Anzac Fires for Effect

Aircraft Carriers – A Personal View

Australia’s Museum of Flight

Frank Getting – A Forgotten Submariner

Australia’s Leading Naval Magazine Since 1938
The Type 42 class destroyer HMS SOUTHAMPTON and a Type 22 batch 3 class frigate at sea. See our article in this edition entitled The RN Today and Tomorrow (RN).
THE NAVY

Volume 65 No. 3

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HMS INVINCIBLE Backgrounded by the Rock of Gibraltar. The Invincible class aircraft carrier has been a good performer for the RN but it does have its limitations. The RN will soon begin construction on two replacement carriers for the three Invincibles which address the inadequacies of the Invincible through deck cruiser design (RNs)

Peter Horne, Associate editor of the UK based magazine WARSHIPS IFR, considers the condition of the British fleet in 2003 and its future ambitions. His article is a summary of a publication produced by WARSHIPS IFR on the RN in 2003 (see product review section)

The Royal Navy (RN) is undergoing a period of considerable transition, and a conscious decision has been made to take some risks in order to get where the British fleet thinks it ought to be in a 10 to 15 year time frame. Any analysis of the 'State of the Navy' must begin by looking to the far horizon, in order to explain the sometimes painful, changes to be made within the next few years. Subject to any significant change in the world security situation, the UK government's finances and British defence policy, the intended shape of the front line fleet by 2012-2015 is likely to be the following.

SUBMARINES

Four Vanguard Class nuclear-powered ballistic missile submarines (SSBNs) each capable of carrying 48 nuclear warheads. Some of the missiles carried are designated as having a sub-strategic role, which was allocated to the RN when the WFE-172 nuclear bomb was withdrawn from the RAF in 1995. Only one SSBN will normally be on patrol at a given time.

Ten nuclear-powered conventionally armed submarines (SSNs), about half of them the 1960s Trafalgar Class, and the rest belonging to the new Astute Class. All will come armed with Spearfish and Tigerfish torpedoes, mines if necessary, plus Tomahawk cruise missiles. Sub Harpoon may be replaced by a new anti-ship missile.

AIRCRAFT CARRIERS

One or two aircraft carriers, initially two Invincibles with a third of the class in deep reserve. All three have received re fits and extensive modernisation - ARK ROYAL emerged from refit in 2001 and is the current fleet flagship, ILLUSTRIOUS entered a two-year refit in October 2002 and INVINCIBLE is due to re-join the fleet in the northern hemisphere spring of 2003. All three could therefore be kept operational until at least 2012. There are only two carrier air groups, so these would have to be augmented by RAF planes to use all three in the carrier role. One of them, as proved by ILLUSTRIOUS in late 2001, could be used as an LPH, therefore making an ideal stand-in for HMS OCEAN when she is not available. However, budgets and scarce manpower will probably prevent all three Invincibles being kept in the front line. These venerable ships are due to be phased out as the new aircraft carriers - likely to be named HERMES and EAGLE - come into service between 2012 and 2015. With the Sea Harrier FA-2 having been phased out between 2004 and 2006, from about 2012 onwards the UK will be sending Joint Strike Fighters to sea.

DESTROYERS & FRIGATES

About 20 operational destroyers and frigates, which means, assuming for some ships being in refit, around 26 available for front line deployment. This is a surprisingly high availability rate, but the RN believes that new maintenance cycles and practices, plus a different system of personnel management will achieve the target. By 2015 the escort force will consist of Daring Class (Type 45)
MARITIME AVIATION
- The RN will also be operating updated Lynx Mk 8 and Merlin Mk 2 helicopters, a battlefield support aircraft (the tilt-rotor Osprey and the EH-101 Utility Helicopter). By 2012-2015 a replacement for the Sea King Airborne Early Warning (AEW) probably the Hawk-eye E-2 aircraft, should also be available. This is an ambitious catalogue of capabilities, especially for a service that 30 years ago, in the depths of the Cold War, was virtually written off. In the short war between Warsaw Pact and NATO that most envisaged, leading to a nuclear exchange, there would be no time for sea power to have any effect and therefore no use for this service. The future fleet laid out above is particularly ambitious, it assuming that there will be a stable and benign financial regime such as Britain has enjoyed for the last few years. But, even with the recent £3.5 billion budget increase the British armed forces were given in 2002, there are signs of strain and something will have to give somewhere. The number of RAF Eurofighters will almost certainly be cut, there will be cuts in the Army’s heavy armour, and the RN, which has already suffered deep cuts, will not escape its share of further pain.

DESTROYERS, MODERNISED DUKE CLASS (TYPE 23) FREGATES, AND UNMODERNISED TYPE 23s WHICH WILL BE IN THE PROCESS OF BEING REPLACED BY THE ‘FUTURE SURFACE COMBATTANT’ (FSC).

AMPHIBIOUS SHIPS & 3 CDO
- A flotilla of new specialist amphibious shipping including 3 Amphibious ships & 3 CDO left in their hulls. The Batch 3 versions are very capable ships and also have Flag and Staff facilities for control of operations (RN).
- The Type 22 Batch 3 class frigate HMS CORNWALL. The four remaining Type 22 Batch 1 and 2’s have all been retired with many years left on their books. The Batch 3 versions are very capable ships and also have.
- Two Albion Class assault ships (LPDs). The helicopter of which six are currently on order. By 2015 the Type 45 will be in service. The Type 22 Batch 3 class frigate HMS CORNWALL.
- The Type 22 Batch 3 frigate HMS CORNWALL. The four remaining Type 22 Batch 1 and 2’s have all been retired with many years left on their books. The Batch 3 versions are very capable ships and also have Flag and Staff facilities for control of operations (RN).
- A computer generated image of the RN’s new Type 45 Danng class. The first of eight recently ordered Type 45 destroyers (foreground) and Type 23 Duke class frigates (background). These two classes of ships are the most common in the RN order of battle at present. In 2015 only a handful of Type 23s are expected to be in service and Type 45s will be modernised for some time to come. The RN is also left in their hulls. The Batch 3 versions are very capable ships and also have Flag and Staff facilities for control of operations (RN).
- The RN will also be operating updated Lynx Mk 8 and Merlin Mk 2 helicopters, a battlefield support aircraft (the tilt-rotor Osprey and the EH-101 Utility Helicopter). By 2012-2015 a replacement for the Sea King Airborne Early Warning (AEW). The Hawk-eye E-2 aircraft, should also be available. This is an ambitious catalogue of capabilities, especially for a service that 30 years ago, in the depths of the Cold War, was virtually written off. In the short war between Warsaw Pact and NATO that most envisaged, leading to a nuclear exchange, there would be no time for sea power to have any effect and therefore no use for this service. The future fleet laid out above is particularly ambitious, it assuming that there will be a stable and benign financial regime such as Britain has enjoyed for the last few years. But, even with the recent £3.5 billion budget increase the British armed forces were given in 2002, there are signs of strain and something will have to give somewhere. The number of RAF Eurofighters will almost certainly be cut, there will be cuts in the Army’s heavy armour, and the RN, which has already suffered deep cuts, will not escape its share of further pain.

MCMS’S, SURVEY VESSELS & AUXILIARY SUPPORT SHIPS
- Five modern survey vessels, and about 20 Mine Counter-measures vessels (MCMS’s). Fifty highly capable Royal Fleet Auxiliaries, carrying fuel and ammunition.

BIG RISKS TAKEN
However, with a large number of legacy systems, some still left from the era of the Cold War, something drastic must be done to achieve the goals the RN has set itself. Clearly the Navy’s leaders have decided that a degree of enhanced risk is acceptable.
TYPE 42s SOLDIER ON

The Sea Dart area defence missile is more than 25 years old and after the fitting of Infra Red fuses there will be no further improvements. The Sheffield Class (Type 42) destroyers that carry Sea Dart are desperately needed to fill the layers of defence of a task force. For this reason alone, provided the cost is more like the £20 million which informed sources say it will be, HMS NOTTINGHAM (of Lord Howe island fame) will be repaired HMS BIRMINGHAM, however, has already been decommissioned and cannibalised for spares and other Type 42s will follow soon. This will undoubtedly leave gaps in the RN’s air defences until the Type 45 Darings start to become available. However only six of these much needed ships are planned, for in-service dates between 2007 and 2011, and clearly the UK Government needs to order more at once. Some of the later Type 42 (Batch 3) ships will still be in service as the first Type 45s come in. But all twelve Type 42s must be replaced, so a second batch of six Type 45s is needed. Otherwise this neglect of the RN’s air-defence might cost thousands of lives if, or rather when, war breaks out.

THE DEMISE OF THE FA-2 SEA HARRIER

The demise of the FA-2 is another example of a dangerous gap opening in the RN’s capability, and of the risk it is being accepted. Widely acclaimed as Britain’s best fighter, certainly until Eurofighter is fully operational, it has been a shock to learn the FA-2 Sea Harrier will be withdrawn from service between 2004 and 2006. This is at least six years before the JSF becomes available. In the meantime the UK’s carrier-borne aircraft will be upgraded from the RAF’s Type 42s.

4) ships will still be in service as the first Type 45s come in. But all twelve Type 42s must be replaced, so a second batch of six Type 45s is needed. Otherwise this neglect of the RN’s air-defence might cost thousands of lives if, or rather when, war breaks out.

ANZAC Fires for Effect

HMAS ANZAC’s Mk-45 127mm gun firing on anger at Iraq positions on the Al Faw peninsula. This was the first naval bombardment mission conducted by the RAN in warfare for 31 years. (RAN)

At 0604 on 21 March 2003, the Western Australian-based frigate HMAS ANZAC, often called the ‘Lighthorse’, commenced naval gunfire in direct support of the Royal Marine battalion, 40 Commando, assault on Al Faw Peninsula in southern Iraq. CMDR Ste Wheeler of HMAS ANZAC details the ship’s action.

The land assault on the Al Faw Peninsula began shortly before midnight on Thursday 20 March 2003. At the time HMAS ANZAC was tasked as ‘Squadron Action Commander’, guarding the massive offshore oil terminals known as Kaard and Mahot. Operating in sight of both pumping stations, less than 12 miles from the Iraqi coast, ANZAC’s task was to challenge and intercept any vessel that approached the terminals. As in previous conflicts with Iraq, there was a very real fear the Iraqi military would quickly sabotage and detonate the terminals, causing a massive environmental disaster and force the coalition ships to abandon the assault on the Al Faw Peninsula. Shortly before midnight, ANZAC was informed by the US Navy Special Forces (SEAL) that successful seized vessels containing explosives and sea mines and took control of the giant oil terminals of Kaard and Mahot, heralding the next phase of ANZAC’s mission.

At 0130, under the surreal moon-light stillness of the northern waters of the Persian Gulf, HMAS ANZAC received orders to proceed up-stream of the Khawr And Allah (KAA) waterway in company with the RN Type 23 Frigate HMS MARLBOROUGH to a position close to the Al Faw Peninsula and prepare for gun action. Having just weathered a heavy dust storm and covered with a red patina of Gulf filth, HMAS ANZAC slowly entered the waterway, surrounded by a glossy-black sea, brightly lit under full moonlight. At only 3 knots, with no navigational lights and the ship fully darkened, ANZAC crept upstream. For the 16 mile transit up the KAA, ANZAC was deadly quiet in case sea mines had been laid. With the ship closed-up at Action Stations and machinery running in a quietened state, ANZAC crept up the murky brown waters of the KAA to within seven miles of Iraqi-held territory. As ANZAC slowly entered the waterway, the sound of explosions and huge thuds rang clearly through the night,往往 shaking the ship with percussion. Blows bright red and white flashes were seen in the distance and the air was quickly filled with smoke and the acrid smell of cordite and sulphur. One of the lookouts said ‘it was like standing downwind of a bush fire’. For two hours the ship glided through the watery obsidian, quietly breasting a gentle stream of the familiar long, bright green ribbons and plumes of phosphorescence. This was an eerie and unforgettable moment for the people of ANZAC. Secretly, we all knew the mission would be a defining point in our lives.

