forum for discussing the role of nuclear weapons in world affairs, and for promoting peace and security.

Command of the Sea

A modern analyst has noted that all these commentators were interested in war and they were concerned with dominance. They were acutely conscious of the historical advantages that lay with the utilisation of the sea to further national power. One of the first products of their thought was the concept of command of the sea, which was considered to be the principal objective of naval forces operating in a maritime campaign. This is defined as the possession of such a degree of superiority that one’s own operations are unchallenged by the adversary, while the latter is incapable of utilising the sea to any degree.

Command of the sea was theoretically achievable through the complete destruction or neutralisation of the adversary’s forces, but it was a concept that, however historically valid, became increasingly unrealistic when naval forces were being faced by a range of asymmetric threats brought about by technological innovations such as the mine, the torpedo, the submarine and the aircraft. Furthermore, attempting to command the sea carried the risk of dissipating resources by a failure to recognise that the sea, unlike the land, was a dynamic medium and that the value of maritime operations was in relation to the use of the sea for movement and not for possession of the sea itself. Julian Corbett, in particular, recognised these dilemmas. He pointed out that all naval conflict was fundamentally about the control of communications. With this in mind, Corbett qualified the concept of command of the sea, a process which led in the 1970s to the development of the contemporary term sea control.

Sea Control

Control of the sea can be limited in place and time and the required extent is determined by the task to be done. Sea control is defined as that condition which exists when one has freedom of action to use an area of sea for one’s own purposes for a period of time and, if required, deny its use to an opponent. The state includes the air space above and the water mass and seabed below as well as the electromagnetic spectrum. To an increasing degree, it also includes consideration of space-based assets.

Sea denial

Given that some maritime powers might have as their aim the prevention of the use of the sea against them, a related concept evolved in the form of denials of the sea, or sea denial. This is defined as that condition which exists when one has freedom of action to use an area of sea for one’s own purposes for a period of time and, if required, deny its use to an opponent. The state includes the air space above and the water mass and seabed below as well as the electromagnetic spectrum. To an increasing degree, it also includes consideration of space-based assets.
control and command of the sea is that the achievement of sea control does not exclude the existence of risk. The essential difference for military planners between operations will be required whenever Australia's national strategy is threatened. One of their judgements is that sea control may be at the tactical level or most critically, in the operational environment for more direct efforts in relation to the land. This is not only concerned with the land but also with airfields and to airfields and bases. There are no lines on the sea.

Australian sea communications have two important vulnerabilities. The first is that shipping moving to and from our trading partners in East Asia must pass through archipelagic choke points to reach its destinations. The second is that some distance away as being bound only for Australia or New Zealand.

One of their judgements is that sea control may be required in circumstances other than just the threat of war or terrorism. The strategic and operational implications of the stronger power by forcing the latter to divert its own forces to control the sea, or to provide additional protection for its vulnerabilities.

The ability to ensure sea control will be needed across the complete spectrum of conflict. This is the key theme in the most thoughtful of modern maritime strategists. Much of their work has focused on the utility of sea control and the spectrum of conflict given its small size and limited armament.

Two key developments are having profound influences on Australia's maritime strategic requirements are closely tied up with the concepts of sea control and of sea denial. Many of the ideas on the sea gap's vulnerability of the sea gap's potential point ships and aircraft must be regarded as tools for the operational commander that can be risked and lost in battle. While ships and their crews cannot be wasted, preservation of material and personnel must not become priorities that obscure strategic goals.

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Sea lines of communication
Sea control will be an essential element, whether as object or precondition, of almost any conceivable campaign or operation which will be mounted by Australian forces, whether acting unilaterally or in coalition. This requirement can be described as the protection of sea lines of communication or SLOCs. In many circumstances, sea control will be pre-existent, but it is important that its status not be unilaterally assumed.

Furthermore, SLOCs do not have a physical existence as either defence can be considered only in terms of the ships which use them. Such protective processes, except in regard to facilities such as ports and harbours and more confined coastal areas and choke points, are inherently dynamic, in contrast to the fixed defensive methods which may apply to lines of communication on land, such as roads and railways, and to air fields and bases. There are no lines on the sea.

The SEA LAND AND THE AIR
The steady blurring of the boundaries between environments and the accompanying drive towards the integration of all elements of combat power has led to the concept of battlespace which incorporates both space and the electromagnetic spectrum. The attainment of sea control is the necessary maritime component of battlespace dominance and requires the ability to shape, influence and control this environment for more direct efforts in relation to the land.

Maritime Power Projection
A contemporary maritime strategist has summed up this reality: "Navies fight at sea only for the strategic effect they can secure ashore, where people live. Some of the activities which take place at sea in wartime can be more effectively managed by indirect means that do not require the direct action of naval forces on the shore but, sooner or later, that link is established and a terrestrial result accomplished. In this respect, the sea is seen as the environment for more direct effects in relation to the land. Maritime forces can shape, influence and control this environment, as well as deliver combat forces ashore if necessary. The delivery of force from the sea is defined as maritime power projection and can take the form of the landing of amphibious or special forces or the delivery of seaborne land forces, or bombardment by guided or unguided weapons from seaborne platforms. Their covert nature means that submarines can play an important part in the projection of maritime power. In the Australian national context, amphibious operations by the use of hovercraft and tilt rotor aircraft to deliver ground forces will be seen as a necessary part of collective security, particularly in the context of the Caspian Sea region. The result of the demise of the primary rival against which the United States and NATO Navies were matched has been the US Navy's shift from the traditional navy to an amphibious force. The US Navy's series of doctrinal publications, led by NDPO 1, Maritime Strategy (1997), then DP 1, Amphibious Forces and Operations (1998), have been instrumental in creating a new understanding of amphibious operations by the use of hovercraft and tilt rotor aircraft to deliver ground forces to difficult terrain. This is not only concerned with the development of extended range projection, such as cruise missiles and guided munitions, which can be fired from ships. It also means that submarines can play an important part in the delivery of forces, in particular, amphibious operations by the use of hovercraft and tilt rotor aircraft to deliver ground forces well inland in a battle ready state. The other inherent advantages of seaborne power, particularly its mobility in mass, these increases in reach mean that naval and amphibious forces have an essential role in the wider range of situations. Both amphibious and conventional forces are also closely tied up with the development of more improved battlespace management systems and the ways in which these can be used to advantage on the battlefield. Naval and amphibious forces can become an integral part of the land and air battle and be able to intervene in the land and air battles despite intervening terrain.

The new potential for seaborne forces needs to be balanced against the improvements in surveillance and anti-ship weapons systems which pose challenges for surface units. The effective use of seaborne forces in a threat environment will require a careful assessment of the adversary and the balancing of offensive and defensive capabilities.

This means integrating not only the efforts of the ships themselves but the activities of intelligence, surveillance and air operations platforms in particular. The second development is the end of the Cold War and the collapse of the Soviet Union as an effective blue water power. The result of the demise of the primary rival against which the United States and NATO Navies were matched has been the US Navy's shift from the traditional navy to an amphibious force. This situation is one that has not applied since the late 1870s when the US Navy was nearly destroyed by the British.

Australia's maritime strategic requirements are closely tied up with the concepts of sea control and of sea denial. Many of the ideas on the sea gap's vulnerability, the potential point ships and aircraft of the north of Australia which were anecdotally in the mid-1980s, are based on denial of the maritime approaches to any would-be aggressor. Amendment to this approach is an island security situation fundamental to the sea as a communications. This has recognises strategic realities, but it may well take some time to implement. The only other regions whose interests are not those of the United States or the West.

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The Fourth Ally: The Dutch forces in Australia in WWII.

By Doug Hurst

Reviewed by Mark C. Jones

pp. viii+74. B&W photos and maps, index, bibliography. Available from Crusader Trading, 9 Townsville Street, Fyshwick, ACT, 2611. Ph: (02) 6239-2332, Fax: (02) 6239-2334. E-mail: info@crusaderbooks.com.au Or their website at: http://www.crusaderbooks.com.au

Price: $30.00 including GST + PP

Doug Hurst tells the story of the Dutch contribution to the war in the Pacific theatre. Using the stories of former Dutch servicemen, Hurst weaves together the story of the Netherlands armed forces from the pre-war years of 1938-39 through the immediate post-war period of 1945-1948. The author attempts to cover the entire range of the Dutch contribution to the Allied cause but the emphasis is mostly on aviation and naval units. Dutch land forces were virtually non-existent in Australia because so few soldiers had been evacuated from the NEI. While units of the Royal Netherlands Navy are mentioned throughout the story, the Dutch squadrons within the Royal Australian Air Force are clearly the focus of Hurst's story. (The author is a former RAAF officer). Also included in the story are the sailors of the Dutch shipping company KPM (Koninklijke Paketvaart-Maatschappij), who with other Allied merchant mariners played a crucial role in the Allied victory.

The Fourth Ally is not an exhaustive study of the role of Dutch forces in the Pacific theatre during World War II. The author acknowledges this, stating that he was attempting to make known the story of Dutch Australians, not to write an official campaign history. This he does capably, interspersing anecdotes and pictures from Dutch servicemen with an explanation of the larger campaigns of the war. The selection of which personal stories to include seems to be determined by who the author had met among the former Dutch servicemen. Instead of tracking down one or more servicemen from each Dutch ship or squadron and then combining their stories, the author seems to have based his book on the stories of those former servicemen he knows in Australia. This process produced a somewhat representative story but certainly not a comprehensive treatment of the experiences of Dutch service personnel. Among the approximately twenty men who shared their wartime experiences with Hurst are mariners from the light cruiser TROMP, an officer from the submarine K-15, numerous pilots and aircrew from the air service of the Netherlands East Indies Air Force, and several men who fought in the army or marines in the post-war struggle against the Indonesian nationalists.

There are two topics that come out in Hurst's treatment of the topic that have not appeared to my knowledge in other English-language sources that address the Dutch armed forces during World War II. The first is the difference of attitude and experience of personnel who were from the NEI as opposed to the Netherlands proper. Hurst indicates (p. 54) that men from the NEI had a different view on colonial social structures than European Dutch. NEI Dutch were also more likely to recognize that Dutch control over the islands was likely to change as a result of the war. The second is the issue of ethnicity in the Dutch armed forces (pp. 74-76). The units that escaped to Australia included Dutchmen from both Europe and the NEI, men of mixed European and Indonesian origin, and native Indonesians. Many of the Indonesian men wished to return to the islands, seeing the war as lost, and some Australian and American officials initially objected to these ethnically diverse units out of racial prejudice. The inclusion of these two issues is noteworthy and will appeal to any reader with an interest in military sociology.

One topic covered by the book that seemed to fall outside of the declared scope of the book is the post-war struggle by the Dutch to reassert control over the islands. While some of the Dutch aviation units needed to retain control of the NEI were based in Australia and needed Australian logistical support, the majority of the Dutch armed forces were in the islands and under British strategic direction. The experiences of Dutch men who served in the army or marines are certainly interesting but they appear to fall outside of the time frame of the story (World War II) and the location of the story (Australia). The book would be more effective if it dispensed with the post-war chapters and instead more thoroughly covered the wartime experiences of Dutch personnel resident in Australia.