Once in position at 0530, HMAS ANZAC reported ‘Guns Up. Ready for Call to Fire’ to the Royal Artillery ‘Forward Observer’ (FDO) on the nearby Al Faw peninsula. Shortly after dawn, ANZAC commenced firing her 127mm (5-inch) Mk 45 gun using high explosive shells aimed at military targets and, for the first time in 31 years, the Royal Australian Navy engaged in combat gunfire support. Over the next three days, ANZAC shuck and shuddered as the firing of her 5-inch gun...
launching barrages of high explosive shells in support of the Royal Marine battalion. 40 Commando ANZAC conducted seven fire missions in total, with all rounds hitting Iraqi bunkers, destroying artillery strongholds and key military installations. An eighth mission on an Iraqi ammunition bunker was aborted due to suspected chemical weapons held in the facility. All of ANZAC's rounds fell on military targets with none harming civilian support. Success was largely due to aggressive use of Indirect Fire assets and the swift and lethal response of respective units. Your bombardment and destruction of key military installations had a huge impact on the ground and shattered the enemy's will to fight.

HMAS ANZAC - United We Stand.

A virtual next generation E-2C platform, in addition to the vANZAC, virtual participation of several other simulation lab is co-ordinating the simulations at various locations in the Pacific. A virtual next generation E-2C platform, in addition to the vANZAC, virtual participation of several other simulation lab is co-ordinating the simulations at various locations in the Pacific. A virtual next generation E-2C platform, in addition to the vANZAC, virtual participation of several other simulation lab is co-ordinating the simulations at various locations in the Pacific.

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HMAS ANZAC - United We Stand.

Each of these simulations were fed from the lab at NWDC to ships operating off Guam where shipboard systems were simulated with actual radar, acoustic and electronic data, as if the actual platforms were participating in the event. A number of RAN officers operated the experiment command and control, and intelligence, surveillance and reconnaissance systems (CISR) aboard the vANZAC in the Fernhill lab. They were supported by joint Australian and U.S. technical teams in both Canberra and Newport, and were represented in the experimental strike warfare commando's staff on USS BLUE RIDGE (LCC-19) which was operating in the Pacific Ocean by an RAN and a U.S. Navy officer.

The experiment explored intelligence, surveillance and reconnaissance management, including cross-coupling of coalition and US sensors and weapons through the time sensitive targeting process of "Find, Fix, Track, Target, Engage and Assess."

Through this initiative, the USN is able to assess the capabilities, strengths and weaknesses of coalition forces, and facilitate the matching of future missions with capabilities. This initiative also assists in determining coalition forces' interoperability requirements, and aids the RAN with their future transformation efforts and investment decisions, with a focus on the requirements for a credible surface land-attack capability.

As shown by the recent war in Iraq, the relevance of this experiment is even more significant. "The future of warfare lies in coalitions," said Sutton. This experiment is designed to "build relationships, provide exposure and help to ensure that the RAN is able to more fully integrate its capabilities in future engagements."

Bloom + Voss delivers first Patrol Vessel to Royal Malaysian Navy

The German firm Bloom + Voss GmbH has delivered the Royal Malaysian Navy's (RMN)'s first new MEKO patrol vessel. The incomplete patrol ship arrived in Malaysia on the back of a deck ship on April 26 and is now on site at the partner shipyard Penang Shipbuilding & Constructions Naval Dock Yard. Final outfitting as well as the sea trials will be carried out by Penang Shipbuilding.

The vessel is the first of a series of six for the RMN. The ship was laid down in Kiel on November 13, 2001, and has been built according to the Bloom + Voss developed and patented MEKO® concept. It has a displacement of 1650 tonnes and is especially suited coastaland littoral duties.

The patrol vessels have a length of 91.1 m, a beam of 12.8 m and a draught of 3.4 m and are equipped with two Caterpillar diesel engines each producing a 5450 kW of power. With two CP propellers a speed of 22 knots can be reached. The crew comprises 28 with a reserve of 15. The vessels will be mainly used for the protection of sea traffic in the Strait of Malacca. Stealth technology has been made use of to reduce the radar signature.

Indian stealth warship launched

India has launched its first indigenous stealth warship. The ship, christened INS SHIVALIK after one of India's Himalayan peaks, has been built by the private yard Mazagon Dock Ltd. (MDL) near Mumbai. INS SHIVALIK is part of a national naval strategy to deploy three stealth warships. INS SHIVALIK is expected to be commissioned by December 2004.

"INS SHIVALIK will play the dual role of offensive and defensive combat and it also has the capacity to attack inshore targets," said an Indian Defence Ministry Officer.

Further details of the ship were not available but sources said it was likely to be fitted with the 300 kilometre (180-mile) anti-ship cruise missile Brahmos, being jointly built by India and Russia.

Taiwan submarine purchase stalled

A plan by Taiwan to purchase eight conventionally powered submarines from the United States is understood to be "on the rocks" after Washington supposedly demanded US$340 million in fees for the deal.

Taiwanese military authorities have rejected the demand, which they termed "unreasonable and illegal." The cost of the deal is estimated at three to four billion US dollars.
The Tuvalu-flagged MV PONG SC (foreground) is intercepted in a joint operation between Australian Customs, AFP and elements of the Australian Defence Force, including Special Forces and HMAS STUART, in the broad area. The MV PONG SC was taken into custody in New South Wales, where further investigations are still being carried out by RAN.

The Type 22 Batch 2 frigate HMS SHEFFIELD. Two other identical Batch 2 Type 22 in service with the Royal Fleet Auxiliary (RFA) Portland and Ocelot returned to Devonport, while the third Batch 2 Type 22, Portland, is scheduled to join the fleet in 2022.

A Tactical Tomahawk Block IV cruise missile, conducts a controlled flight test over the Naval Air Warfare Centre (NAWC) at China Lake. The Tomahawk's next generation of Tomahawk cruise missile, adds the capability to reprogram the missile while in flight to strike an unordered element target. The test involved theTomahawk cruise missile being launched from a Global Positioning System (GPS) target candidate, and then being able to target the area of interest using its on-board GPS, allowing the war fighting commander to access battle damage assessment of the target and, if necessary, redirect the missile to any other target of interest.
Operating as one of two forward-deployed Harrier carriers in support of Operation Iraqi Freedom, BATAAN became the Harrier carrier, embarking the most Harriers on a large deck amphibious ship ever.

"When we came into theatre, we had 26 Harriers and the USS BONHOMME RICHARD (LHD 6) had 22," said Lt. Larry Young, BATAAN's flight deck handling officer. "One of our squadron, VMA-542, transferred custody of two Harriers to BONHOMME RICHARD, so both ships would have equal numbers. Now that we are getting ready to depart, we now have those two Harriers back onboard."

BATAAN's flight deck and hangar bay can get a little crowded with 26 Harriers.

"Real estate is a premium on the flight deck, and this ship was never designed to carry so many Harriers, but we've been able to accommodate them, get the mission accomplished," said Young. Young said the flight deck crew rewrite the book on how to move and arrange aircraft to meet operational commitments.

We developed a plan and made it work," said Young. The key was to make the flight deck a 'ready deck' through use of the night move crew. If it weren't for them moving the aircraft around at night to set up for the day work, believed to be up to 17 days – without needing to send them to repair their homes. U-31 will return to Kiel in mid-March 2004 for final testing and rectification of any anomalies detected during the trials undertaken ahead of handover, currently scheduled for the end of that month. U-31 is slated to follow in May 2005 and the other two of the class will be commissioned in 2006.

Russian naval squadron departs Indian Ocean

Russian warships from the Pacific and Black Sea fleets have left port to begin a long-planned deployment into the Indian Ocean, culminating in a major exercise with the Indian Navy.

It is the largest out-of-area deployment undertaken by the Russian Federation Navy in a decade, fuel shortages and lack of maintenance have placed severe restrictions on the Navy's ability to undertake long-distance deployments in recent years, and those ships in a war-winning condition have generally been required to undertake short periods of sea time in home waters.

However, senior naval officers are keen to resume shorter deployments, albeit on a limited basis, to demonstrate the Navy's continued ability to deploy and operate in areas where Russia sees a strategic interest.

The Udaltsov-class destroyers MARSHAL VAISOPOHONIKOV and ADMIRAL PANTELEYEV sailed from their base port Vladivostok on 6 April accompanied by the tankers 4ADIMIR KOLECHTSKY. This was followed by the departure of the Slava-class cruiser MOSKVA, the Kriwak-class frigate PYTLIV, the Kashin-class destroyer SMETLIVY and the Ropucha-class landing ship TSEZAR KUNIKOV from Sevastopol.

The keel of the first of a series of five F-100-class frigates for the Royal Norwegian Navy is laid at the F-310 yard in Stavern.

Although the F-100 design is based on the F-100 air warfare frigates for the Spanish Navy, which incorporates the AEGIS combat system, the class' primary focus is anti-submarine warfare. The class is also equipped for anti-surface and shore protection missions.

The construction of the ships is shared between IRZ KERPOL and a number of Norwegian shipyards, all of which produce modular blocks which are then sent to IRZ where they are assembled in the slipway. The launching, the sea trials and the delivery take place in Spain. In the case of the last two vessels the procedure will be reversed. IRZ will send blocks to Norway where they will be assembled. The launching, the sea trials and the delivery of these final units will take place in Norway.

In other IRZ news, the company recently launched the F-100-class air warfare frigate BLAS DE LEZO, third of four F-100 frigates being built for the Spanish Navy. The launching of the F-103 took place 15 months after the laying of the keel with the ship due to be delivered in December 2004. On launching, the ship was approximately 80% complete, a high percentage possible due to the integrated construction system developed by IRZ.

Following the launch of the third frigate, the yard laid the keel of the fourth unit, named MÉNDEZ NUNEZ. This ship is scheduled for launch in January 2005 and the commissioning, which will herald the end to the F-100 program, is scheduled for February 2006.

Last Oberon retires

The Chilean Navy has retired the last of two Oberon-class diesel-electric submarines (SSKs) ordered from the UK and delivered in 1970, leaving its submarine force temporarily reduced to only two German-built Type 209 boats.

Two Scorpene-class SSKs which were ordered late in 1997 at a cost of US$450 million are currently under construction in France and Spain by DCN and IZAR with deliveries scheduled for the end of 2004 and the beginning of 2006 respectively.

OBERON, the last Oberon-class submarine in service in the world, sailed from the Valparaiso naval base with a reduced crew on board. Retirement is not the result of technical problems, as was the case with sister vessel HYATT, retired in 1998, but part of measures being taken to reduce costs and refocus resources to other naval projects.

Thai Navy cuts back Corsair fleet

The Thai Navy is maintaining only four of its 18 A-7 Corsair fighter jets because it is not worthwhile to repair all of them. Part of the maintenance budget will be diverted to buy a Donier patrol plane.
A Navy source said the four jets were being maintained with parts removed from the other Corsairs. Navy Chief Adm Thaweesak Sompaige decided not to buy new parts because the Corsairs' service life would end in the next five years. The 18 Corsairs were ordered from the United States five years ago after they had been in use over two decades. The jets have been deployed at the Songkhla naval base, Chon Buri, Adm Thaweesak gave sight permission from Defence Minister Gen Thamasak Isarangkura Na Ayudhya to withdraw 300 million baht from the 700-million-baht budget for maintenance of the Corsairs to buy a Dormer patrol plane from Germany. Instead the Navy's chief, however, had served the Navy well. However, maintenance had been put off during his term because of problems between the U.S. and a Greek aircraft repair company.

**New Chinese destroyer launched**

The first Type 052C guided-missile destroyer for China's People's Liberation Army Navy (PLAN) has been launched from the Jiangnan shipyard in Shanghai.

**Australian Budget 2003**

The Australian 2003/04 budget was revealed on May 15 with an defence spending, by $1.1 billion, to $51.8 billion for the financial year 2003/04. The 2000 Defence White Paper Maritime Force Goal will be met now and in the future through a number of activities. In 2003/04 these will include:

- delivery of additional Evolved Sea Sparrow surface-to-air missiles
- continued enhancements to Collins- Class submarine platforms and sensors
- delivery of a digital hydrographic database
- other activities, with outcomes in future years to include:
  - selection of the patrol boat replacement
  - continuation of the FFG upgrade program
  - construction of a mid-life upgrade of the Anzac Class FFH
  - establishment of a naval ammunition facility at Eden, NSW.

**USN activity in Western Australia**

As Operation Iraqi Freedom was winding down, several ships and submarines of the United States Navy began the long trek back home via WA.

**Inquiry launched into SSN collision**

A board of inquiry is being set up by the UK Royal Navy to find out why a British nuclear powered attack submarine (SSN) collided with an object, possibly an iceberg, while at sea.

**Tomcats of VF-2 Bounty Hunters who,**

See story below. THE NAVY VOL 65 NO 3 THE NAVY VOL 65 NO 3
The inquiry into Australia's maritime strategy policy by the Defence Sub-Committee of the Parliament's Joint Foreign Affairs, Defence and Trade Committee, announced on 1 September 2002, conducted public hearings in Canberra. Sydney and Melbourne in March. No Navy interest groups or organisations, and especially bushmen and women with families in some cases, have avoided travelling to Canberra. Although very much safer in 2003 than in 1940, aircraft continue to carry spare personnel. There is no room for such luxuries - so disruption and expense was inevitable as personnel moved except of course for emergency or illness. At a time of international uncertainty and change, a time when governments are attempting to determine the measures necessary to maintain the nation's security, the United Nations Organisation has been weakened, the Australian Maritime Committee has been weakened, the Parliament's Defence Sub-Committee has the opportunity to assess dispassionately the information made available to it and to make a valuable contribution to the nation's security in a timeless world.

The Maritime Strategy Inquiry (2)

It was pleasing to note that a number of submissions concerned the Australian merchant shipping industry. Most referred to the need to have suitable ships available in times of emergency and the factors making this an objective difficult to achieve. The Navy League also referred to the subject in its submission and in THE VICTOR that has published articles over the years concerning the need for a viable Australian owned/controlled shipping industry and expressed regret at the steady decline in the number of Australian flagged merchant ships over the years. The writer expresses regret at the need for a viable Australian Defence Minister accompanied by the Chief of the Air Force, the Chief of the Defence Force and the Secretary of the Department set off by air to the Middle East to visit Australian personnel in the theatre of operations.

An Unlimited Risk

Following the occupation of Iraq by Coalition forces the Australian Defence Minister accompanied by the Chief of the Defence Force and the Secretary of the Department set off by air to the Middle East to visit Australian personnel in the theatre of operations.

During another war, in August 1940 three Australian Cabinet Ministers, including the Army and Air Ministers, together with the Chief of the General Staff, were killed in an air crash at Canungra, a serious loss at the time. As a result of the inquiry, many of the large companies and organisations, and especially bushmen and women with families in some cases, have avoided travelling by air. Although very much safer in 2003 than in 1940, aircraft continue to carry spare personnel. There is no room for such luxuries - so disruption and expense was inevitable as personnel moved except of course for emergency or illness. At a time of international uncertainty and change, a time when governments are attempting to determine the measures necessary to maintain the nation's security, the United Nations Organisation has been weakened, the Australian Maritime Committee has been weakened, the Parliament's Defence Sub-Committee has the opportunity to assess dispassionately the information made available to it and to make a valuable contribution to the nation's security in a timeless world.

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Part of the impressive collection of aircraft housed at the Australian Museum of Flight.

Much effort has been expended in recent years on bringing the facility up to scratch in terms of prevailing conservation and security standards. When the current redevelopment programme is completed later this year the ANAMF's museum should rank as one of the country's finest regional museums and, an institution that reflects considerable credit on the RAN.

The museum is currently embarked on an ambitious exhibition redevelopment programme, which it hopes to complete this year, coinciding with other global commemorative initiatives marking the year's centenary of powered flight. These new displays, which reflect five over-arching themes (viz: Defence, Society, Technology and History), will also include audio and audio-visual interactive. New exhibits have been sourced from around the country, several national and state institutions having generously agreed to loan iconic artifacts from their own collections. Amongst the collection loaned by Museum Victoria for example is the Wright Flyer engine from the first aircraft ever to fly in Australia; the only stock original Wirraway trainer; and the Lockheed 12 once owned and operated by the former Australian naval aviator Sidney Cotton.

A Westland Wessex helicopter is suspended from the roof as part of the museum's display aircraft. Also visible is a Fairy Fantome carrier heap ASW aircraft.

Frank Getting - A Forgotten Submariner?

It is 'three cheers' for HMAS OXLEY as she departs Portsmouth, England on her delivers voyage to Australia on February 19, 1923 with Frank Getting serving as her Executive Officer.

History correspondent, Vic Jeffery, looks at one notable RAN officer who possibly should have had a Collins class submarine named after him. The story of Frank Getting is very interesting and the argument for a submarine name compelling.

Whilst the former Royal Australian Navy personnel time. (Frank) Getting was a member of the RAN's first officer intake in 1913 from boys born in 1899. Born at Manly, NSW on July 30, 1900, Getting's classmates included future senior officers such as Burnett, Collins, Dechaineux, Feldt, Long and Showers.

Getting saw active service in World War One aboard the heavy cruiser HMAS CANBERRA during the Battle of Savo Island and the death of its Commanding Officer, CPT F.E. (Frank) Getting, RAN.

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Canberra participated in Operation Watchtower engaging of Guadalcanal and Tulagi.

Experienced only two days carrying out day and night main armament gunnery firings off Sydney and a week of inclement weather due to her refit and sailed for New Zealand where it joined US Rear Admiral Turner’s amphibious force at Wellington. Melbourne weather which had restricted her anti-aircraft fireings.

Heads for the last lime under darkened skies she had experienced only two days carrying out day and night main armament gunnery firings off Sydney and a week of inclement weather which had restricted her anti-aircraft fireings.

HMAS CANBERRA had missed the Battle of the Coral Sea due to her refit and sailed for New Zealand where it joined US Rear Admiral Turner’s amphibious force at Wellington.

The ships sailed three days later bound for the planned assault on New Georgia. The orders were given ‘load. load. load!, ‘full ahead’ and then hard to starboard with torpedoes passing down either side of the ship and with three Japanese heavy cruisers only 1500 metres away.

As CANBERRA started to work-up to full speed, two explosions, the first from a direct hit from an 8-inch shell on the bridge killed the gunnery officer Lieutenant Commander Donald Hole instantly, badly wounding Midshipman Bruce Loxton and mortally wounding Captain Getting. Coupled with a load second detonation, a torpedo, on the port side disabled the ship before it fired a shot with all steering and power lost throughout the ship - all within three minutes.

The crippled CANBERRA came to a halt, listing eight degrees to starboard and on fire amidships as the ship absorbed at least 27 hits from 8-inch shells, all on the port side which saw the cruiser left as a drifting hulk.

Captain Getting, still conscious and with one leg almost blown off was on the bridge and insisting he would be all right until eventually he told his executive officer Commander John Walsh to ‘carry on’ and ‘do what he could’. Post war research reveals that it was almost certain that the torpedo which disabled HMAS CANBERRA was fired in error from one of the escorting USN destroyers, the 19 fired by the Japanese cruisers either being avoided or missing the 10,000 cruiser.

CANBERRA burnt throughout the night with her crew valiantly fighting the fires with buckets.

Daylight saw the cruiser dead in the water, listing and enveloped in smoke. Three USN heavy cruisers, ASTORIA, QUINCY and VINCENNES, had been lost. With the withdrawal of the invasion convoy and the covering force, planned for later that day, the decision was made to abandon the ship and sink her with torpedoes and shelling. And even then it required a major effort to dispatch the crippled cruiser.

Captain Frank Getting was transferred to the American transport USS BARNETT with other seriously wounded crew members and later died of his wounds whilst the ship was enroute to Noumea. He was one of 83 of CANBERRA’s crew, which were lost.

The circumstances of the loss of HMAS CANBERRA did not warrant the relegation that Captain Frank Getting’s name has subsequently suffered. His fighting spirit would have been a fine tribute to this virtually forgotten Australian submariner and his name a most fitting selection name for one of Australia’s Collins-class submarines.
Aircraft Carriers - A Personal View

By David Hobbs

A USN CBC (Carrier Battle Groups). The USN has found a better use of the English language when they refer to ships in company as a 'Battle Group', implying mutual support by ships of disparate strengths rather than some weakness in the capital ship that requires it to be 'escorted' (USN).

Following the announcement that RAE Systems has been selected to lead the industrial team that will design and build two new aircraft carriers for the Royal Navy, Royal Navy Aircraft Carrier Plan naval historian, writer, broadcaster and curator of the RN Fleet Air Arm Museum, takes an objective look at the role aircraft carriers will play in the twenty-first century and dispels some of the myths that have surrounded them.

Great Britain invented the aircraft carrier because 70% of the earth's surface is covered by water. A fusion of ships and aircraft, where they were needed, when they were needed with a capacity to fight in roles across the spectrum of operations where local air superiority has to be gained and maintained and offensive support of ground forces is always relied upon. At the time of their construction, a number of medium-sized Navies looked for affordable carriers to operate aircraft that can fight in roles across the spectrum of war fighting, deterrence and humanitarian relief. It can also sustain action with technical and logistic support. A planner looking forward for the life of a major command facility. Her cancellation, after 10 years work and at a "give-away" price in 1981 after a short-sighted defence review.

The other 'legacy' with which the RN lives today is the tradition that the first 'capital ship' laid down in a particular reign is named after the Sovereign. She would have been a national asset, capable of operating aircraft from all three services including Joint Strike Fighters, procured jointly for the RN and RAF and was to be fitted with a Joint National Command facility. Her cancellation, after 10 years work and when the design was ready for industrial tender, followed the notorious 1966 Defence Review (Part 1 of this stated):

"Experience and study have shown that only one type of operation exists for which carriers and carrier-borne aircraft would be indispensable; that is the landing or withdrawal of troops against sophisticated opposition outside the range of land-based aircraft. It is only realistic to recognise that we, unaided by our allies, could not expect to undertake operations of this character in the 1970s - even if we could afford a larger carrier force".