The strengths of this book are several. First, the subject is one that has yet to be covered adequately in English so this book is a useful addition to the literature. Second, the use of personal stories and pictures gives the book a flavour that is lacking in conventional military history writing. Third, the book is well illustrated with 71 black and white photographs plus six maps and four other illustrations. Fourth, the story is easy to follow and smoothly expressed, again something not always found in books on military topics.

The book also has several weaknesses. First, the book overemphasizes the role of the aviation units incorporated within the RAAF (such as 18 Squadron) and neglects some of the naval units, specifically the surface ships and submarines based at Fremantle. Second, with just a few exceptions, the author does not indicate the source of arguments about the direction of the war or statistics on forces involved. Third, the bibliography lacks many published sources that a reader can use to check the author's account or read further on the subject. Those published sources that are included often lack a complete citation. Fourth, some minor errors relating to naval forces slipped through the editing process such as claiming that the light cruiser TROMP could steam at 41 knots (p. 161), referring to the ships of the U.S. Navy's 58th Destroyer Division as torpedo boats (p. 29), referring to the anti-aircraft destroyer HEEMSKERCK as a destroyer (p. 68), and giving the name of the Royal Navy's Eastern Fleet commander, Admiral Sir James Somerville, as Somerville (p. 122).

In summary, The Fourth Ally is an interesting, highly readable account of an aspect of World War II that has not been told before. For readers whose interest in naval history is more general, this book will be a pleasant read.

Product Review

The Navy

Vol. 64 No. 1

Australian Navy Centenary Postmark - 2nd October 2001

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Battleship

Video Documentary by: The Discovery Channel

Price: $24.20 + PP

Reviewed by John Robey

Available from Crusader Trading, 9 Townsville Street, Fyshwick, ACT, 2611
The video documentary "Battleship" is one of the more interesting documentaries on this subject to date, and there have been a few. Produced by the Discovery Channel, this 1 hour 38 minute documentary has some remarkable footage of battle-ships over the last 100 years. Footage includes: the Iowas performing in Desert Storm; GATO in the Battle of the River Plate; the RN attack on the French fleet; and a new film on HMAS HOOD, which has been preserved as a monument to battleship crews.

One of the interesting stories from the documentary was the arrival of the USS NORTH CAROLINA in Pearl Harbor on 11 July 1942. NORTH CAROLINA was the first Battleship to be produced by the US in over 18 years and was a great morale boost for the 1,000+ people working around the clock to get the sunken battleship fleet back into service. Great cheers went up all over the harbour despite NORTH CAROLINA's 16-inch guns not having seen action.

Some fascinating and rare footage shown in the documentary concerned the building of the Iowas. This shows the fitting out of one of the battle-ships in colour.

The documentary's coverage of the battle of Savo Island, while brief, only covers US ships and not for instance the loss of the Australian Cruiser CANBERRA, which is a little disappointing but somewhat expected for US war documentaries of late.

Notable historians interviewed for this documentary include Eric Grove, Jon Suminda, Paul Stilwell and Andrew Gordon who add immensely to the documentaries insights on these giants of the sea. Interviews were also held with Pearl Harbor survivors, former Captains of the Iowas and one of the three survivors of the HMS HOOD disaster.

The documentary takes one on an extraordinary journey inside a surviving battleship, USS NORTH CAROLINA, which has been preserved as a monument to battleship crews and as a museum. The head curator of this floating battleship museum demonstrates how the giant 16-inch guns were able to fire accurately via a crude analogue computer generating gunnery solutions, how the crew loaded and fired the 16-inch guns, as well as what life was like aboard.

Battleship is narrated by Hal Haltbrow who played the villain in the Dirty Harry movie 'The Enforcer' and 'Fletch II'. The documentary's narrative tends to lose its appeal towards the end of the video, with the authors trying to be overly emotive and personalising the battleship. Some viewers could also be left somewhat confused by the 'flexible' use of past, present and future tense in the narratives text. It also focuses on US battleships more than it needs to making this documentary rather long, however, it still produces enough on battleship guns as well as what life was like aboard.

Hatch, Match & Dispatch

Hatch
NUSHIP RANKIN

Rankin files in Last Collins Class tastes salt for the first time

With an explosion of champagne, the sixth and final Collins Class submarine was launched on a sparkling future with the RAN.

The daughter of Robert ‘Oscar’ Rankin after whom the submarine is named, Ms Patricia Rankin, performed the launching ceremony at Osborne, South Australia, just three days before the federal election.

Ms Rankin travelled from Canada to represent her mother, Mrs Molly McLean, from Queensland, who was unable to attend through ill health.

In front of a crowd of nearly 500 guests, she pushed a button to release the bottle of bubbly onto Rankin’s fin.

The Australian Submarine Corporation (ASC) and Navy had previously ensured that the bottle exploded with a shower of champagne by a quick spot weld on the structure and a judicious grinding of the bottle.

Because the submarines are, as Hart Olliff, CEO of the Australian Submarine Corporation, put it, "too delicate a piece of machinery to be launched at speed down the slipway", the Rankin was already bobbing gently in the water for the launch.

Guests at the launch included federal, state and local politicians, senior Navy personnel including Chief of Navy, ADM David Stalker, ASC senior personnel and corporation workers, a handful of veterans who had served with LCDR Robert ‘Oscar’ Rankin aboard the sloop HMAS YARRA, and a crowd of cameramen and reporters.

Mr Olliff welcomed the audience to the ASC dockyard at Osborne and thanked the 7,500 workers involved in building the RANKIN.

Chairman of the Australian Submarine Corporation, Mr John Prentice, said the building of Australia’s six Collins class submarines was a project which ranked in size with the North West Shelf Gas Project, and the Snowy Mountains Scheme.

He welcomed the federal government’s decision to award the contract for support and maintenance of the submarines to the South Australian yard, and said that ASC would seek to broaden and deepen the capabilities of the very fine boats it had built.

"We're proud that these submarines have been named after people who showed real heroism."

Premier of South Australia, Rob Kerin said the Collins class of boats was remarkable for its stealth, deep diving and endurance capabilities.

He praised the mechanical, electrical and software engineering which had gone into the design and manufacture of the submarines, and wished fair weather, fair seas and the best or good fortune to those who sailed in RANKIN.

It was revealed at the launch that the Hong Kong Police, the Malaysian and Thai navies had all placed orders with ASC recently after being impressed with the outcomes of the submarine project.

The outgoing Minister for Defence, Peter Reith, told guests that the Collins Class submarines would keep Australia at the forefront of world class submarine technology.

There has been some controversy surrounding this project, but the problems have been overcome.

"By 2007, we will have six fully operational submarines once the combat systems have been replaced."

This project is a testament to our capacity as a people to meet challenges, and I congratulate you all."

Guests retired to a reception in ASC’s workshop after the official launch. The Chief of Navy gave a toast to the new submarine, and newly appointed Commanding Officer of RANKIN, LCDR Doug Theobald presented Ms Rankin with HMAS RANKIN’s ship’s crest.

By Anna Marsden (NAVY NEWS)

Dispatch

BRISBANE

HMAS BRISBANE

(See beginning of edition)

BRISBANE’s last message

SUBJ: BRISBANE FINAL ENTRY

1. ON ENTRY TO SYDNEY 09220Z OCT 01

BRISBANE’S FINAL SEATIME COMPLETES

2. FOUR BOILERS AVAILABLE, GUNS UP AND READY FOR FIRE IF NEEDED. STILL AIMING FOR HIGHER THINGS AND READY UNTIL THE END

3. BIG WHEELS HAVE STOPPED TURNING PROUD MARYS SPIRIT KEEPS ON BURNING END

BRISBANE will line up at the Australian War Memorial who recently took delivery of the DGs Bridge, Ms 13 missile launcher and a propeller. It is hoped they will go on display sometime in the next five years.
The strategic background to Australia’s security has changed in recent decades and in some respects become more uncertain. The League believes it is essential that Australia develops capability to defend itself, paying particular attention to maritime defence. Australia is, of geographical necessity, a maritime nation whose prosperity, strength and safety depend to a great extent on the security of the surrounding ocean and island areas, and on seaborne trade.

The Navy League:

- Believes Australia can be defended against attack by other than a super or major maritime power and that the prime requirement of our defence is an evident ability to control the sea and air space around us and to contribute to defending essential lines of sea and air communication to our allies.
- Supports the ANZUS Treaty and the future reintegration of New Zealand as a full partner.
- Urges a close relationship with the nearer ASEAN countries, PNG and the Island States of the South Pacific.
- Advocates a defence capability which is knowledge-based with a prime consideration given to intelligence, surveillance and reconnaissance.
- Advocates the acquisition of the most modern armaments and sensors to ensure that the ADF maintains some technological advantages over forces in our general area.
- Believes there must be a significant deterrent element in the Australian Defence Force (ADF) capable of powerful retaliatory action off both East and West coasts simultaneously.
- Supports the concept of a strong modern Air Force and highly mobile Army, capable of island and jungle warfare as well as the defence of Northern Australia.
- Supports the development of amphibious forces to ensure the security of our offshore territories and to enable assistance to be provided by sea as well as by air to friendly island states in our area.
- Endorses the transfer of responsibility for the coordination of Coastal Surveillance to the defence force and the development of the capability for patrol and surveillance of the ocean areas all around the Australian coast and island territories, including the Southern Ocean.
- Advocates measures to foster a build-up of Australian-owned shipping to ensure the carriage of essential cargoes in war.
- Advocates the development of a defence industry supported by strong research and design organisations capable of constructing all needed types of warships and support vessels and of providing systems and sensor integration with through-life support.

As to the RAN, the League:

- Supports the concept of a Navy capable of effective action off both East and West coasts simultaneously and advocates a gradual build up of the Fleet to ensure that, in conjunction with the RAAF, this can be achieved against any force which could be deployed in our general area.
- Is concerned that the offensive and defensive capability of the RAN has decreased markedly in recent decades and that with the paying-off of the DDGs, the Fleet will lack air defence and have a reduced capability for support of ground forces.
- Advocates the very early acquisition of the new destroyers as foreshadowed in the Defence White Paper 2.
- Advocates the acquisition of long-range precision weapons to increase the present limited power projection, support and deterrent capability of the RAN.
- Advocates the acquisition of the GLOBAL HAWK unmanned surveillance aircraft primarily for offshore surveillance.
- Advocates the acquisition of sufficient Australian-built afloat support ships to support two naval task forces with such ships having design flexibility and commonality of build.
- Advocates the acquisition at an early date of integrated air power in the fleet to ensure that ADF deployments can be fully defended and supported from the sea.
- Advocates that all Australian warships should be equipped with some form of defence against missiles.
- Advocates that in any future submarine construction program all forms of propulsion be examined with a view to selecting the most advantageous operationally.
- Advocates the acquisition of an additional 2 or 3 updated Collins class submarines.
- Supports the maintenance of an enlarged, flexible patrol boat fleet capable of operating in severe sea states.
- Advocates the acquisition of an additional 2 or 3 updated Collins class submarines.
- Advocates the retention in a Reserve Fleet of Naval vessels of potential value in defence emergency.
- Supports the maintenance of a strong Naval Reserve to help crew vessels and aircraft in reserve, or taken up for service, and for specialised tasks in time of defence emergency.
- Supports the maintenance of a strong Australian Navy Cadets organisation.