Quite apart from the fact that 'experience and study' showed no such thing, Part 2 of the same document said:

"The aircraft carrier is the most important element of the fleet for offensive action against an enemy at sea or ashore and makes a large contribution to the defence of our seaborne forces. It can also play an important part in operations where local air superiority has to be gained and maintained and offensive support of ground forces is required."

These two contradictory statements barely reflect the considered reflections of a 'joined up' Government. Sixteen years later, they were told by our allies' British forces were undertaking 'operations of this character' in Sun Carlos Water liberating the Falkland Islands. The scenario might have been written to illustrate the fundamental importance of QUEEN ELIZABETH, had her existence might have acted as the deterrent that would have prevented the war, but it fell to two much less capable ships, HERMES and INVINCIBLE, to make the operation possible. Unfortunately, several generations of British naval officers have been brought up with the assumption, from this legacy, that carriers were somehow "not allowed" in Britain. After decades of being a 'small- ship' Navy with a few small carriers, it will not be easy for the 'ship handlers' to grow into the new carriers in 2012 and it is they, rather than the airmen who will struggle to achieve the new ship's potential.

Analysis of future requirements

Defence Reviews in Britain in 1957, 1966 and 1981 failed to offer a viable structure for the armed forces or a realistic policy for them to implement. "Looking into the future" is not easy. A glance looking back shows us that the strength of a warship, say 30 years, in 1932 would have had to predict the rise to power of Hitler in Germany, appeasement, militarism in Japan, the end of US isolationism, the Second World War with an ally in Russia, the range of land based air and ENSO in the Suez Crisis! On a tactical level, the demise of the battleship and the rapid development of aircraft, radar and guided missiles were significant. Similar prophecies in our own era made in 1980 might have included the Fall of the Wall, the Cold War and the spread of regional conflicts requiring western intervention. They should have placed more emphasis on counter-terrorism operations however. Since 1945, British forces have been in action against 'stateless' terror groups in Palestine, Mesopotamia, Korea, Cyprus, Aden, Borneo, the Former Yugoslavia, Northern Ireland, Sierra Leone and others.

Legacy

The equipment deployed by any armed force is the legacy of decisions taken by previous generations, often faced with very different circumstances. The present Invincible class, built to a modest specification as anti-submarine vessels in a Cold War context, are a good example of a bad design. It suffered from a lack of focus; failed to appreciate the immense value of size and constrained the ability of these ships to offer the intervention capability that British foreign policy has always relied upon. At the time of their construction, a number of medium-sized Navies looked for affordable carriers to replace their war ships built by British light fleet carriers. It is a damaging indictment of how we got there that we list the Invincible design, although Australia briefly agreed to buy the name ship "of a give-away" price in 1981 after a short-sighted defence review.

Fleet here though, carrier flexibility worked and ships intended to replace the awful Tiger class Command/Carrier/Cruiser proved much better ships that had the advantages of a carrier hull, albeit in small measure. This allowed the three ships to operate Sea Harrier STOVL fighters and armed with some even short-listed the Invincible design, although Australia briefly agreed to buy the name ship "of a give-away" price in 1981 after a short-sighted defence review.

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HMS ILLUSTRIOUS with a mix of RN FA 2 Sea Harriers and RAF GR 7 Harriers. The mixing of air groups has produced good results that will be carried over ever the course stage to the decisive stage when the RN introduces its new aircraft carriers (RN).

A Joint Force of up to 16 Sea Harriers and GR 7 Harriers is regularly carried although "tailored air groups" including anything from Chinook to Lynx helicopters can be deployed. This allowed the three ships to operate Sea Harrier STOVL fighters and armed with some even short-listed the Invincible design, although Australia briefly agreed to buy the name ship "of a give-away" price in 1981 after a short-sighted defence review.

Obislate gun-armed cruisers left over from WWII, they were modified in 1958 to carry four AV-8B Harrier helicopters, which could be operated one at a time, from a cramped flight deck all of a box like hangar. They were probably the worst warships operated by the RN in the modern era and represent a design of which the Service should be ashamed. Why the carrier CUMBERLAND, which was in reserve at the time, or the conspicuous LEVIATHAN were not considered as helicopter carriers is beyond comprehension. Both could have operated up to 20 Sea Harriers.
CVA01 illustrates that their importance has transcended the capability. Battleships did not. Aircraft carriers, in a variety of forms and shapes, are important national assets. The very fact analysed in a process known as 'hindcasting' in the USA and future proof our forces? Experience of the recent past can be

IW2 haldlands War and the limitations the RN suffered in having small

• Vulnerability is the most common myth, usually
  associated with comments about eggs in baskets. Facts
  reveal a different picture with only eight British

• Carriers need support and 'escorts'. So do land
  based expeditionary air forces, that is why the RAF
  maintains its own Regiment of specialist soldiers. It also
  needs transport aircraft, engineers to build facilities at temporary air bases, oil tankers and
  specialist ammunition carrying ships to carry bulk
  logistics. As is often the case, the USN has found a
  better use of the English language when they refer to
  ships in company as a 'Battle Group', implying mutual
  support by ships of disparate strengths rather than some
  weakness in the capital ship that requires it to be
  escorted'.

One last myth concerns deck landing. Once propellers,
  straight decks and crash barriers made deck landing a difficult
  and dangerous operation for the unpractised. The British
  inventions of the angled deck and mirror/projector sight
  changed all that and the RN has not felt the need to operate a
  training carrier since 1956. Techniques can be practised ashore
  and I made my first catapult launch and arrested landing off
  Puerto Rico having sailed from the UK over a week before in
  HMS ARK ROYAL. Several of my contemporaries joined
  carriers in the Far East before making their first 'trap'. The
  system would have hardly allowed that to happen if there
  were to be a significant risk of failure. Besides that was over
  30 years ago; in 10 years time equipment automated landings
  and equipment will be that much better. We are after all,
  confident expecting to operate unmannned aircraft from ships
  by then!

The Future Carrier (CVF)

The Royal Navy began to make tentative plans for new
carriers after the South Atlantic War revealed flaws in its
legacy equipment. At first, three ships of about 30,000 tons
were considered but the growing importance of intervention
operations led to deep studies as part of the Strategic Defence
Review (SDR) of 1998. In consequence plans have been taken
forward for two much larger ships capable of operating
tailored air groups made up from Joint Forces, including Joint
Force Harrier and its successors. Studies by two industrial
groups evaluated both CV designs, with catapults and arrester
wires, and STOVL designs. In October 2002, the UK
Government elected to take forward an 'adaptable' design,
based on the CV but with a ski-jump, not necessarily fatal to the possibility of buying
CVFs ability to operate autonomously. The decision to opt for
a ski-jump is not necessarily fatal to the possibility of buying
E-2C Hawkeye's from the USN since the type has
demonstrated the ability to launch from a ski-jump built
ashore at NAS Putsent River during the 1980s. Whether it
can do so regularly at sea will be an interesting question for
the Project Group to study.

The ambitious naval ships USS Kearsarge (LHD-3) and USS
Bataan (LHD-5) sail in formation. The USN has approximately
11 marine carriers that can also act as small war const of ships through
the employment of ASW helicopters and Harrier fighters. They can also act as
continental ships and humanitarian relief ships. The carrier's ability to do so is a further demonstration of its inherent flexibility. (USN)

This is not the first time there has been a serious opportunity to produce a new generation of carriers for the RN. The latest such chance occurred in 1961 by VICTORIOUS, CENTAUR and BULWARK.

In addition to the JSF, the Maritime Airborne Surveillance and Control (MASC) Project is of critical importance to the CVF's ability to operate autonomously. The decision to opt for a ski-jump is not necessarily fatal to the possibility of buying E-2C Hawkeye's from the USN since the type has demonstrated the ability to launch from a ski-jump built ashore at NAS Putsent River during the 1980s. Whether it can do so regularly at sea will be an interesting question for the Project Group to study.

The UK Government announced that design work would be taken forward by an industrial group led by BAE Systems with Thales as a partner. They will now work on a detailed design before the next milestone, which will be a contract to construct two ships, expected in 2004. The first metal is expected to be cut in 2005, after which the first ship is to be launched in 2009 for completion and commencement of a trials programme in 2011. The first ship is to be operational in 2012 and the second in 2015. INVINCIBLE and ILLUSTRIOUS are already over
20 years old and the second CVF is planned to replace ARK
ROYAL in 2015, by which time she will be 30 years old. There is no room for slippage.

With 11 strike carriers in service and another building together with 11 helicopter carriers also capable of operating STOVL Harriers; the USN is easily the world's largest carrier force. It has consistently built big ships 'future proofed'
against changes in aircraft design and air group composition. Work is proceeding on evolution from the Nimitz design to
CVNX; a new large hull designed to take advantage of the latest technology. Recent statements from the Pentagon have,
however, shown that the Bush administration is convinced that carriers remain the essential core of the fleet's combat
capability but are by no means convinced that big carriers are the way forward. The Nimitz design can be traced back to
the aborted United States project of 1949 and as well as being
effective to build, they are extremely manpower intensive,
and therefore costly, to operate. Only one shipyard is capable
of building them. Cruise missiles, spy satellites and other new

(From L to R) USS ENTERPRISE and the French aircraft carrier CHARLES DE GAULLE during operation Enduring Freedom in the Arabian Sea. The use of the aircraft carrier in operations in Afghanistan proved again the carrier's ability to be in the right place at the right time despite the targets dwelling within
a land locked country. (USN)
technologies have reduced the size of air groups and recent studies have focused on the possibility of procuring a larger number of smaller carriers with construction being shared between a larger number of shipyards. Present plans call for the USN to deploy more than 20 battle groups in the war against terrorism. Only half these can include carriers and the procurement of ships like the British CVF would make a lot of sense. Using the rough order of costing mentioned earlier, six CVF hulls could be purchased for the cost of two Nimitz giving the potential to embark 300 rather than 150 aircraft and be in more places at once. These numbers, or some like them are causing a lot of thought in the Pentagon at present. USN air groups would probably comprise a mix of F-35 JSF/E-2C and EA-6B (or its replacement) types. The F-35 is a very capable fighter, even in its STOVL form and overcomes many of the earlier limitations of STOVL aircraft. The USN may well procure this version as well as the CV variant to deploy in larger numbers on helicopter carriers for specific operations. Significant changes may be evident soon and we may see co-operation between the UK and USA on carrier design as close as that on the F-35 Joint Strike Fighter.

A long look into the 21st century

Aircraft Carriers need no host nation support, they can pose out of sight 'over the horizon' waiting for the political decision to act. They can operate 'airlifted' air groups capable of operations at long ranges that counter detection by any but the most sophisticated opposition unlikely. Should Government decide not to act, they can fade away quietly without embarrassment. Those who favour long range bombers as an alternative forget that carriers can persist in operation, can ferry and land troops with helicopters, counter submarine surface ship and air threats, provide humanitarian aid and support national diplomacy. 'Showing the Flag' is powerful adjunct to foreign policy as those who have seen a US carrier on a visit to their shores will agree. Aircraft carriers are a two-stage weapons system in which the ship gives range, poise and sustainability. The embarked force gives a whole spectrum of offensive and humanitarian capabilities from the sea that are difficult for a potential enemy to counter and often impossible for land based air, a long way away, to replicate. They may change their size and shape as much over the next ninety years as they have over the past ninety but their future is secure.

The use of carriers as sea-base platforms is set to expand and it will be interesting to see how Australia, emerging as one of the most significant medium powers will change her force structure. Once a member of the 'carrier club', she paid off MELBOURNE with her Skyhawks, Trackers and Sea Kings in 1982 without replacement. She has recently selected the JSF as a potential replacement for the F-111 and F/A-18. If she logically chooses the F-35C tailhook or carrier version, will it be shackled to a land base or will its true potential be realised as part of a joint force operating from a sea base? If she wanted to, could she afford it? France is in the market for a second carrier and may well lean to the CVF design, especially with Thales taking a place in the project management. Brazil and India have old carriers and want to replace them.

The JSF must be the only logical choice for the manned element of the British Future Offensive Aircraft System (FOAS), another key element of the SDR. How very sensible to procure the carrier version with its longer range and to operate it, when necessary, from the CVF. I cannot see why anyone would not want it!

The RAN's last aircraft carrier HMAS MELBOURNE. Australia used to be an experienced member of the 'carrier club' but made the un-enlightened decision not to replace MELBOURNE or her capability. Since then more nations have joined the carrier club than left it. (RAN)
Hatch, Match & Dispatch

HATCH

TOOWOOMBA Launches

The ninth ANZAC class ship built by Tenix Defence Systems has been launched at Williamstown, Victoria. The ship, TOOWOOMBA, was launched on Friday 16 May 2003 by Mrs Judy Blight.

The ship's first phase and marks the beginning of the next phase. It is the first class of ship to be designed and built to meet Australia's unique strategic environment, and it is the first time that the Australian Navy has taken the role of parent Navy.

The techniques used in production of the Collins Class are at the leading edge of their field. The program has challenged traditional thinking and it has demanded well thought out solutions. There have been some understandable delays, but the core program has been delivered within the budget agreed by Government in 1987.

Through the outstanding efforts of the Royal Australian Navy, the Defence Science and Technology Organisation, the Department of Defence, the Australian Submarine Corporation and its sub contractors, the United States Navy and most importantly the submariners who serve in the Collins Class Australia has acquired a very potent submarine force.

Phase 2 of the Collins program is successful operation and support for the submariners who serve in the Collins Class and their submarines, the survivability of the industrial capability that underpins the force, and preparation for the next phase of submarines. As a large country surrounded by water with long trade routes and a small population Australian security strategy has no option but to be at the leading edge. This takes time, and we need to start now.

MATCH

RANKIN joins the fleet

Cora members match onto the newest commissioned submarine in the RAN, HMAS RANKIN (RAN). The Commissioning of the sixth Collins Class submarine HMAS RANKIN into the Australian Fleet on Saturday 29 March, marked the successful completion of the construction phase of the Collins Submarine program. It also marks a major milestone in Australia's submarine capability.

The Collins Submarine program is the largest and most complex single engineering project undertaken in Australian history. It has produced six of the world's most advanced conventionally powered submarines and it has established a strategic indigenous industrial capability that is critical to Australia's security.

The strengths of many individual Australians and Australian companies have contributed to this success. They have faced and overcome many challenges, the most daunting being the modern conventional submarine force that is second to none.

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MATCH

YARRA Commissions

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

YARRA was launched in Newcastle in January 02. The 720-tonne fibreglass warship was built at ADI's Carrington yard. Her hull is designed to withstand tremendous underwater shocks. YARRA's hull is single skin without any ribs or reinforcing frames and has a 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, HAWKESBURY, NORMAN, GASCOWYNE and DIAMANTINA, form a $1 billion contract to give the RAN one of the best mine countermeasures fleets in the world.

PRODUCT REVIEW

Fly Boy
By Geoff Litchfield
Published by Panvale Pressers
Available from numerous specialist outlets, by reference to the author, on tel (03) 9439 9376
www.flyboy.com.au
Price $39.60 incl. GST
Reviewed by John Bird

The Odd Angry Shot
Directed by Tom Jeffrey
Book by William Nagle
SRRS24.95
Reviewed by Lionel Hutz

THE NAVY

THE NAVY

VOL. 65 NO. 1

THE NAVY

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The language in this movie is very Australian as is the relationship between the characters. It is rather refreshing to see movie which isn't full of 'Americanisms' or how the US warships. Some may balk at the cover price - the Aussie dollar does not translate well from pounds sterling - but in my view, if the Royal Navy and its plans for the future are your thing, then it is well worth it.

THE EMPEROR'S CODES
Bletchley Park and the Breaking of Japan's Secret Ciphers

By Michael Smith
Price: $24.95
Published by Bantam Books, London and distributed in Australia's Readers' House

Reviewed by: Vic Jeffery

A must! This is the only way I can describe this 411-page soft cover book which is highly recommended and is Supported by 35 photographs it is an enthralling account of the Japanese super-encrypted codes were broken in World War II.

Author Michael Smith, himself a former codebreaker presents a fascinating account of the role of the British and Australian cryptographers in breaking the Japanese codes. He draws heavily on recently declassified British files from the Public Records Office, US intelligence officers and the memories of many still surviving codebreakers.

For years the Americans have claimed they broke the majority of the Japanese codes and ciphers which 'cut two years off the war in the Pacific'. This of course was never challenged as the British remained silent and steadfastly refused to release their files on their wartime codebreakers. One reason being that they could continue to intercept the communications of other countries with impunity.

The naval intelligence gathering field is clearly exhibited in this book and the once hush-hush FRUMEL (Reel Radio Unit, Melbourne) is openly discussed. For years the Americans have claimed they broke the majority of the Japanese codes and ciphers which 'cut two years off the war in the Pacific'. This of course was never challenged as the British remained silent and steadfastly refused to release their files on their wartime codebreakers. One reason being that they could continue to intercept the communications of other countries with impunity.

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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 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 off-shore surveillance.
- Advocates the acquisition of sufficient Australian-built offshore 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 seas 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.
The RAN Battle Ensign flies from the mast of HMAS ANZAC during her gun action in the Persian Gulf during Operation Falconer (the Australian name for the US led Operation Iraqi Freedom). ANZAC conducted seven fire missions over 21-23 March. A total of 40 rounds were fired by ANZAC on the Al-Hasa peninsula with coalition units firing a total of 77 (ANZAC, RICHMOND, MARIBOROUGH, CHATHAM). The longest range target was engaged at approximately 18kms away from the ship (RAN).
A shell caught in flight by the camera as HMNZS Waikato’s 4.5” gun fires on Iraqi positions. The Mk 45 gun on the RAN ship was able to produce more impact than the RN’s Mk 8 gun employed on the three other supporting RN frigates in both range and high explosive. The naval gunfire support missions provided valuable indirect fire to Royal Marines fighting towards the port of Umm Qasr (RAN).
Creswell, A Remarkable Life

Russia's SSBN Force

The FY-04 USN

A Merchant Navy for Australia

Australia's Leading Naval Magazine Since 1938
The RAN has chosen a DMS/Austal design for its new Armidale class patrol boat. 12 boats are to be built in WA with the first expected into service around 2005. Their names will be ARMIDALE, BATHURST, BENDABERG, AULBANY, PIRIE, MATHILDA, ARARAT, LAUNCESTON, FARRAKA, WOLLONGONG, CHIDERS and BROOME. (Austal)

The Commanding Officer of SHIP PARRAMATTA, Commander Mike Noonan RAN, leads his crew in a cheer after the ANZAC Class Frigate was delivered by Tenix Defence at Williamstown, Australia, on 20 June 1991. (Tenix)
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The opinions or assertions expressed in THE NAVY are those of the authors and not necessarily those of the Federal Council of the Navy League of Australia, the Editor of THE NAVY, the RAN or the Department of Defence. The Editor welcomes correspondence, photographs and contributions and will assume that by making submissions, contributors agree that all material may be used free of charge, edited and amended at the Editor's discretion.

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Front cover: The Tsionderoga class cruiser USS PORT ROYAL (CG-73) steams into position alongside the aircraft carrier USS JOHN C. STENNIS (CVN-74) to begin under way replenishment (UNREP) operations. Cruisers, destroyers and frigates of a battle group often receive supplies and fuel from the carrier. It is this ability to resupply while at sea that provides the Navy with the sustainability for any operation around the world in support of national interests. (USN)
DEFENCE PLANNERS UNENVIOUS TASK

For many years the Navy League has maintained that the country’s defence planners have an extremely difficult task to plan the structure of a defence force without any clear idea of the course international events were likely to take.

While uncertainty has been the watchword, even when governments approved a planned structure, the plan has seldom been carried out in its entirety, financial constraints always and from time to time a change in the international scene, eg, the Cold War, require a change in capability priorities.

Although terrorism has been a factor in a number of countries, it has had to take into account for many years, and Australian Defence Ministers and planners have recognised this fact, the scale of the attack on New York in September 2001 had world-wide repercussions, not least in Australia with its close American connections.

Three years ago the Government produced a Defence White Paper - Defence 2000 - said to be the most specific long-term defence funding commitment by any Australian Government for over 25 years. The paper was preceded by extensive public consultation and subsequently received wide Government for over 25 years. The paper was preceded by extensive public consultation and subsequently received wide Government for over 25 years. The paper was preceded by comprehensive consultation in Australia.

In conclusion, Australia is not a major power in world terms and its geographical situation - an island in a vast oceanic area thousands of kilometres from Europe and North America - indicates Asia is the direction in which the collective gaze of Australians should be focused.

The Broad thrust of Defence 2000 was confirmed earlier this year in Defence Update 2003 but understandably, given repeated acts of terrorism in the Middle East, Indonesia and elsewhere, it has been reviewed again; the result of the review is expected to be known at about the time this issue of THE NAVY is published.

An uneasy situation in the region is the result of movements by the Middle East, Indonesia and elsewhere. The Reference to Maritime Strategy Committee is made to both Defence Update 2003 and the JCFADT review in the July September issue of THE NAVY.

Over many years successive governments have often been accused of under-funding defence, whether or not the accusations were justified will be the point - every year governments are required to consider a score of competing demands for funds and make decisions even if it means taking risks in some areas.

Extreme acts of violence have brought home to everyone the unsettled state of the world. It would seem essential at this time for the present government to look well into the future, and avoid decisions that may harm the country’s ability to defend itself against aggression unlikely, though this may be in the immediate future, the demands of a capable defence force and anti-terrorist measures are not mutually opposed.

The Navy's leg of that triad has been neglected. Their share of the overall defence budget has been gradually falling since the early 90's. In 1993 the Russian Navy had 29% of the defence budget. The current level is 11-12%.

Vladimir Putin's coming to power seems to have put the 'brakes' on the Navy's decline. During a visit to the Pacific Fleet at the end of August 2002, just three months after signing the Offensive Reductions Treaty (SORT), President Putin reinforced the importance the government attaches to reforming the Navy. He proclaimed, “It is time to recognise the role of the Navy in the defence of the country and cease treating it as a stepchild" He also identified inadequate allocations from the military budget as contributing to the serious problems faced by the Navy and characterised the failure to build new ships as a result of government neglect. The Minister of Industry, Science, and Technology, Ilya Kleshanov also said, “The problems of the Navy [now] are the problems of the government and not only the Ministry of Defence".