The League:

Calls for a bipartisan political approach to national defence with a commitment to a steady long-term build-up in our national defence capability including the required industrial infrastructure.

While recognising current economic problems and budgetary constraints, believes that, given leadership by successive governments, Australia can defend itself in the longer term within acceptable financial, economic and manpower parameters.
HMAS ANZAC with HMAS SYDNEY astern. SYDNEY is currently operating in the Persian Gulf enforcing sanctions against Iraq after replacing ANZAC in the same role. (RAN)

"Going, Going..." Australia's first US designed and built DDG, PERTH, slips below the waves to provide an underwater dive attraction and economic windfall for Albany, WA. The ship sits upright on the bottom with the top of her mast exposed above the water. (RAN)
The PLAN (People's Liberation Army Navy) Jiangwei II class FFG YI CHANG arriving in Sydney for the cancelled Centenary of Federation Naval Review. This was one of the first times this class of Chinese ship has been seen up close in the West. (John Mortimer)

One from the archives. This photo was taken in the late 1950's from Taronga Park Zoo in Sydney and shows, amongst others, the carrier SYDNEY however, the rest of this 'Athol Bay flotilla' remains a mystery that THE NAVY is hoping its readers can solve? Also note the blue colour of the harbour which many believe has since changed to a darker tone due to increased traffic and environmental degradation. (Osie Farren)
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 Australian Navy 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 organizing symposia, ship visits and various other functions of maritime interest throughout the year.
- Member participation is encouraged in all these activities.

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To become a Member of The League, simply complete the Application Form below and post it, together with your first annual subscription of $24.20 (which includes the four quarterly editions of "The Navy") to the Hon Secretary of the Division of the Navy League in the State in which you reside, the address of which is as follows:

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

THE NAVY LEAGUE OF AUSTRALIA
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To The Hon Secretary,
The Navy League of Australia

The Division

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I wish to join The Navy League of Australia, the objectives of which I support, and I enclose a remittance for $24.20 being my first annual subscription to 30 June next.

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Subscriptions are due on 1 July in each year and your membership will be current to 30 June immediately following the date on which you join the League, except that if your first subscription is received during the period 1 April to 30 June in any year, your initial membership will be extended to 30 June in the following year.
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The Australian Navy Cadets provide for the spiritual, social and educational welfare of boys and girls and help to develop them in 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 Units. If injured while on duty, Cadets are considered for payment of compensation.

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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 ropes, general sporting activities and other varied subjects.

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

NEW SOUTH WALES: Cadet Liaison Officer, HMAS Penguin, Middle Head Road, Mosman NSW 2088. Telephone: (02) 9960 0560.

QUEENSLAND: Senior Officer ANC, Naval Support Office, Bulimba Barracks, PO Box 549 Bulimba QLD 4171. Telephone: (07) 3215 3512

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VICTORIA: Cadet Liaison Officer, Naval Boatshed, Nelson Place, Williamstown VIC 3016. Telephone: (03) 9399 9928.

TASMANIA: Cadet Liaison Officer, Naval Support Office, Anglesea Barracks, Locked Bag 3, Hobart TAS 7001. Telephone (03) 6237 7240

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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 1043
Pacific 2002 Conference and Exhibition

Australia’s Maritime Doctrine — Part 4

Australia’s Leading Naval Magazine Since 1938
The ex-Soviet aircraft carrier VARYAG is carefully manoeuvred down the Bosphorus from the Black to the Aegean Sea and then on to China. November 2001. See page 7 for details. (Serhat Gevenc)

IZAR’s first F-100 air defence frigate ALVARO DE BAZAN on sea trials (see Flash Traffic p15). The F-100 would have to be considered a strong favourite to win the RAN’s SEA 4000 air warfare destroyer project. (IZAR)
NAVY CULTURE – NO NEED FOR CHANGE

From time to time it is asserted by assorted officials that the "culture" in one or other of the Armed Forces needs to be changed. This usually happens when reports of some misde-meanour or Service personnel appear in the media. Assuming that "culture", in the used sense, means moral discipline and training rather than artistic development, a lengthy association with the writer to believe the calls for change are unwarranted.

An overwhelming majority of sailors are and always have been normal, healthy young people who, at sea, are attached to their ship and take pride in its competitive achievements. Most Commanding Officers enjoy the respect and loyalty of their Ship's Company. If a "bad apple" turns up the person soon becomes known and will be discharged sooner rather than later.

It should perhaps be remarked that one change in particular in modern Navies was the decision to send women to sea in warships. This introduced a factor "old Navy" personnel did not have to consider. It can however, be assumed female personnel develop the same sense of pride and loyalty as their male counterparts.

Pride and loyalty are features of generations of Australians who have served the Navy and their country well. It seems to the writer a culture to be encouraged rather than changed.

Geoffrey Evans

FROM OUR READERS

Sailor Editor

I would like to comment on the Observations – by Geoffrey Evans on page 23 of Vol No 41 article about 'Sailors in Disguise'.

Thank you for having the guts to publicise this fact. I felt disgusted with Defence issuing this order. As a serving soldier of the Australian Regular Army - how shocked was I when informed that I could not leave the barracks in uniform or wear any uniform outside of the barracks in the performance of my duty. This similar order was also given to all ADF members during the Gulf War. The order was clouded with references to the safety of ADF members in Public. What a load of 'Codswallop', this order was politically motivated to protect the Government's PR image and had little to do with safety of Defence Personnel.

This order lets other countries know that they can embarrass the ADF on their 'doorstep'. The Government makes the ADF run away to barracks and hide until safe to come out. We should tell Australians that we are not scared by threats of terrorism.

How many countries of the world use these tactics? Engage local citizens or plan them to protest outside of Defence Establishments, Recruiting Centres and Defence related organizations knowing that the ADF will retreat. How many times have you seen the Recruiting Staff on the TV news hiding behind 'poster boards' or in an office because they can't be seen on TV because Defence has threatened any member with disciplinary action if they say or do anything.

In fact Wormald Security deals with these situations more than the ADF does, because they and companies like them counteract these building organizations. However, is it Wormald Security that will deal to the next Australian/UN hotpot? I don't think so. It will be 18-year-old "Johnny or Jane" ADF member that will. Will they have the training, restraint and PR knowledge to deal with this situation?

We should be using this PR situation to our advantage. We should be exposing our Defence Personnel to this type of "warfare", the PR war, the warfare of the 21st Century. Public opinion, world support and perception has more to do today with winning a war than any weapons platform, money or defence policy. Let use these PR events to train our ADF members in how to win the PR war and not be scared by it.

Dealing with the PR war requires different sets of skills. In the PR war, our people can no longer use lethal force to annihilate the enemy. The soldier who fights the PR war needs, restraint, control and PR training. One wrong move by that Defence person may sway public opinion more than any terrorist attack ever could.

Let see the PR battle before it seizes us.

Name withheld at the Editor's discretion.

Sir,

After several perusals of the pubs to on the back page of issue Jan/Mar 2002 the following may recall other readers to name the ships.

On the extreme left of the photo is the stern of a salvage tug RESERVE then on the port side of HOBART is a boom defence vessel E Bar Class? HOBART, on the starboard side is ARUNTA on her starboard side is a Bay class frigate with a River class frigate on her starboard side. Fwd of HOBART looks like a River class frigate then to the right BATAAN and WARRAMUNGA with TOBRUK on the starboard side of the WARRAMUNGA. At SYDNEY'S bow are three Bathurst class minesweeper/corvettes and in the middle, fwd of ARUNTA another Bathurst class. The Merchantman in the background appears to belong to the Pacific Steam Navigation Co.

A very interesting and comprehensive article by CAPT Peter Jones, RAN, whom I knew as a young LEUT on YA0 CANBERRA.

Hope this will bring back some memories.

H. Peter Kunningesser (ex WOOCX) LEUT ANH, Commanding Officer H. T. Krat.

Many thanks to all the people who contributed to this puzzle and the efforts they made to explain where each ship was located in the bay.

Editor

THE NAVY
It would seem from the above that a major programme to increase the effectiveness and deterrent value of the RAN is of national importance. Part of such a programme must include the early provision of the projected AWDs. What now, in layman's terms, are the broadly likely requirements for an AWD in our environment in the early 21st century?

We would suggest something along the following lines:

- A ship capable of operating effectively in all weather conditions from the tropics to the sub-Antarctic with a range of 6,000 nautical miles or more, a maximum speed of 30kts plus and the following characteristics and capabilities:
  - Long-range area air defence with appropriate detection and control systems and missiles;
  - Sub-surface action with detection and delivery systems for appropriate weapons including torpedoes;
  - Operating two helicopters equipped with air to surface missiles, torpedoes and ASW equipment together with equipment for reconnaissance and ship missile control;
  - Long-range cruise-missile (such as Tomahawk) for strike against both land and ship targets;
  - Operating UAVs;
  - At least one, preferably two medium guns capable of firing extended range ammunition against ship or land targets;
  - A hull size and design allowing for major equipment additions and alterations during the life-time of the vessel, including at least one major modernisation;
  - Robust design to ensure a reasonable chance of survival after receiving action damage and to reduce damage to vital areas, equipment and personnel;
  - Defence against missile, torpedo and mine attack;
  - Low-speed signature against all detection systems, both above and below water;
  - Able to operate closely with US naval forces in all forms of warfare.

Clearly these requirements indicate a vessel of some size - maybe 7,000 tonnes or more. But this aspect should not be of concern, for hulls and propulsion machinery are relatively cheap. It is the equipment fitted which often governs the cost.

So it would seem that a modern well-equipped and capable ADF is as much in Australia's interest as it has ever been. Given our geographic position a major element of our ability to defend ourselves or to contribute to an allied effort will be the capability of the Navy.

Without the DDGs the FFGs, while well-equipped for the movement and logistic support of modest ground forces, can no longer provide area air defence or a significant level of gunfire support for deployed ground forces, nor can it provide adequate Fleet defence.

While the six new Collins class submarines are proving to be most effective in their roles, the surface fleet, so relevant in all situations, is now poorly armed. The new Anzac class frigates and the older Adelaide class guided missile frigates (FFGxs) (when they are updated in the next few years) will provide an effective small frigate/escort force but without any long range punch.

The new mine-clearance vessels form a very effective core force for their role and the survey vessels are in good shape. Likewise the transport ships MANOORA, KANIMBLA and TOBRUK give Australia a useful force for the transport and logistic support of a modest overseas or coastal deployment. However, one of the two fleet tankers and the entire patrol boat force require very early replacement. A most concerning aspect is that about 70% of all surface ships in the Australian Navy are either unarmed or fitted with ancient pre-WWII designed Bofors guns without any fire control equipment. Given the very small number of well-equipped escort vessels and the huge diversity of tasks requiring their presence, in any serious war there would be little chance of providing escorts for many of these poorly armed vessels. They would be a serious risk facing almost any form of maritime attack. Painting them grey is hardly an effective defence, and there is a morale aspect for crews which must not be overlooked.

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This is what it's all about. The arrival of the RAN AWD will mean that 'missile shooters' such as this will be unable to not only close to within their missile's range but also determine their targeting data from being unable to 'lock on' to the sea in home contact. Picture in a German Airforce (Luftwaffe) Tornado firing a Kormoron anti-ship missile (Luftwaffe)

A Slow VARYAG to China

By Dr Roger Thornhill

The ex-Soviet aircraft carrier VARYAG is towed down the Bosphorus Strait on its way to China and an uncertain future either as a floating hotel and casino (America) or reconditioned as a PLAN or as China's first aircraft carrier. This image clearly shows the 12-degree ski (autopilot employed by the class - Borys Gavrin)

At the time of printing the ex-Soviet aircraft carrier VARYAG still had not 'turned up' in the Asia-Pacific region's media despite being over due from her transit from Turkey to China. VARYAG's appearance in a Chinese port is certain to send shock waves through the region as to date, surprisingly, none of the region's defence academics has even acknowledged that China has bought the super-carrier. There also appears to be some 'anomalies' as to who has bought VARYAG, a Chinese based travel agency or the PLAN (People's Liberation Army-Navy).

Before the collapse of the Soviet Union the aircraft carrier VARYAG, still building, was to be the communist nation's second super-carrier next to the already completed ADMIRAL KUZNETSOV. VARYAG was originally known as RIGA when her keel was laid down at Nikolayev South (formerly Shipyard 444) on December 6, 1985. She was launched on December 4, 1988, and was renamed VARYAG (taking in late 1990.

After she was 70% complete construction stopped in 1992 with the ship structurally complete but without electronics, weapons and sensors. Ownership was transferred to the Ukraine as the Soviet Union broke up and the ship was laid up without any routine maintenance or preservation work being carried out. She was then stripped of anything valuable to maintain the crew and so to feed the families of dockyard workers. Her condition in early 1998 was grim. She lacked engines, a rudder, and all of her operating systems and was offered for sale as scrap metal.

In April 1999, Ukrainian Trade Minister, Roman Shrejek, announced the winning bid for VARYAG's sale. A small Hong Kong company called the Chung Lo Travel Agency Ltd paid US$20 million for the hulk represents US$600 per tonne, three times higher than what scrap metal is normally worth.

Due to the poor condition of VARYAG's hull, many Western military analysts believe it is highly unlikely that the PLAN will commission the carrier, rather they suggest that the PLAN intends to examine the carrier as a model for an indigenous carrier to be built later. Others counter that as the carrier does not require modern technology. Also, the PLAN could probably have learnt all they needed from VARYAG without towning it all the way to China. So why the tow to China?
The engineless, rudderless hulk of what was to be the Soviet Union’s second super carrier VARYAG. The carrier was initially denied permission to transit the Bosporus Strait given the danger it posed to the large number of bridges linking Europe to the Orient. But assurances to pay for any damages by the Chinese Government and the fact she was the only vessel in a party of 23 vessels including 11 tug boats and three pilot boats finally convinced the Turkish Government to allow her to pass. (Shinto Yamanaka)

Whatever plans have been made, in mid-2000, a Dutch tug with a Filipino crew was hired to take VARYAG under tow. However, Chong Lin could not get permission from Turkey to transit the dangerous Bosporus Strait — in addition to safety issues, the Montreux Treaty of 1936 does not allow aircraft carriers to pass the Dardanelles — and the hulk spent 16 months circling in the Black Sea costing the owners C$58,000 a day in tug boat fees. Interestingly, high-level Chinese Government ministers conducted negotiations in Ankara on Chong Lin’s behalf, offering to allow Chinese tourists to visit cash-strapped Turkey if the travel agency’s ship were allowed to pass through the straits. On November 1, 2001, Turkey finally relented from its position that the vessel posed too great a danger to the bridges of Istanbul, and allowed the transit, which forced the closure of the Bosporus to all other traffic. The Chinese Government’s active involvement in the negotiations with Turkey over the VARYAG issue gives strength to speculation that the ship is to be used by China to develop its first aircraft carrier.

Escorted by 27 vessels including 11 tug boats and three pilot boats, the large engineless and rudderless carrier took six hours to transit the straits; most large ships take an hour or two to establish their tow. However, after many failed attempts to reattach the lines, a Greek coast guard rescue helicopter landed on VARYAG and picked up four of the seven crew. One tug managed to make a line fast to the ship later in the day, but high winds severely hampered efforts by two other tugs to secure the ship. On November 6, Arica Lima, a sailor from the tug HALIVA CHAMPION, died after a fall while attempting to reattach the tow ropes. On November 7, the hulk was taken back under tow and progress toward the Suez Canal resumed at some three knots.

Since then, she has failed to materialise in the region.

Background

The 67,500-ton Kuznetsov class aircraft carrier was designed to support strategic missile carrying submarines, surface ships and maritime missile carrying aircraft of the old Soviet fleet. The ship was to be capable of engaging surface, subsurface and airborne targets. Superficially similar to American carriers, the design is in fact defensive in support of SSBN basins. The lack of catapults may preclude launching aircraft with heavy strike loads, and the air superiority orientation of the air wing is apparent.

The flight deck area is 14,700 square meters and aircraft take-off is assisted by a bow ski-jump angled at 20 degrees in lieu of steam catapults. The flight deck is equipped with arrestor wires. Two starboard lifts carry the aircraft from the hangar to the flight deck. The ship has the capacity to support 18 Sukhoi Su-27D (Flanker) and four Su-25 Frogfoot fixed wing aircraft and a range of helicopters including 15 Kamov Ka-27 HP (Helix) and two Kamov Helix AEW&C.

The ship was fitted for a Granit anti-ship missile system equipped with 12 vertical surface to surface missile launchers. The air defence missile system was to include 24 vertical launchers housing 192 anti-air missiles.

Originally designated ‘Black-Com-2’ class (Black Sea Combatant 2), then subsequently the Kuznetsov class, these ships were sometimes also referred to as the Brezhniv class. Initially Western analysts anticipated that the ships would have a Combined Nuclear and Steam (CONAS) propulsion plant similar to the Kiev battle cruiser. However, the class was in fact to be conventionally propelled with oil-fired turbines.

Western intelligence first detected preparations for the construction of the first ship in late 1979. The first public view of this ship came with the leak of the ‘Morrison Photos’, which were the first real public look at overhead satellite imagery. Another leak over a decade later was a headstone to the first, showing the dismantlement of the sister ship to the carrier in the Morrison photo.

The first unit was originally named TBILISI, and subsequently renamed ADMIRAL FLOTA SVETSKOGO SOYUZA KUZNETSOV. The ADMIRAL KUZNETSOV is currently the only operational aircraft carrier in the Russian Navy. A variety of aircraft were tested on KUZNETSOV. The first specially configured Su-25UT Flagon B, Su-27 Flanker, and MiG-29 Fulcam conventional jets landed on the deck of the TBILISI in November 1989, aided by arresting gear. The MiG-29K passed test flights from the deck of the aircraft carrier, but was not selected for production.

The carrier VARYAG had an earlier life since 1992 without any present work or maintenance being conducted. What China will make of VARYAG is as yet unknown. The future clearly looks very different for VARYAG and her owner.

The 7(Kt complete VARYAG sits at dock awaiting disposal or sale (1997).
NZ defence caught in a time warp
By Henry Wilson.

From the Defence Systems Daily website

In a situation more akin to the whims of a Hollywood screen writer than a serious idea from Defence Chiefs, the latest sea trials in New Zealand of the country’s frigates have cast more doubt on the wisdom of last year’s decision by the Government to scrap its Air Force. The vessels CANTERBURY and TE KAHĀ carried out training exercises in the Bay of Plenty, their ‘enemy’ - three elderly aircraft flown by members of the NZ ‘Warbirds Association’, who restore and preserve classic aircraft.

Last year’s decision to disbend 2, 14, and 75 Squadrons of the RNZAF, which flew A-4 Skyhawks and Armeach carriers, met with criticism from its allies, both regional and global, as New Zealand became the first country since the war to disassemble its airborne defensive capability. Action group ‘Save Our Squadrons’, is currently exploring legal possibilities that the decision breaches the 1990 Defence Act and is therefore unconstitutional. Helen Clark, Prime Minister of the left-wing coalition government, ignored advice given by experts on the wisdom of defence, including those commissioned by her own party, who questioned the wisdom of the move.

The events of the last week can only have cast further apresension on the current state of New Zealand’s defensive capabilities. The aircraft - a Hawker Hunter which first flew with the Singapore air force in 1957, a Fouga Magister which entered service with the French military in 1960 and a Creona A-176 built in 1972 and used during the Gulf War of 1990 - are likely the rank of enemy aircraft in mock attacks on the two warships.

How this will have prepared the ships and their crew for the realities of modern warfare is unclear, but no doubt Ms Clark will be pleased that the humorous traditions of HMS Petitchouf have been well served.

New ship decisions for RNZN
NZ Defence Minister Mark Burton has finally revealed the future shape of New Zealand’s Navy. The Government is committed to equipping the Royal New Zealand Navy with a practical fleet that is modern, sustainable and matched to New Zealand’s needs. This will involve a significant increase in the current naval fleet and a more focused use of each resource.

‘This announcement follows the first ever comprehensive analysis of New Zealand’s maritime patrol requirements, both civilian and military,’ Minister Burton said. ‘Decisions have been taken on the basis of the Maritime Forces Review, and the earlier Maritime Patrol Review, released in February 2001.

‘The reviews have identified gaps in the Navy’s current ability to meet all particular, real-time and civilian patrol requirements. Cabinet has therefore agreed to spend up to NZ$200 million on capital acquisitions for the Royal New Zealand Navy,’ Mark Burton said.

‘This will include a multi-role vessel, at least two offshore patrol vessels, and four or five inshore patrol vessels. The inshore requirements could possibly be met by upgrading the Navy’s existing five inshore patrol craft.

‘The two key timing issues are filling the gap in civilian agency patrol requirements, and bringing into service the multi-role vessel to replace the Leander class frigate CANTERBURY, due for retirement in 2005.

‘I have therefore directed the Ministry of Defence to canvass proposals from industry to meet the requirements for a multi-role vessel, and offshore and inshore patrol requirements. Opportunities for New Zealand industry involvement will be explored. The New Zealand shipbuilding industry has already indicated that there would be considerable scope for New Zealand involvement.

‘Once input from industry has been analysed, I will put acquisition proposals forward to Cabinet.

‘The Government has embarked on a badly needed equipment modernisation programme across all three services: Navy, Army and Air Force. There is expected to incur capital spending of around NZ$2 billion over the next decade, as we provide our defence personnel with the right equipment to do their jobs,’ Mark Burton said.

The current Royal New Zealand Navy fleet consists of:

- 2 ANZAC class frigates: HMNZS TE MANA and TE KAHĀ
- 1 Leander class frigate: HMNZS CANTERBURY
- 1 replenishment ship HMNZS ENDEAVOUR
- 1 diving support vessel HMNZS MANAWANUI
- 4 inshore patrol craft: HMNZS ships MOA, KIWI, WAKAKURA and HINAU
- 1 hydrographic and oceanographic survey ship HMNZS RESOLUTION
- The Royal New Zealand Navy of the future will include the following elements:
- 2 ANZAC class frigates: HMNZS TE MANA and TE KAHĀ
- 1 Multi-Roll Vessel
- 2 or more offshore patrol vessels
- 1 replenishment ship HMNZS ENDEAVOUR
- 1 diving support vessel HMNZS MANAWANUI
- 4 or 5 inshore patrol vessels.