In contrast, the current reform plans call for the Navy to resurrect its status as an oceanic power, assume a predominant role in nuclear deterrence in place of the land based SRF (Strategic Rocket Forces), and receive at least 20% of the defence budget. Putin's vision for the Navy, outlined in his 2007 Plan, details these ambitious, but whether or not the funding for them is ever realised is another story.

There is no certainty that Putin's plan will ever be fully implemented. Time is now critical for Russia's SSBN force as there is only so much time that they can keep putting off developing and building new systems if they wish to maintain an active fleet. If funding for the SSBN fleet remains only incremental or worse in the next decade then the Russian Navy may be faced with some interesting and possibly difficult decisions. A significantly reduced force falling to unprecedented levels in active hulls could be one bleak consequence.

Russian Navy Chief, Admiral Korotov, estimates that continuation of the current level of funding would result in a fleet of no more than 12-16 SSBNs. He further stated that the Navy requires 12-16 subs as a bare minimum.

Any future force will likely remain within current basing trends, with the majority based in the Northern fleet and the rest in the Pacific. A force of 12 might see eight in the north and four in the east. A force of 16 may have nine based in the north and seven in the east.

A program of SSBN fleet modernisation began in the 90s and is now well underway, albeit very slowly. With the emphasis now on reform the forthcoming years should start to bear results, as long as the Russians continue to believe and support this capability's ultimate deterrent value.
The new SLBM (Submarine-Launched Ballistic Missile) to arm the Borey is known as the Bulava. It is believed it may also replace the RSM-52/SS-N-20 on the remaining Typhoon class. Earlier speculation suggesting a single warhead for this missile appears to be incorrect. A MIRVed warhead fit now seems to be expected according to Western intelligence sources.

The Bulava missile is based on the land-based Topol-M/SS-27 ICBM (Intercontinental Ballistic Missile). With up to 70% commonality it has been seen in both weapons. Ultimately this would make production and maintenance cheaper and improve on service standardisation.

Of the Typhoon class SSBN’s only three are considered in ‘service’. The most recent news concerning the class was the relaunching in 2002 of TK-208, the lead boat of the class, now known as DMITRI DONSKOI, after 12 years in overhaul. It was put back to sea without missiles and is expected to become the test vehicle for the new Bulava SLBM. Testing of the new missile is hoped to start before 2005. This missile, as stated earlier, may eventually be fitted to the remaining Typhoon class as part of another upgrade to extend their useful lives as the RSM-52/SS-N-20 nears the end of its service life. The Typhoon class are typically fitted with 20 SS-N-20 missiles.

The backbone of the fleet for the next decade plus will be the Delta IV SSBNs. There are currently seven in commission but only four are considered operational. All were built between 1986-92. The class is currently undergoing and overhaul to keep them viable until at least 2015. So far two have been completed while another two remain in dry dock. However, further funding problems have been delaying overhaul completion. It is not unreasonable to assume this overhaul program may take until 2010 to complete.

Bringing up the rear of the current day fleet is the retiring force of Delta III SSBNs. Operational numbers range from five to nine depending on the source. Most of them are based with the Pacific fleet with the youngest hull now over 20-years-old. There does not appear to be any plan to overhaul them at this stage, which may indicate an earlier than expected retirement. Indeed one source claims that all will be retired by 2006. But the Russian naval hierarchy is known to wish to maintain an effective strategic nuclear first strike and deterrent capability. But any future force will be minor compared to that of the former-USSR which 10 years ago numbered 56 hulls.

**MISSILES**

There are three SLBM types in active service with the Russian Navy. The RSM-50/SS-N-19 (small numbers), the RSM-52/SS-N-20 and the RSM-54/SS-N-23. As of the end of 1997 the Russians had officially deployed 30 SS-N-20 missiles. Another 20 were either removed or also destroyed. Not much is known about the Bulava missile as it is still in the design phase. Often referred to as the Bulava-30, it is apparent to be a compact-sized solid-fueled ballistic missile. It is being developed by the Topol-M ICBM designers of the Moscow Institute of Thermal Technology (MITT), in co-operation with the SLBM design team at the MAKyev Design Bureau. The Bulava will replace the RSM-52V Variant-3 or Bark [NATO: SS-N-29], which was to have been deployed on YURI DOLGORUKI. The Bark missile program was cancelled after four successive test failures. While there were indications it might be resurrected, work on this weapon has not resumed. It is hard to speculate on the Bulava missile’s future designation within the Russian establishment. But one could assume a designation of RSM-56 in line with previous weapons and possibly of the use of “SS-N-28” by NATO.
Globalisation and the world wide use of open registers usually referred to as "flags of convenience" has changed the shape of merchant shipping forever and has led to the demise of many well known shipping Companies. Australia has not been exempt from this and the frequent use of "single voyage permits" has enabled the Australian coastal trade to be dominated by foreign owned ships. In the bush commercial world this is not necessarily a bad thing as it enables Australian commercial interests to select the most economic form of maritime transport yielding the lowest freight rate. For example Mr Lance Hockridge the former Head of BHP Transport in delivering the 2000 Boulton Lecture stated 'BHP has in the past owned ships in order to capture the lowest cost, highest reliability solutions but now ship ownership is not the sole way of achieving this: a variety of models can be used, for example the use of other providers' assets through various charter arrangements. BHP is supportive of a competitive Australian shipping industry but cannot continue indefinitely to support one that is not competitive.' Since that date of course BHP Billiton has announced the divestment of its shipping interests. Additionally many Australian exporters prefer to sell their goods FOB (Free On Board) and thus it is up to the consignee to provide the ship or shipping.

In 1996 the Australian Federal Government withdrew fiscal support (capital grants, accelerated depreciation etc.) and thus any inducement to own or operate Australian shipping. As a result Australian Shipping has all but disappeared and it is not likely to re-appear until it may become competitive in terms of operational costs and a taxation system, which is comparable to those overseas. Additionally at the present time there appears to be little interest in Australia in investing in ships or shipping. There is also a conspicuous lack of any definite shipping policy by successive Australian Federal Governments even though inquiries and reports have been commissioned ad infinitum and various prominent learned experts have dwelt on the benefits of an Australian Merchant Navy. Indeed a new study entitled the "Independent Review of Australian Shipping" has just been announced. It will be Co-chaired by Mr Peter Morris and Mr John Sharp. Federal Transport Ministers in both Labor and Liberal Governments. They are due to report in February 2003. Perhaps one may recall the words of Otto Von Bismark who commented long ago "When you say you agree with something in principle you mean that you have not the slightest intention of carrying it out in practice."

In the light of this gloomy picture the question "Does Australia Need a Merchant Navy?" has a hollow ring. In short on a strictly commercial basis it does not, but on wider National grounds it may well need one. The world is currently undergoing a measure of political instability and countries to our North are in some cases experiencing serious unrest. This means that much logistic effort, whether directed towards maritime combat forces or not, will be by sea. Shipping must thus be considered a joint logistic asset. Its protection may well become a critical issue within a campaign that has few other apparent maritime dimensions.

In the section headed "Ships taken up from trade" it states -

"support capabilities can be improved by taking merchant ships up from trade and converting them to the extent required by the operation. These vessels cannot replicate the capabilities of full-fledged purpose replenishment but they can play a vital role in maximising the capacity of the latter by acting as re-supply units between shore bases and the operational area. If vessels are to be taken up from trade, then mechanisms need to exist for their identification within the national register and charter or requisitioning. In these circumstances the possession of a substantial national fleet can be an important strategic advantage. Merchant vessels can also be employed to provide sealift for the movement of land forces and their logistic support. Nations

The USS STARK was hit by an exocet missile and 33 seamen killed.

In the article "Australia's Maritime Doctrine - Part 6" published in the October-December (Vol.64) Edition of the magazine THE NAVY which details chapter 9 of the RAN's maritime doctrine there are several excerpts in the section headed "Maritime Logistics" which are relevant and are therefore paraphrased here.

Naval forces are therefore largely self-sustaining for long periods if supported by an underway replenishment group and the "pull" forward of mission critical stores. This contrasts with the "push" system used for land forces, where the fundamental unit of combat is the soldier who has limited capacity for self-support.

Australia's strategic circumstances reinforce the truism that the sea remains the principal medium for the movement of large quantities of material. This means that much logistic effort, whether directed towards maritime combat forces or not, will be by sea. Shipping must thus be considered a joint logistic asset. Its protection may well become a critical issue within a campaign that has few other apparent maritime dimensions.

Additionally many Australian exporters prefer to sell their goods FOB (Free On Board) and thus it is up to the consignee to provide the ship or shipping. In the bush commercial world this is not necessarily a bad thing as it enables Australian commercial interests to select the most economic form of maritime transport yielding the lowest freight rate. For example Mr Lance Hockridge the former Head of BHP Transport in delivering the 2000 Boulton Lecture stated 'BHP has in the past owned ships in order to capture the lowest cost, highest reliability solutions but now ship ownership is not the sole way of achieving this: a variety of models can be used, for example the use of other providers' assets through various charter arrangements. BHP is supportive of a competitive Australian shipping industry but cannot continue indefinitely to support one that is not competitive.' Since that date of course BHP Billiton has announced the divestment of its shipping interests. Additionally many Australian exporters prefer to sell their goods FOB (Free On Board) and thus it is up to the consignee to provide the ship or shipping.

In 1996 the Australian Federal Government withdrew fiscal support (capital grants, accelerated depreciation etc.) and thus any inducement to own or operate Australian shipping. As a result Australian Shipping has all but disappeared and it is not likely to re-appear until it may become competitive in terms of operational costs and a taxation system, which is comparable to those overseas. Additionally at the present time there appears to be little interest in Australia in investing in ships or shipping. There is also a conspicuous lack of any definite shipping policy by successive Australian Federal Governments even though inquiries and reports have been commissioned ad infinitum and various prominent learned experts have dwelt on the benefits of an Australian Merchant Navy. Indeed a new study entitled the "Independent Review of Australian Shipping" has just been announced. It will be Co-chaired by Mr Peter Morris and Mr John Sharp. Federal Transport Ministers in both Labor and Liberal Governments. They are due to report in February 2003. Perhaps one may recall the words of Otto Von Bismark who commented long ago "When you say you agree with something in principle you mean that you have not the slightest intention of carrying it out in practice."

In the light of this gloomy picture the question "Does Australia Need a Merchant Navy?" has a hollow ring. In short on a strictly commercial basis it docs not, but on wider National grounds it may well need one. The world is currently undergoing a measure of political instability and countries to our North are in some cases experiencing serious unrest. This means that much logistic effort, whether directed towards maritime combat forces or not, will be by sea. Shipping must thus be considered a joint logistic asset. Its protection may well become a critical issue within a campaign that has few other apparent maritime dimensions.

In the section headed "Ships taken up from trade" it states -

"support capabilities can be improved by taking merchant ships up from trade and converting them to the extent required by the operation. These vessels cannot replicate the capabilities of full-fledged purpose replenishment but they can play a vital role in maximising the capacity of the latter by acting as re-supply units between shore bases and the operational area. If vessels are to be taken up from trade, then mechanisms need to exist for their identification within the national register and charter or requisitioning. In these circumstances the possession of a substantial national fleet can be an important strategic advantage. Merchant vessels can also be employed to provide sealift for the movement of land forces and their logistic support. Nations
WANTED URGENTLY

Back issues of "The Navy" Magazine and its predecessor
"The Navy League Journal of NSW"

As a Navy League Centenary Project the Victoria Division, on the initiative of its President, Commander John Wilkins RDF** and with the assistance of the NSW Division and the State Library of NSW is compiling a consolidated index of all issues of the two magazines from 1920 to the present, and hopes to provide microfiche copies of all available issues of the magazines and of the index to major libraries and selected museums in Australia.