‘(The need for a hydrographic survey capability is the subject of a separate review nearing completion.)

The Maritime Patrol Review involved all of the relevant government departments and agencies: Ministry of Defence and Defence Force, Ministry of Foreign Affairs and Trade, Ministry of Fisheries, New Zealand Customs Service, Treasury, Department of Conservation, Department of Prime Minister and Cabinet, Ministry of Agriculture and Forestry, Maritime Safety Authority, New Zealand Police and Department of Science, Research and Innovation (NSRI) and Ministry of Defence and Defence Force, Ministry of Foreign Affairs and Trade, Ministry of Fisheries, New Zealand Customs Service, Treasury, Department of Conservation, Department of Prime Minister and Cabinet, Ministry of Agriculture and Forestry, Maritime Safety Authority, New Zealand Police and Department of Science, Research and Innovation (NSRI).’

Osprey to enter two-year flight test programme

US Defense Under Secretary for Acquisition, Technology and Logistics, Pete Aldridge, has announced that the US Military’s troubled V-22 Osprey aircraft is to go through a two-year flight test programme.

‘I’ve had some serious doubts about the safety, reliability and operational suitability of the V-22,’ Aldridge said during a Pentagon press conference. ‘I personally still have some doubts, but the only way to prove the case is to put the airplane back into flight test, and let it go to do what it will do.

THE USMC still plans to buy 360 while the USN and USAF plan to buy 50 of the tilt-rotor aircraft. These plans however, were put on hold following two crashes that killed 23 Marines in April and December 2000. The new flight test programme is to start in April 2002 and will be a comprehensive, two-year look-at the aircraft. The tests will further explore the occurrence called vortex ring state, deemed responsible for the first crash of a V-22 in Arizona that killed 19 Marines.

The tests will also explore shipboard compatibility such as what happens when one rotor is over the flight deck and the other is over the side of the ship. Conditions such could include take-off, landing or craft on deck.

The tests will also explore low-speed hover conditions, such as landing when the prop wash up dust, debris, snow and other things. Combat manoeuvrability and formation flying, including refueling operations are also included.

Aldridge said he and Navy Secretary Gordon England would assess the testing programmes at various posts along the way. He said the flight-test hurdles would be event-driven rather than schedule-driven. Tests will not move to new areas until engineers fully understand the results of earlier testing.

‘We’re not going to try by driving to accomplish something in a certain period of time,’ he said.

The US DoD has slowed production of the V-22 to the minimum sustaining level. This will allow changes to be made to production aircraft. Aircraft already built will be refurbished.

USMC UH-1Y rolls out

The first remanufactured UH-1Y utility transport helicopter for the US Marine Corps (USMC) was rolled out at Bell Helicopter Textron’s Flight Research Center, at Arlington Municipal Airport, on 13 December 2001. Bell is remanufacturing 100 UH-1N Hueys to the new UH-1Y configuration as part of the US Army’s $4.5 billion High Speed Program, which also includes the remanufacture of 180 AH-1W attack helicopters to AH-1Z configuration.

The H-1 Program is a major upgrade initiative to remanufacture these two UH-1 type helicopters, which form an advanced configuration featuring common engine, electronics and weapon systems. The H-1 upgrades include an enormous amount of commonality between the two aircraft including engines, General Electric T700-701SHs, a four-blade all-composite, hingeless, bearings-less rotor system and tail rotor, identical drive trains, hydraulics and electrical distribution systems. By utilising common systems, the cost of the logistics support process for the two helicopters, reduces dramatically allowing for vastly improved shipboard operability. For less critical shipboard space will be needed to store spare parts and support equipment to support the two helicopters comprising the H-1 Program.

New Russian SSN starts sea trials

The new Russian SSN GEPARD has started its sea trials in the northern waters of the White Sea following a ceremony that went some way to easing the wounds of the KURSK disaster and restoring the Russian navy’s morale. GEPARD is Russia’s first nuclear-powered submarine of the 21st century.

President Vladimir Putin met the crew and sent the missile-armed, torpedo-carrying boat - named Cheetah in English - into service after successful sea and weapons trials under the blue and white Russian fleet flag of St. Andrews.

Russian Navy officers have already recognised the boost to pride that comes with a new vessel. Commander in-chief of the Russian Naval Admiral Vladimir Kuroyedov said that it is ‘symbolic of the lost boat to be replaced by a new submarine,’ noting that Russia was advancing in building...
Visby starts sea trials

The first of Sweden's Visby-class corvettes has started sea trials under the supervision of its builder, Kockums.

A total of six Visby-class vessels were originally ordered from Kockums. However, the Swedish Defence Materiel Administration (FMV) and Kockums had concluded an agreement to reduce the order to five ships (with an option remaining on the sixth vessel) after the HDW-owned shipyard incurred substantial cost overruns on the project.

Displacing over 600 tonnes, the 72m corvettes are constructed almost entirely from fibre-reinforced plastic material, and feature a variety of innovative signature-reduction techniques covering radar cross-section, infra-red, acoustic, magnetic, hydrodynamic pressure, visual and electronic signature reduction measures.

SM-2 Block IVa Cancelled

The US Under Secretary for Defence for Acquisition, Technology and Logistics, Pete Aldridge, has cancelled the US Navy’s Area Medium-Range Air Defence Program due to poor performance and projected future costs and schedules. The cancellation will result in a work stoppage at some contractor and governmental field activities.

The cancellation came in part as a result of a March 1997 McCurdy Selected Acquisition Report breach of the existing program. A Nutt-McCindy unit cost breach occurs when a major US defence acquisition program experiences a unit cost increase of at least 15%. If the unit cost increase is at least 25%, the US Secretary of Defense must certify that:

• The acquisition program is essential to the national security;
• There are no alternatives to the acquisition program which will provide equal or greater military capability at less cost;
• The new estimates of the program acquisition unit cost or procurement unit cost are reasonable and:
• The management structure for the acquisition program is adequate to structure and manage control program acquisition unit cost or procurement unit cost.

In the case of the Navy Area Medium-Range Air Defence Program, the program acquisition unit cost and average procurement unit cost exceeded 57% and 65%, respectively. The Department has decided not to certify the program as currently configured.

"It's unfortunate we've reached this point," said Aldridge, "but certification was impossible. We are still in pursuit of a sea-based terminal phase capability as part of the co-rollable missile defence strategy, but we must now move forward from here."

Over the next several months, the Ballistic Missile Defense Organization (BMDO) will address sea-based terminal phase capability that is ideal for extended and deep diving. Because Mesma extends submerged endurance three to four-fold, the vessel does not need to surface nearly so often to recharge her batteries and is generally more discreet. Mesma-powered conventional submarines also offer new operational capabilities, including improved interception and quieter evasion.

The first Mesma AIP system purchased by an international customer, offers an air-independent propulsion capability that is ideal for extended and deep diving. Because Mesma extends submerged endurance three to four-fold, the vessel does not need to recharge its batteries and is generally more discreet. Mesma-powered conventional submarines also offer new operational capabilities, including improved interception and quieter evasion.

VL MICA missile test a success

The first vertical launch of a MICA missile, developed by the newly formed company MRDA, has taken place at the Centre d'Essais des Landes (CEL) in France.

This trial was to validate the principles and technologies used during the launch phase of this new short range air defence (SHORAD) system, using the air-to-air MICA missile which is in service with some air forces.

This validation marks an important step in the VL MICA programme. It effectively clears the way for the full development of the system, the naval version of which is due to be launched during this year and is intended for the self-defense of surface ships.

The principal objectives of this test were to verify the concept elements and the new technologies used in the storage container and vertical launcher of the VL MICA, and to study the behaviour of the missile during the launch phase.

The results achieved proved that the principal risks in the vertical launch
The concept of the VL MICA has been extensively tested. The missile is fire-and-forget, and its Mk-13 missile launcher. (Brian Morrison, Warships & Marine Corps Museum & Mark Schweikert)

The US Military

The Hellenic Navy (HQN) is retiring two of its four ex-US Navy Charles F. Adams-class DDGs to allow the corresponding and expensive manpower and maintenance requirements. The DDGs were transferred to the HK in 1992, and made Greece the first eastern Mediterranean country able to perform area air warfare missions, thanks to the ships' Mk-13 rail launcher and SM-1MR weapon system.

VL MICA

The development of the naval version of the VL MICA has been extensive. The missile is fire-and-forget, all weather, and against all types of targets (sea, surface, air, ground). The system is a short range surface-to-air missile with a multi-mission console. On-board target designation can be done either manually or autonomously to the missile Hies autonomously to the target. Target engagement capability (fire-and-forget, all weather) against all types of targets (sea, surface, air, ground) are features of the missiles proved unfeasible, a order to be kept operational until 2010.

To the Polish Navy last month and will be renamed ORP GENERAL TADEUSZ KOSIUCHZKO on its official commissioning in June.

Turkey to receive more FFGs

The US Department of Defense (DOD) has approved the sale to Turkey of two more FFG-07 Oliver Hazard Perry-class frigates.

The deal, which could be worth as much as US$110 million, would involve transfer of the French FREMMs to Turkey. The TSV will be delivered to the Spanish Navy in 2015.

France to acquire spy ship

The French Government has announced that the defence company Thales and prime contractor to supply a new intelligence-gathering vessel (AGI) and embarked MINREM signals intelligence suite for the French armed forces following a competition with EADS (teamed with shipbuilder Chantiers de l’Atlantique).

The Naval Procurement Directorate of the Défense Generale, on 15 September, awarded the contract. The ship will be worth more than EUR100 million. It marks the first time that Thales has been selected as prime contractor for a new-build ship for the French Navy.

Designed to replace the AGI BOUGAINVILLE, the new ‘eavesdropping’ vessel is scheduled to enter service in 2005 and will be operated by the French Navy (Marine Nationale). The specification for the MINREM joint forces signals intelligence system was defined by the French Direction du Renseignement Maritime (DRM) military intelligence directorate.

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The mean time between routine engine service nil 2012.

helicopters.

an interim improvement program lor ihe US Marine Corps' (USMC) replenishment. The USMC Sea Knight...Thales in France.

features include a helicopter flight deck and facilities for underway replenishment.

USMC Sea Knight improvement program

Delays in the V-22 Osprey programme have put a fresh emphasis on an interim improvement program for the US Marine Corps' (USMC) Boeing CH-46E Sea Knight helicopters.

However, even if there are no further setbacks to the V-22 programme, under current plans the CH-46E will remain operational service till 2012.

The USMC's 229 CH-46E helicopters are suffering from the growing effects of age. Torpedo payloads have been reduced from 25 to eight to 18 combat equipped troops.

The time mean between routine engine maintenance servicing for the CH-46'E's T58-GF16 engines, which have an average service life of over 3,500h, has been reduced to fewer than 350h from original 900h.

This decreased performance is due to both weight gain through necessary modifications to the CH-46'E (over 3,600 lb/year) and the threat of faults and a 10% reduction in thrust as the engines have aged.

The US$1.9 billion four-year ERIIP (Engine Reliability and Improvement Program) is intended to maintain safety, airworthiness and restore the CH-46'E engines to their original thrust and reliability levels.