The project is well on the way being 90% complete as regards copying the magazines, and 75% complete as regards the index, but the league has not been able to locate copies of the following issues:

- **The Navy League**
  - 1920 Volume 1 Nos 1, 4, 5, 8-11
  - 1921 Volume 2 Nos 1, 4, 6, 7, 10, 12
  - 1922 Volume 3 Nos 1-4

- **The Navy**
  - 1938 Volume 1 No 5
  - 1954 Volume 18 Nos 9-11
  - 1955 Volume 18 Nos 1, 2
  - 1956 Volume 19 Nos 4, 10, 11

If any of our readers have, or know where we can locate, any of the missing copies, please notify the NSW President, Otto Alberti, at the address listed on page 1 of this magazine (or by fax) and he will take the matter from there. The copies can either be made available on loan to the NSW Division so they can be copied onto microfiche or, if they are not required as part of a collection, they can be donated to the State Library of NSW which already has the most complete sets of the two magazines.

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A near fully laden merchant ship leaves port. Being an island nation Australia's economic stability and future is reliant on sea transport, and its protection. Having an Australian Merchant Navy should thus be an important part of any Government's economic and military outlook.

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The Ticonderoga class cruiser USS VINCENNES at sea. The first five Ticonderoga class cruisers are armed with the Mk 38 twin arm launcher making them incapable of using the Tomahawk cruise missile. This fact alone means that the USN will be retiring the first five before 2005 with two decommissioning this year. Having plenty of life left in their hulls, and with the imposing SPF/SPS/SM-1 combination still in perfect working order, they would make a great buy. (USN)

The US Navy's Fiscal Year 2004 budget may be considered the last of the 'legacy' programme budgets as the service enters into the era of Transition. Anchored by the doctrine of 'Sea Power 21' - comprising three major concepts: Sea Strike, Sea Sledge and Sea Basing - there are critics who believe the Navy's Admirals are spending their monies in all the wrong places in regard to the future fleet and Joint Operations demands. Based on recent experience in Afghanistan and Iraq, there may be a lot to be said for this criticism.

"Winning the Global War on Terrorism is our Number One priority. Our naval forces will play a leading role both in this historical struggle and in preparedness for future threats to our national security by contributing precise, persistent, and responsive striking power to the joint force, strengthening deterrence with advanced defensive technologies, and increasing operational independence through sea basing. This is the Naval Power 21 vision", according to Chief of Naval Operations Admiral Vern Clark.

The US Navy faces a number of issues. One of these is 'quantity versus quality' in the number of vessels it can keep in commission and attain 'Naval Power 21' for 'Global Concepts of Operations' (Global CONOPS) as it is referred to sometimes). The new Global Concept of Operations requires a fleet of about 375 ships, to be organised into 37 independent groups (Cruiser Battle Groups, Surface Action Groups, Amphibious Ready Groups, etc) - compared to 15 to 17 groups today. However, battle force ships numbers declined from 313 in FY-2002 to 292 in FY-2004 planning. Only seven new ships are funded under FY-2004 thus 375 ships seems a long way out. The USN is currently in the process of planning for three new ship classes. The DD (X) new generation destroyer, a 10,000 tonne ship; the LCS (Littoral Combat Ship) for inshore naval operations and the CG (X) new generation cruiser using the same hull as the DD (X).

US Navy decommissions this year include five Spruance DD, two Ticonderoga CG, two Los Angeles and Seawolf SSNs, two LSD amphibious ships and four TACOS research ships, with gains of four Arleigh Burke DDG and one Scowolf class submarine (USS JIMMY CARTER) and the first Virginia class submarine (SSN-774).

FUNDING IN 2004

The proposed biannual budget for the US Navy and Marine Corps for Fiscal Year 2004 budget is US$114.72 billion, a US$10 billion increase over Fiscal Year 2002. The largest increase is a nearly US$3 billion increase in the US Navy's Research, Development, Test & Evaluation (RDT&E) budget, rising from US$11.3 to US$14.1 billion. Within the RDT&E budget, Engineering and Manufacturing development absorbs most of the increase in funding (from US$3.6 billion to US$6.2 billion). Gaining the greatest share are the new DD (X) missile destroyer, Joint Strike Fighter (F-35B/C) and Command, Control, Communications & Intelligence (C3I) programmes.

Why the great increase in RDT&E? In large part, the Fiscal Year 2004 budget is the last 'legacy' programme budget under the Department of Defense modernisation initiatives, the Department of Defense modernisation initiatives under the guidance of US Secretary of Defense Donald Rumsfeld. The heavy RDT&E budget reflects new
procurement programs that will begin in fiscal year 2005-2007, including the new CVN-21 class super-carrier (CVN-78), LHA (replacement) and Maritime Pre-positioning Force (Future) (MPF-FI) ship programs scheduled for procurement funding in FY-2007. In aircraft programs, 64 new F-35B/C (Navy/Marine Corps version) and 117 V-22 Osprey will be funded during FY-2005-09.

**SHIP CONSTRUCTION FUNDING**

Highlights of the Shipbuilding and Construction (SCN) and aircraft procurements for the year include:

- One Virginia class (SSN-774): FY-04 reflects a multiyear contracting effort for seven boats over FY-2004-08, with plans in hand to raise annual orders to two SSNs per year from FY-07 to meet a national security requirement for A55 van fleet. Funded at US$5.24 billion, with plans for eight SSN-774 for FY05/09 at US$19.84 billion cost.
- Three x Arleigh Burke Flight IIA class (DDG-51): Last six ships to be funded between FY04 and FY05 budgets, allowing sooner transition to DD(X). Initial RDT&E funding under FY05 (as with Littoral Combat Ship corvette).
- One x San Antonio class (LPD-17): new generation Amphibious Landing Ship Dock (LPD), replacement class for 41 ships of four classes now in service. Funded at US$1.92 billion this year, average ship costs are US$400 million but it is hoped this will decline to about US$750 million by 2008. USS SAN ANTONIO (LPD-17) was christened July 19th this year.
- Two x Lewis & Clark T-AKE: new class replaces AOE designated cargo and stores and AE-designated ammunition ships. Three T-AKE already funded and lead ship due for delivery in May 2005.

Other important programmes:

- Trident SSGN Conversion: USS OHIO (SSBN-726) will be the first of four SSBN conversions to SSGN conversion in November last year and will return to service in 2007, to be followed by FLORIDA (SSBN-728), GEORGIA (SSBN-729) and MICHIGAN (SSBN-732). Funded at US$1.236 billion.
- Cruiser Conversion: Modernization of Ticonderoga class cruisers beginning with sixth ship (BUNKER HILL, CG-52). First five will be retired in 2005. Major upgrades include Cooperative Engagement Capability (USE-2) and SPY-1D improvements.

**AIRCRAFT PROGRAMMES**

In aircraft programs, 196 F/A-18E/F Super Hornet and 56 G (Growler) were planned for FY05/09 at US$18.48 billion. Nine MV-22 (USMC) and two CV-22 (Air Force) Osprey (US$1.65 B.) and 14 UAV systems (Pioneer) plus VTUAV (Fire Scout) are included. The USN will move into Global Hawk-Navy and Broad Area Maritime Surveillance (BAMS) during FY05/06, along with Sea Based Penetrating Surveillance (UCAV-N) and submarine launched Unmanned Underwater Vehicles (UUV) in FY05. Aircraft rebuilds include E-2C Hawkeye 2000 (two), six MH-60R and 13 MH-60S (VERTREP) Black Hawk upgrades and continued EA-6B Prowler avionics and aircraft SLEP (Service Life Extension Program) efforts.

Major offensive missile procurements include: Tactical Tomahawk (267), JASSM (429), SLAM-ER (84; phase out in FY05) and JDAM (12,326). Tactical Tomahawk is just getting underway with over 425 being bought each year from FY04. JASSM procurement begins in FY07.

**USMC**

The counterpart Marine Corps doctrine to the USN's Global Ops is called "Marine Corps Strategy 21", combining the concepts of Expeditionary Maneuver Warfare with Ship-to-Objective Maneuver (STOM) to allow future Marine Air Ground Task Groups (MAGTFs) to greatly expand their operational tempo and flexibility to allow manoeuvre forces to move directly against deep inland objectives (as done in Iraq). The current Corps force remains steady at three Marine Expeditionary Forces (MEF) and four Marine Expeditionary Brigades (MEB) although FY03 saw an increase of one battalion (to 71). Two USMC F/A-18 Hornet squadrons are deployed onboard USN carriers at all times. Of the 175,000 Corps active forces, some 32,000 Marines are deployed on 110 ships and bases around the world on any given day. As of 30 July, the Marine Corps Reserve had 19,191 personnel activated in support of worldwide operations.

Procurement of the Advanced Amphibious Assault Vehicles (AAAV) prototype was funded under FY03 and special＋tailing funding is covered under FY04/05 with first vehicle procurement under FY06 (18 vehicles) rising to 90 vehicles in FY09. Initial AAAV in service should be reached in FY08 and Full Force Operational Capability in 2018. Humvee (HMMWV/2) funding includes 1,792 vehicles and a Light Armored Vehicle (LAV-25) SLEP has begun.

The USMC's Corps artillery is also being modernised with continued procurement of Lightweight 155mm Howitzers (LW-155), at 60 guns in FY04 and 110 in FY05 and continuing through FY07. The lighter weight, increased lethality and smaller footprint of the new howitzer reduces strategic sealift space required for the guns. One HIMARS rocket launcher is included in FY04 and FY05, with full production to begin in FY05 (15 systems), offering an indirect fire support system with 30 to 60km range and with C-130 airlift ability. Predator ATOM (Anti-Tank Guided Munition) production continues, with 526 in FY04 and 673 in FY05 and production planned well past 2010.

One cannot miss the obvious - Corps inland operations in Iraq were immensely successful, both in open desert terrain and urban warfare conditions - superbly supported by both M-1A1 and LAV-25 vehicles. While the Corps has operated the LAV-25 for sufficient years to implement a SLEP programme, the US Army is just now fielding its first Stryker Brigade units based on the same vehicle.

Overall, this coming years budget for the USN is a "Steady as She Goes" effort, just before a vast new Transition era begins in 2005.
New patrol boats for Navy announced

Australia is a step closer to buying a new fleet of bigger, faster and more capable patrol boats to increase surveillance and better protect Australia's coastline. 

Defence Minister Robert Hill said a partner-ship between Defence, Maritime Services and Austal has been selected as the preferred tenderer to build and support the Navy's replacement patrol boats. 

The new aluminium boats will operate out of Cairns and Darwin and will be armed with the Rafael 25mm Typhoon stabilised cannon and equipped with state of the art communications systems. They will be able to operate in a greater range of seas and conditions and improve the Navy's capacity to intercept and apprehend vessels suspected of illegal fisheries, quarantine, customs or immigration offences.

"The fleet of 12 new boats will also carry two smaller sea boats to allow Navy crews to conduct boarding, customs or surveillance missions," Senator Hill said.