Indian stealth frigate starts sea trials

INS TALWAR, the first of three new Project 11356 frigates built by Russia's Balticysky Zavod shipyard for the Indian Navy (IN), has sailed from St Petersburg to begin sea trials in the Gulf of Finland.

A substantially modified version of the Soviet Krotik class, the three Talwar class ships were ordered in November 1997. They incorporate topside structures and hull surfaces shaped to remove radar "hot spots" and reduce overall radar cross-section.

China buys two more Sovremenny DDGs

In the last issue of THE NAVY we reported on the US Navy's plans to purchase two more Sovremenny-class destroyers, to a modified Project 956EM design developed by the St Petersburg-based Severnaya Design Bureau.

The contract is thought to be worth in excess of US$1 billion and was signed by Sergei Chemezov, first Deputy Director General of Russia's Rosoboronexport Arms Export Agency, and Zhou Vai, Deputy Head of China's Chief Armament Direction Office.

The contract also includes an option for a further two ships, which if taken up, would give China six of the powerful destroyers expected to enter service.

The first two Project 956E destroyers, HANGZHOU and FUZHOU, were delivered in December 1999 and November 2000 respectively. Both ships had originally been laid down for the Russian Navy, but funding problems prevented their completion. The two new ships are due for delivery by the end of 2005.

While the first two Project 956E Sovremenny-class ships for the PLAN were completed to what was essentially the standard Project 956 configuration (with eight supersonic SS-N-22 'Sunburn' missiles) the new Project 956EM units are expected to incorporate substantial combat system improvements.

A source from the Soviet navy bureau of the world renowned Jane's Defence Weekly that four alternative design options had been presented to the PLAN. Each included a modernised anti-ship capability either eight improved SS-N-22 'Sunburn' missiles on each four missile silos on the ship's side. The four missile silos on the ship's side.

A number of years have been discussing the sale of more Sovremenny-class ships for some time. At one stage it was expected that the PLAN would purchase a second batch of Project 956 ships from Russia.

India to lease Russian Akula SSNs

India has announced that it will lease two Russian Akula class SSNs to enable it to meet its "expanding operational responsibilities," and to counter China's presence in the Indian Ocean and Bay of Bengal. The move comes as India's own indigenous nuclear-powered submarine - the Advanced Technology Vessel (ATV) - is well behind schedule.

India's New Delhi said the Indian Navy will lease the SSNs for five years. The boats are expected to enter service in 2004, although the contract is still to be approved by the Indian Government.

The Akula class SSNs displaces 9,100 tons dived. It has a submerged top speed of 28 knots via one nuclear reactor. It has four 21 in (533 mm) and four 25.6 in (650 mm) torpedo tubes for a combination of 333 and 650 mm torpedo. Tube boats can be used to reduce the larger diameter tubes to 533 mm. An impressive total of 40 tube-launched weapons are carried. The Akula is loosely described as being the improved Victor III class SSN with extremely low noise signatures.

India's own ATV design is believed to be based on the ex-Soviet Charlie I class SSN, one of which the IN leased for three years in 1988.

US Navy to retire

The US Navy has announced that it intends to retire its only mine-countermeasures (MCM) control (MCM) control (MCM) vessel, the two JMSDF USN INCHON (MCS-12), this year due to rising operational and maintenance (O&M) costs. As recently as last year, USN studies indicated that INCHON's life could be extended until 2010. However a fire on the ship last October combined with rising costs caused the USN to re-examine its plans.

Despite the ship's early retirement, the Navy said it is still committed to having a dedicated MCM ship over the long term. The USN is exploring concepts using the leased Indian high-speed catamaran as a surrogate platform for such a ship. Under a draft concept of operations for the high-speed vessel, the ship would have an airlift and interdiction payload, one of which would fill the dedicated MCM C2 role.

Until a replacement enters the fleet, the Navy's general-purpose (LHA) and multi-purpose (LHD) amphibious assault ships will take on the mission in addition to existing duties.

Campaign to save former VENGEANCE

The USN's only Mine warfare aircraft carrier and command ship is to retire without a dedicated replacement.

The Brazilian Navy's carrier MINAS GERAIS is also the former USN MCM VENGEANCE. Since the carrier's decommissioning an appeal has been set up to save her from the scrapyard and turn her into a museum and exhibition centre in Southampton Water in the UK.

In addition to displaying historic naval aircraft on her flight deck, she will have a cinema and theatre, and provide a unique focus for airshows.
The Royal Navy has decided to acquire two ex-Royal Navy (RN) Type 22 Batch 2 frigates, HMS COVENTRY and HMS LONDON. The Romanian government intends to upgrade the two frigates in the areas of command and control, new guided weapons and the fitting of a medium-calibre gun system. The work is expected to be done in a Romanian shipyard. Acquisition of two ships would support Romania's NATO Membership Action Plan and provide the country's obsolete navy with its first modern surface combatants. As well as affording a huge leap in capability, the two 4,200-tonne frigates would enable the Romanian Navy to achieve a far higher degree of interoperability with NATO forces operating in the Black Sea and Mediterranean.

The batch 2 variant of the successful Type 22 frigate incorporates many of the lessons of the Falklands War. The ship is larger than its batch 1 cousins to improve sea keeping, habitability and damage control – all four batch 1 Type 22s are currently operated by the Brazilian Navy. The ships are armed with two example launchers for the very accurate Sea Wolf missile although it is expected that Romania will remove the system. Designed primarily for ASW they are large enough to incorporate new weapons and systems to change their current speciality to whatever the Romanian Navy has in mind.

THE NAVY has been following the Type 22 batch 2 frigate saga for some time as it was remarkable that these very capable warships were not only being decommissioned early but without any buyers. The class was also thought to be an attractive option for the RNZN.

The Romanian government is purchasing two of the very capable Type 22 Batch 2 frigates. HMS COVENTRY and HMS LONDON. Depicted is the Type 22 Batch 2 frigate LONDON. The Type 22 Batch 2 frigate saga for sometime as it was remarkable that these very capable warships were not only being decommissioned early but without any buyers. The class was also thought to be an attractive option for the RNZN.

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A SHIPING SUCCESS STORY - THE WILHELMSEN LINE

Although ranked among the world's leading shipping companies and its ships certainly well-known on the waterfront, Wilhelmsen was not an instantly recognised company name in Australia, that is, until 2001 when the MV TAMPA was caught up in the Howard government's border protection project as a consequence of rescuing several hundred 'boat people' whose craft was about to sink TAMPA, her owner Wallenius Wilhelmsen and Norwegian authorities became involved in an unsavoury wrangle with the Australian Government.

Wilhelmsen was founded in Tonsberg, Norway in 1861 and commenced liner operations to Australia in 1895. Wilhelm Wilhelmsen, son of the founder of the line and grandfather of its current President, was Chief Officer of the TIGUR which initiated the service (the names of all Wilhelmsen ships start with the letter "T")

Wilhelm, or Wallenius Wilhelmsen to give the company its full title - the link with Wallenius, a pioneer in car transportation, took place in 1999 - has always focused on international liner activity and is today one of the world's largest car and RoRo transport companies.

The company's fleet consists of over 70 vessels designed to carry not only cars and other vehicles, but containers, cargo unsuitable for containers and RoRo goods. More than 12,000 people are employed and the seagoing element is linked with extensive shore-based management facilities to enable a complex transport service.

The writer can recall as a youngster being impressed by the smart Wilhelmsen freighters with their black funnels ringed by two pale blue bands: it is pleasing to note that, together with partner Wallenius, the line developed into one of the world's success stories.

"Wilhelm purchased its first steamship TALBOT in 1887. It traded very profitably and thereafter all ship names were prefixed with "T". One of the fleet, TAMERLANE, was christened in Australia recently."

AUSTRALIANS ARE NOT MARITIME-ORIENTATED

It is curious that Australia, an island nation heavily dependent on an ability to trade with other countries and on ships to transport the goods, has seldom if ever been regarded as a maritime nation, either by most of its own people or those with whom the country trades.

Certainly Australians are conscious of the sea - most live on the seaboard and enjoy the pleasures it offers - but few "christened" in Australia recently)

began with T. One of the fleet, TAMERLANE, was christened in Australia recently.

Hatch

NUSHIP YARRA

The last of the Huon class minehunters to be built in Australia has launched.

The last of the Huon class minehunters to be built for the RAN, the coastal minehunter YARRA was launched in Newcastle in January 02.

The 720-tonne fibreglass warship was built at ADI's Carlingford shipyard.

Her hull is designed to withstand tremendous underwater shocks. YARRA's hull is single skin without any ribs or reinforcing frames.

The hull also has very low magnetic signature and noise levels.

On board, all machinery and equipment is mounted in cradles or suspended from bulkheads to further enhance shock resistance, reduce noise and protect ship systems.

YARRA, along with sister ships HUON, HAWESBURY, NORMAN, GASCOYNE and DIAMANTINA, form a $1 billion contract to give the RAN the world's most capable mine countermeasures fleet.

The ceremony took place in Newcastle on January 19 2002 and attracted a good crowd.

To be commanded by Lieutenant Commander Douglas Atwood, YARRA will carry the bow number 87, with a ship's company of about 42.

The minehunter's principal task is to keep Australia's maritime environment clear of mine dangers to the nation's shipping. The ship deploys a remote controlled mine disposal vehicle or clearance divers to identify and, if necessary, neutralise the mine.
Chapter 6
MARITIME OPERATIONAL CONCEPTS

THE RELATIONSHIP BETWEEN LAND, AIR AND MARITIME POWER

The environments within which the services operate and fight are interconnected and cannot be considered in isolation. Indeed, Australia is attempting to ensure seamless warfighting approaches—such that virtual integration is achieved to maximise the effectiveness of our forces. Furthermore, the trend of technological development is such as to make the operating environments and methods more alike. The fundamental differences between the land and the other two environments used to be that land warfare tended to be linear and focused on gaining or holding ground, while air and maritime warfare tended to be non-linear and platform focused. Furthermore, as noted in Chapter Five, there are tactical relationships between the offence and defence on land which differ in nature from those on the sea or in the air. As all environments become more technologically sophisticated, such distinctions are beginning to disappear, with land warfare becoming more dynamic and non-linear, and all three environments becoming more organised as networks in order to achieve battlespace dominance. Space-based assets and over-the-horizon sensor systems create new elements of this process. Forces from all environments are increasingly developing the capacity to manoeuvre, acquire and engage targets throughout the battlespace. Nevertheless, these processes are still in their early stages, and there remain key differences between land, air and maritime operations.

Probably the most important factor for maritime forces is that the nature of maritime operations leads more readily to organisation and command by task rather than within specified geographical boundaries. The more detailed aspects of this form of command and control will be discussed in Chapters Ten and Eleven, but the key issue is that both the capabilities and the vulnerabilities of maritime forces must always be considered in terms of both space and time.

CHARACTERISTICS OF MARITIME POWER

By their nature, seaborne forces possess characteristics and attributes in combinations and in an extent which are not necessarily present in the other environments. For the Australian context, the characteristics of land forces are described in Land Warfare Doctrine 1 - The Fundamentals of Land Warfare, which is available in Australian Air Publication 1000-10 The Air Power Manual. For units on or under the sea, these characteristics include:

- Mobility: Ships are mobile. Warships may only transit at less than a twelfth of the speed of jet aircraft, but even moderate-sized ships have the ability to carry tens, hundreds or even thousands of empty times the payload. Ships are thus uniquely mobile in mass. This mobility in mass relates not only to lifting capacity, which is the ability of ships to move large numbers of people and large cargo have been, but also the capacity of warships to carry considerable combat power in the form of their organic weapons and munitions over similarly long distances. This is a very important aspect for smaller forces which face particular difficulties in projecting and sustaining concentrated combat power.

- Warships are also continuously mobile in a way that land or air platforms are not, being capable of sustaining their progress almost indefinitely. Seaborne forces may move at several times the speed of large land forces over long distances, an aspect of considerable significance for amphibious operations. Even at a speed moderate of 15 knots (28 kilometres per hour), a naval task force can travel up to 000 nautical miles (more than 660 kilometres) in a single day. In conjunction with organic and shore-based aircraft, particularly airborne early warning and control aircraft, and with the support of non-organic systems such as over-the-horizon radar and submarines, the idea of a moving bubble of approximately 1000 nautical miles (or nearly 2000 kilometres) radius is a realistic way of thinking about the scope of geographic influence of a maritime force.

- Flexibility: Warships are flexible. Warships are immediately responsive to the requirement to be in a particular place, or to be asked to carry out a particular task. In fact, conventional submarines travel much more slowly, although they have excellent endurance. Warships can transport and insert small special forces units and can operate covertly. By comparison with surface forces, however, conventional submarines travel much more slowly.

- Readiness: Warships can be ready. While the Navy's normal operating tempo means that not all ships can be in training all the time, it makes it easier to reorganise, make up full crews and to transition from a peacetime state to the highest degree of battle readiness, without giving any external indication of their increased readiness. This is a very important consideration for any would-be adversary. Even, the ability to change their employment from the most benign of international activities to offensive action within a similar period and with equally little warning to an adversary. By their nature, seaborne forces possess characteristics and attributes in combinations and in an extent which are not necessarily present in the other environments. For the Australian context, the characteristics of land forces are described in Land Warfare Doctrine 1 - The Fundamentals of Land Warfare, which is available in Australian Air Publication 1000-10 The Air Power Manual. For units on or under the sea, these characteristics include:

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Persistence has judgement as to the key characteristics needed to achieve the occupying troops can hold ground on land. Although concurrently, the extent of this redundancy tends to increase dramatically with communications to support campaigns on land. Weapon and sensor capabilities and can perform several tasks alone. The blockade of an entity which has no alternative as an element for final strategic decision except that what that will almost always be the case for Australia - the Navy, the main, concentrated on the Strategic Setting and the Government's new strategy for the development of Defence Industry.

The primary danger of indirectness is that it tends to disguise the critical nature of the maritime environment in most conflicts. This is particularly true in relation to the requirements for the maintenance of uninterrupted sea power which can achieve the greatest possible advantage over the adversary. By seizing, restraining and exploiting the initiative, the terms and place of confrontation can be selected to exploit an adversary's will or capacity to resist. It is thus inherently a land-sea or a land-air confrontation in which the decision to fight can be made for Australia because of the maritime-litoral nature of so much of this country's strategic environment. Sometimes described as manoeuvre from the sea, it will be fundamental to most Australian operations in conflict.

Resilience:

Manoeuvre as a concept in the maritime environment, or maritime manoeuvre, principally relates to the inherent capability of maritime forces, which possess a sufficient degree of sea control to move military force to the location which can achieve the greatest possible advantage over the adversary. Beyond repositioning and exploiting the initiative, the effects of seaborne power sometimes take a very long time to be fully effective.

The primary danger of indirectness is that it tends to disguise the critical nature of the maritime environment in most conflicts. This is particularly true in relation to the requirements for the maintenance of uninterrupted sea power, which can achieve the greatest possible advantage over the adversary. By seizing, restraining and exploiting the initiative, the terms and place of confrontation can be selected to exploit an adversary's will or capacity to resist. It is thus inherently a land-sea or a land-air confrontation in which the decision to fight can be made for Australia because of the maritime-litoral nature of so much of this country's strategic environment. Sometimes described as manoeuvre from the sea, it will be fundamental to most Australian operations in conflict.

The keynote address for the opening of the conference and exhibition was given by Senator the Hon Robert Hill, Minister for Defence, who, in the main, concentrated on the Strategic Setting and the Government's new strategy for the development of Defence Industry.

The fundamentals of the program, outlined in the White Paper, to provide capabilities, will be maintained, but in addition to the already announced increase in counter terrorist capability and defence intelligence other issues will be considered. These include the adequacy of Chemical, Biological, Radiological and Nuclear defence capabilities; the requirements to conduct concurrent operations, and the lessons from recently demonstrated applications of new technology. Perhaps the most significant announcement was that of a new strategic approach to Defence Industry.

The new NSM anti-ship missile made by Kongsberg on display of the Pacific 2002 exhibition. The missile has a very low radar signature, is very stealthy and passively guided by an advanced imaging infra-red seeker.

The company is hoping to sell the missile to the RAN as a replacement for the Sea Wolf system.

HMAS DARWIN makes her way across the Indian Ocean. (John Monnet)

The Navy

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... the proliferation of weapons of mass destruction continues despite the opposition of the US.

nations such as Australia must look to their own defence.

Dr. Brabham Smith considered that the Defence White Paper remained sound and that Australia's strategic interests had not changed.

Dr Derek da Cunha of the Singapore Institute of South East Asian studies spoke on *The Strategic Outlook: a View from SE Asia.*

He felt that the organisation of ASEAN had mixed fortunes as a security community partly due to the compartmentalised nature of regional security. He outlined the expansion of Chinese capabilities in all fields — economic, financial, diplomatic and military and there was now particular Chinese influence in Cambodia and Myanmar.

Claims to the Spratly Islands had a salutary impact on naval staffs and on naval acquisitions in SE Asia, but there were other concerns including piracy. The South East Asian states appeared on the verge of a new period of stability.

There was concern however that global developments had a direct impact on the US forces in the West Pacific and under some circumstances there was some doubt on US capability to help SEA states, particularly as the region was not a vital US strategic area.

There were uncertainties in the area principally covering China and its intentions, whether Indonesia would hold its place, and the use of the Spratly Islands. The key military balances were between Singapore and Malaysia and between Myanmar and Thailand, which shared a very long, largely unmarked, border and had a long history of animosity and smuggling problems.

Singapore was the leading local military power with her major strength lying in air power. He surmised that the acquisition of submarines, frigates and aircraft was intended to extend influence outwardly. Singapore was now buying Apache helicopters. Malaysia had a comparative technical advantage over Singapore in artillery and in some missile systems.

Unmanned Underwater Vehicles, extended range munitions, supersonic missiles, dumb weapons and a range of precision guided missiles. Maximum commonality in our ships and interoperability particularly with the USN were important requirements as were such things as running costs for ships, stealth design etc. It was an exciting time for the ADF.

Mr Guy Stitt of AMI International (US Naval Analysts and Advisers) spoke on *Developments in Maritime Technology.* There were now 151 ocean navies in the world, the 10 of which (not Australia) were technology leaders. 25 others had some R & D (including Australia). Other nations purchased their requirements from these groups.

Recent technological developments of great importance to navies included fuel cells, permanent magnet motors and high temperature superconductors for propulsion; phased array radars; integrated circuits allowing much smaller size and cost; programmable ammunition; high speed missiles (Mach 7 plus); and UAVs. Platform design was changing with an emphasis on space and general purpose vessels and some states were looking to the space industry to provide for future modification; greater survivability and lower costs; on new materials such as composites; on automation and reliability allowing much lower manning levels. The Incat and Austal ship designs in Australia were examples.

A closer Navy/Industry partnership was required in Australia. Technology must be developed to keep pace with the threat. Collaboration and innovation were important to keep costs down and to remain competitive.

There were a number of presentations covering the importance of the Information age, network centric warfare and the exploiting of technology for maritime warfare. Many observers felt that these developments were too far away for the command and there may well be a problem in sifting the huge amount of information now available to prevent the command being swamped.

Of much interest was a lecture by Major General Rob Fry, the Commander General of the Royal Marines who spoke on *Strategic Policy in the Department of Defence,* stated that in addition to the yearly review of the Strategic Setting there would also be a review of the Defence Capability Plan. He made a number of points including:

- the US commitment to the war against terrorism was very strong.
- the dominance of the US as the leader of the West, and its immense military and economic power.
- the US would continue to be the locomotive for change in warfare through such developments as UAVs, IT, precision guided weapons etc.
- an increased US focus on the Asia Pacific Region,
- the enduring importance for Australian forces of interoperability with US forces.
- for the most part, crises in the Pacific have been well-controlled.
- September 11 had helped to pull many countries together again,
- some nations, particularly in the SW Pacific, have difficulties governing themselves, and this has importance for Australia.
- transnational crime was of growing importance and needed international co-operation to deal with it. The finance behind people smuggling was now similar to that behind the drug trade.

... there was a growing and wider role for the UN.

- a greater range of weapons being fielded could be used for the protection of trade. Navy was an instrument for war and the need for better intelligence was required to deal with most of these problems. The search of merchant vessels presented a huge problem. Much training was needed and at present only the Customs had the necessary expertise in Australia.

- more close range weapons and other equipment would be needed to deal with COLE type attacks. Without a Coastguard, training in new fields would be required for the RAN and terrorism, searching ships, and maritime law. Close co-ordination with Police and Customs and better access to the media would be required. There would be further personnel retention problems caused by perceived deployment of naval personnel.

CDRE Tony Flint, the Director General Maritime Development covered the future for maritime warfare. He spoke on the great influence of technology. The importance of Knowledge was well accepted and a huge range of new sensors and weapons was in the offing. These included phased array radars. Unmanned Air Vehicles (UAVs), advanced weapons, automated vehicles, and undersea warfare. The concept of crossing the beach in amphibious warfare had been replaced by moving direct to the objective by helicopter and a range of new systems. There were significant lessons to be learned from the Gulf War, going to war and coming home. The importance of the information age would be greater and the need for co-operation and co-ordination would be crucial.
More people than in past years seemed to take a great interest in the many displays in the Exhibition Hall. Included were items of interest as possible contenders for the projected Air Warfare Destroyers and other ships.

Idar (formerly Baran, merged with a number of Spanish shipyards), now the second biggest shipbuilder in Europe, showed models of its carrier, landing ships, and the interesting F-100 Frigate.

DCN displayed models of French warships including the NTCD class of Landing Helicopter Dock amphibious assault ship. Two of these 20,000 ton carriers were vessels with a speed of 20 knots, a range of 11,000 nautical miles and carrying up to 450 troops, 16 heavy lift helicopters, armoured vehicles including tanks and two hovercraft or four landing craft, have been ordered for the French Navy. This sort of design could well be a contender for any replacement of HMAS TOBRUK.

Gibbs & Cox, the renowned US naval architects, displayed their designs for a number of ships, including a 20,000 ton Landing Ship dock, a 1,550 ton advanced corvette and the International Frigate - a design offered to the RAN for the Air Warfare Destroyer. This ship is of 5,875 tonnes with a length of 144 metres, a speed of 30 knots, a range of 4,500 nautical miles, phased array radar, standard SM-2 and Evolved Sea Sparrow missiles, Harpoon, RAM, a 5/54 gun system, 35 mm Vulcan guns, MK-46 torpedoes, and capable of operating helicopters such as the Seahawk.

The Western world's great US and European missile firms provided impressive displays of a huge range of weapons, some of which had clear application to the ADF. As a minor criticism there is a tendency, common in all professions, for over use of rhetoric understood only by the initiated. For greater public understanding it would be well for speakers to use simple lay language and drop the acronyms and defense jargon.

Some clear messages from the changing strategic scene seem to be that while current emphasis must be on the non-conventional war aspects, the fundamental reason for the existence of the ADF must not be forgotten or relegated and its warfighting skills and capability must be strengthened. Many wonder whether the very long and expensive decision-making process for the acquisition of major equipment is any longer appropriate. The most concerning 12-year wait for the replacement of the Navy's area air defence capability is an example of tardy decision-making which needs immediate attention.

The Chief of Navy, VADM David Shackleton, wound up the conference listing the importance of six major points:

- the strategic uncertainty of the future.
- the need for interoperability.
- the importance of knowledge and information.
- the need for trials of new concepts and technologies.
- the need to review the whole personnel scene.
- the need to ensure maximum synergies between the three services.

Overall the Exposition and Sea Power Conference must be considered an important and valuable event in the Defence calendar and a credit to the organizers.

During the Afghan War the USN had shown that Marines could be deployed over 450 miles from their sea bases. Cruise missiles such as Tomahawk and extended range ammunition, together with aircraft gave troops a long-range strike capability against land targets up to 1,000 miles inland. During the Afghan War the USN had shown that Marines could be deployed over 450 miles from their sea bases. The UK was not only building new LPDs and General Purpose Landing Ships but designing a new Type 45 destroyers to carry 60 Marines with boats.

The Commander of the Australian Theatre, RADM Chris Richie, spoke of the added load on ships today compared with twenty years ago. They not only had to hone warfighting skills but be able to deal with illegal fishing, illegal immigration, UN sanctions and UN peacekeeping. This posed a number of questions for ship design, training etc.

There had been great changes in the Command and Control arrangements and in civilisation. The acquisition process for new ships has to meet naval capability requirements. There were lessons for the future in the changing expectations and political and public pressure. Different mixes of ships were needed and the Navy may have to restructure to a sea-going force without the sea/shore system of the past.

The Chief of Air Force, Air Marshal Angus Houston spoke on Air Power in the Maritime Environment, drawing some lessons from history. The turning point showing the influence and capability of air power was the sinking of the battleship German battlecruise Ostfriesland in 1921 by
Michael Bennett served some 27 years at sea, for several shipping companies, the Royal Navy and the Royal Australian Navy.

RED SKY AT NIGHT is a personal account of the more memorable experiences of his career, from his first voyage as a 17-year-old cadet, with the Canadian Pacific Line on the North Atlantic run, to finish his career with the RAN as executive officer of the now closed submarine base at HMAS PLATYPUS in Sydney.

The book is also a chronicle of a way of life that has since all but disappeared.

The author commenced his service on the “break bulk” freighters of the post war years, on the SS BEAVERFORD in 1957, and served on a mixture of merchant and passenger ships, plying the sea-lanes and maintaining the trade that bound the British Empire together.

In those days ships such as the BEAVERFORD carried a vast array of cargo, manufactured goods, cars, machinery and so forth, around the world’s oceans from the factories of England to the far-flung outposts of the Empire and Commonwealth. Having discharged their cargoes, the ships would reconfigure their holds to accommodate produce such as wheat, copper, wool, rubber and other raw materials for shipment back to England.

The author notes on one voyage to South East Asia his ship berthing at a newly completed container wharf, and noting the introduction of container ships which were rapidly replacing the traditional freighters on which he served.

Service on the Pacific & Orient Lines passenger ships, such as CATHAY and ORIANA also highlights the changes that have taken place. Voyages to ports such as Singapore and Hong Kong were full of passengers undertaking the trip to take up positions in the colonial administrations, together with their families and possessions.

Today, the long shadow of commercial air travel has replaced the passenger lists of that age, and relegated the ligature to the role of mobile tourist resort. In fact the author describes undertaking a number of such cruises to the Mediterranean and the Fjords of Norway in ships such as the CHUSAN.

The author served as a member of the Royal Naval Reserve, with his Merchant Navy service interspersed with tours of duty with the Royal Navy, notably on anti-submarine frigates such as the Whitby class HMS EASTBOURNE and the Blackwood class HMS MURRAY, and the minesweeper HMS BADMINTON. The Royal Navy of those days was focused squarely on dealing with the looming threat of the Soviet Union, however, Bennett focuses on the high and low lights of Navy life.

In 1969, the author joined the Royal Australian Navy, having married an Australian girl he met on one of his voyages between England and Australia. Having travelled out to his newly adopted country as a passenger, “self-stowing cargo”, on the P&O passenger ship IBERIA, he commenced service on the anti-submarine frigate HMAS QUEENBOROUGH in her role as fleet training ship.

The RAN as presented in these times is very different from the RAN of today. Not just in terms of ships and missions but in the nature of the role itself. The Navy was structured around the aircraft carrier MELBOURNE, with much of the fleet providing for her defence and support.

Following service in QUEENBOROUGH the author served in the minesweeping squadron, and graphically describes the arduous conditions aboard those small, cramped ships during exercises in Australian and Papua New Guinea waters.

In the past the Navy maintained a detachment of patrol boats with the Papua New Guinea Division of the RAN, and the author served as part of that force, commanding the PNG Patrol Boat Squadron, with a chapter relating the challenges of the role. Nice to see that inter-service difficulties are not a recent invention!

Service ashore and afloat on board the training ship HMAS JERVIS BAY followed, with chapters describing the life of the Navy in the 70’s and 80’s, culminating in the author’s retirement in 1985.

RED SKY AT NIGHT is a record of a time that has past. The march of technology has changed both the Merchant and regular Navy dramatically, and RED SKY AT NIGHT is a valuable record of a time whose like we shall not see again.
The strategic background to Australia's security has changed in recent decades and in some respects become more uncertain. The League believes it is essential that Australia develops capability to defend itself, paying particular attention to maritime defence. Australia is, of geographical necessity, a maritime nation whose prosperity, strength and safety depend to a great extent on the security of the surrounding ocean and island areas, and on seaborne trade.

The Navy League:
- Believes Australia can be defended against attack by other than a super or major maritime power and that the prime requirement of our defence is an evident ability to control the sea and air space around us and to contribute to defending essential lines of sea and air communication to our allies.
- Supports the ANZUS Treaty and the future reintegration of New Zealand as a full partner.
- Urges a close relationship with the nearer ASEAN countries, PNG and the Island States of the South Pacific.
- Advocates a defence capability which is knowledge-based with a prime consideration given to intelligence, surveillance and reconnaissance.
- Advocates the acquisition of the most modern armaments and sensors to ensure that the ADF maintains some technological advantages over forces in our general area.
- Believes there must be a significant deterrent element in the Australian Defence Force (ADF) capable of powerful retaliation at considerable distances from Australia.
- Believes the ADF must have the capability to protect essential shipping at considerable distances from Australia, as well as in coastal waters.
- Supports the concept of a strong modern Air Force and highly mobile Army, capable of island and jungle warfare as well as the defence of Northern Australia.
- Supports the development of amphibious forces to ensure the security of our offshore territories and to enable assistance to be provided by sea as well as by air to friendly island states in our area.
- Endorses the transfer of responsibility for the coordination of Coastal Surveillance to the defence force and the development of the capability for patrol and surveillance of the ocean areas all around the Australian coast and island territories, including the Southern Ocean.
- Advocates measures to foster a build-up of Australian-owned shipping to ensure the carriage of essential cargoes in war.
- Advocates the development of a defence industry supported by strong research and design organisations capable of constructing all-needed types of warships and support vessels, of providing systems and sensor integration with through-life support.

As to the RAN, the League:
- Supports the concept of a Navy capable of effective action off both East and West coasts simultaneously and advocates a gradual build up of the Fleet to ensure that, in conjunction with the RAAF, this can be achieved against any force which could be deployed in our general area.
- Is concerned that the offensive and defensive capability of the RAN has decreased markedly in recent decades and that with the paying-off of the DDGs, the Fleet will lack area air defence and have a reduced capability for support of ground forces.
- Advocates the very early acquisition of the new destroyers as foreshadowed in the Defence White Paper 2.
- Advocates the acquisition of long-range precision weapons to increase the present limited power projection, support and deterrent capability of the RAN.
- Advocates the acquisition of the GLOBAL HAWK or similar unmanned surveillance aircraft primarily for offshore surveillance.
- Advocates the acquisition of sufficient Australian-built afloat support ships to support two naval task forces with such ships having design flexibility and commonality of build.
- Advocates the acquisition at an early date of integrated air power in the fleet to ensure that ADF deployments can be fully defended and supported from the sea.
- Advocates that all Australian warships should be equipped with some form of defence against missiles.
- Advocates that in any future submarine construction program all forms of propulsion be examined with a view to selecting the most advantageous operationally.
- Advocates the acquisition of an additional 2 or 3 updated Collins class submarines.
- Supports the maintenance and continuing development of the mine-countermeasures force and a modern hydrographic/oceanographic capability.
- Supports the maintenance of an enlarged, flexible patrol boat fleet capable of operating in severe sea states.
- Advocates the retention in a Reserve Fleet of Naval vessels of potential value in defence emergency.
- Supports the maintenance of a strong Naval Reserve to help crew vessels and aircraft in reserve, or taken up for service, and for specialised tasks in time of defence emergency.
- Supports the maintenance of a strong Australian Navy Cadets organisation.

The League:
Calls for a bipartisan political approach to national defence with a commitment to a steady long-term build-up in our national defence capability including the required industrial infrastructure.

While recognising current economic problems and budgetary constraints, believes that, given leadership by successive governments, Australia can defend itself in the longer term within acceptable financial, economic and manpower parameters.
HMAS SYDNEY in the Persian Gulf. The RAN has taken over command of the MIF (Multinational Interception Force) enforcing sanctions on Saddam Hussein's regime. (RAN)

The Italian aircraft carrier GIUSEPPE GARIBALDI (C-551) and the French nuclear-powered aircraft carrier CHARLES DE GAULLE (R-91) steam through the Arabian Sea. Both carriers, along with USS THEODORE ROOSEVELT (CVN-71) and several ships from other countries including Australia are deployed and conducting missions in support of Operation Enduring Freedom. (USN).
The R N Second Seafire Super Seaspire lifts off for the first time in Australia. The aircraft was transported to Australia via merchant ship, assembled on the docks in Sydney and flown to HMAS ALBATROSS at Nowra. Technical problems have delayed the Seaspire’s in service date until around 2004. (Kaman)

A standard missile leaves a trail of smoke as it is launched from the starboard side of USS VANDEGRIFT (FFG 48) and heads on an intercept course with an incoming ‘hostile’ drone. Other ships in the image include (from L to R) the Spruance class destroyers USS O’BRIEN & CUSHING and the FFG USS GARY. (USN)