The Navy will be able to operate the new Armidale class boats for a combined total of 3,000 days per year plus have the capacity of an additional 600 days in short notice tasks comparing to an average 2,700 operational days per year currently undertaken by the existing Fremantle boats.

The boats are expected to be built at Austal's Henderson yard near Fremantle, Western Australia, and have a range of 3,000 nautical miles and a 20 percent increase over the existing boats.

Senator Hill said the staged tender process has been an intense battle between the three short listed companies, which included ADI and Tenix, which has highlighted how competitive Australia's small vessel shipbuilding industry is.

"The DMS/Austral offer was evaluated ahead of Tenix by a tender evaluation group, which offered the best value for money in meeting Defence's patrol boat requirements in line with the criteria in the request for tender."

INACT delivers to USN, again

Incat of Tasmania has handed over to the USN a 98 metre Wave Piercing Catamaran now known as HSV 2 SWIFT, Incat Hull 061.

Guests at the handing over ceremony were welcomed on board HSV 2 SWIFT by His Excellency The Honourable Sir Gary Green, AC, KBE, CVO, Governor of Tasmania.

With the Royal Australian Air Force hand playing, flags flying and the usual pomp and ceremony associated with such events, the 80 or so US officials and crew were joined by representatives of the Australian Defense Force, invited guests and the entire Incat workforce.

During the ceremony Commander Clark Price, the Captain of the craft, assumed command of its first orders before the Hoisting of Colors, signifying that the US Navy had accepted US Navy Vessel HSV 2 SWIFT.

The ceremony, during which guests were seated on hay bales, was followed by an Aussie themed 'barbeque' complete with the ubiquitous gum trees and Hills on deck.

Speaking of this latest High Speed Vessel, "we have the Stars and Stripes, Rear Admiral Paul Ryan, Commander Mine Warfare Command, US Navy said the name SWIFT is most appropriate, because of its high speed, it reached 47 knots on sea trials."

Admiral Ryan referred to the old Navy adage that 'Speed is Life', saying that "speed is a force multiplier, reducing the transit time to theatre, and therefore increasing the time on station."

Mr Clifford, Chairman of the Incat Group of Companies and Executive Vice President of Bollinger/Incat USA, told the assembled guests of plans for further Incat-built military vessels, "The US Navy is interested in many new ships, ships that will be known as Littoral Combat Ships (LCS). SWIFT is not a Littoral Combat Ship, it is however, a forerunner of that class, and any candidate considered for that class must first exceed the specifications of this ship. That will be no easy task."

Bollinger/Incat USA and Incat will be presenting in due course our Tasmanian-designed ship of the future to the United States Navy" he said.

The High Speed Vessel (HSV) HSV 2 SWIFT will serve operationally as an interim Mine Warfare Command and Support Ship (MCS), and support transformational mine warfare modulus payload initiatives. In support of Navy experimentation, the HSV will be used to explore concepts, capabilities and military utility associated with the advanced hull and propulsion technology integrated with advanced communications in support of the Littoral Combat Ship (LCS) program.

For the Marine Corps, the HSV will conduct a series of limited-objective experiments, exercises, demonstrations and training events that develop interoperability potential of high-speed vessels with causesways, watercraft, amphibious ships and other shipping. Experimentation data will be used to access the military utility of HSVs and future joint and naval military operations or applications.

The HSV is capable of maintaining an average speed of 35 knots or greater, loaded with 500 tons, consisting of 350 personnel and mission equipment. A minimum operating range of 1100 nautical miles at 35 knots is required by the contract, as a minimum transit range of 4000 nautical miles at an average speed of 20 knots. Furthermore, she must be capable of 24-hour operations at slow speeds (3-10 knots) for experimentation with unmanned autonomous vehicles, and to support dedicated and emerging organic mine warfare missions.

A stern ramp capable of offload loading directly astern or to the starboard quarter is fitted. The ramp is capable of loading/unloading a multitude of military vehicles up to and including M-1A1 main battle tanks.

SWIFT is also fitted with a load compensating crane capable of launch and recovery of small boats and unmanned vehicles up to 26,000 lbs, whilst underway. The crane is capable of lifting up to 22,000 lbs. to and from the flight deck.

Perhaps one of the most impressive features of SWIFT is the NAVAIR certified helicopter flight deck for operation of MH-60S, CH-46, UH-1 and AH-1 helicopters. An area protected from the weather for storage and maintenance of two MH-60S helicopters has also been provided to enhance aviation operations in day, night and instrument meteorological conditions.

With sea trials, Navy acceptance, and crew certification complete SWIFT will now deploy and commence routine operations. The vessel will operate with crew stationed at Naval Station Ingleside, Texas, and Naval Amphibious Base Little Creek, Virginia.

The HSV 2 SWIFT is the fourth Incat Wave Piercing Catamaran to enter Military service.
to disarm Iraq. Captain Lockwood said the ceremony was an opportunity to commemorate the recent service of Navy people in the Gulf.

The presentation of these relics will provide the Australian War Memorial with a comprehensive historical record of the Navy’s contribution to the Coalition efforts in the Middle East.”

Captain Lockwood said this commemoration in our national war memorial will ensure the recent active service of Naval personnel in the Gulf is remembered for future generations of all Australians.

“This will assist in helping those generations to understand what today’s sailors have experienced,” CAPT Lockwood said.

The relics presented included a five-inch shell casing engraved with names of all crew-members from HMAS ANZAC, a ceremonial life ring from HMAS DARWIN, a sea nuke and the life ring from an Iraqi lug signed by one of the boarding parties from HMAS KANIMBLA.

First contract for Collins class falk

Head of the Defence Maritime Systems Division, Rear Admiral Kev Scarce, has announced that a contract has been signed with the Australian firm SonarTech Atlas for selected sonar capabilities in the replacement combat system for the Collins class submarine.

RADM Scarce said that the contract with SonarTech Atlas - valued at $22.5 million - is the first of four major contracts to be finalised over coming months.

The contract with SonarTech Atlas represents a small but critical part of the new system.

“They will provide the Submarine Acoustic Transitory Event Processing System (SATEPS) - a unique Australian invention which provides unparalleled capabilities in detecting other submarines and pinpointing their locations,” he said.

The $400 million dollar replacement combat system project was agreed by Government last year. It provides for a significant capability enhancement to the existing combat system, identified in 1999 as the principal technical challenge for the Collins class. It also provides for further improvements in the sonar detection and processing solution currently installed, until the replacement system is introduced.

The replacement combat system will be supplied through the United States Navy. It is based on the Raytheon CCS Mark II tactical command and control system that is currently being used by the United States Navy.

A Foreign Military Sales case to supply the CCS Mark II has been agreed with the United States Government.

In other three major contracts - covering other sonar, servers and hardware and installation - it will be signed over coming months.

This schedule provides for the replacement combat system to be introduced progressively as part of the submarines’ routine docking program from 2005.

In other Collins class news, all submarines of the class have been cleared to sail after a precautionary check on underwater valve movement.

This followed earlier advice from the Australian Submarine Corporation that maintenance on the valves had not been carried out in accordance with manufacturer’s specifications.

The Navy has now been informed by the Australian Submarine Corporation that it has checked maintenance records and conducted testing on the valves, and has assessed the submarines as safe to go to sea.

The Chief of Staff to the Maritime Commander, Commodore Nigel Perry said that the Navy took the decision to recall a submarine into port to undertake the precautionary valve testing for the safety of the men and women serving in submarines.

Precautionary testing was also carried out on other submarines already in port.

“The Navy is pleased that the submarines have been assessed as safe to go to sea so quickly”, he said.

New RNZN vessels to civilian standards

Half a billion dollars worth of new vessels for the Royal New Zealand Navy will be built to civilian, not military, standards.

NZ Defence Minister Mark Burton revealed this, in answer to written parliamentary questions.

Mr Burton said components in the vessels, like their weapons, communications and aviation capability, would be of military specification, but the ships would be built primarily to civilian standard.

He said they would mainly be used for patrol duties and that the new multi-role ship would also undertake military and civilian sealift tasks.

The transit of HMCS VICTORIA allowed for a better understanding of the boat’s performance in a variety of climatic, ocean and weather conditions.”

The Coast fleet immeasurably.” said Vice-Admiral Ron Buck, Commander of the United Kingdom in 1998, replacing the existing combat system, identified in 1999 as the principal technical challenge for the Collins class. It also provides for further improvements in the sonar detection and processing solution currently installed, until the replacement system is introduced.

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The transit of HMCS VICTORIA allowed for a better understanding of the boat’s performance in a variety of climatic, ocean and weather conditions.

“We are delighted to begin work on this very important national defence effort to transfer four DDGs to the Taiwan Navy.”

Victor III scrapping begins

Engineers have begun dismantling a nuclear submarine scrapped from Russia’s Pacific fleet as part of a Japanese-funded project, a senior Japanese foreign ministry official said.

With the recycling of the Victor III-class submarine at the Zvezda (‘star’) in Russian
dockyard near Vladivostok, the implementation of the Russian-Japanese project ‘Star of Hope’ has begun.

While Japan has been funding a nuclear submarine-recycling program for 10 years, too little has been done so far.

Over the past decade, Japan has devoted 20 billion yen (US$169 million dollars) to this program. Four billion yen has been used to set up a nuclear recycling plant, but the remaining 16 billion has not been used to this day.

Not a single nuclear submarine has been recycled and only very recently has there been any progress.

China submarine disaster

Several high-ranking Chinese naval leaders have been dismissed in the wake of a submarine accident in which 70 sailors perished (see THE NAVY Vol 65 No 5 15)

The Navy of the People’s Liberation Army (PLA) will now be commanded by Zhang Dingfa, previously a joint commander, Chinese media said.

Zhang replaces Shi Yunsheng. Hu Yalin also replaces Yang Huaqing as the PLA’s political commissar, the reports said.

The central committee of the Chinese Communist Party approved the changes without offering a reason for them.

The pro-Beijing Hong Kong daily Wen Wei Po, said that the commander of the PLA’s northern fleet, Ding Shichao, had been dismissed and replaced by Zhang Zhanhui, who was the head of the PLA’s training programs.

The new Indian Navy modified Kiriv class stealth frigate TALWAR

‘Heads roll’ after Chinese submarine disaster

Vol 65 No 4

VSE begins Kidd transfer

VSE Corporation has announced that it has been awarded a U.S. Navy delivery order for US$1.2 billion in nuclear fuel assemblies to support the reactivation and transfer of four U.S. Navy ships to foreign Navies.

Work will be performed by the Bureau of Weapons (Bavec) Division of VSE under Bavec’s ten-year, US$1.2 billion Navy contract to support the reactivation and transfer of U.S. Navy ships to foreign Navies.

The first of the 4,000-tonne displacement stealth class warship christened INS TALWAR is already operating with the Indian Navy.

The Kiriv class warship will give the Indian Navy a greater capability being equipped with surface-to-air, anti-ship and land attack missiles.

The three warships were to be induced in the Indian Navy almost 18 months ago but this delivery was delayed as the Indian Navy refused to take possession of the warships after one of its main anti-aircraft missiles, the Shipil, failed during test fire.

Officials said that the fault in the missiles has been rectified and some more test firings would be conducted in the presence of the Indian Naval Chief.
the Navy, Research and Development and Acquisition John Young. "The decision effectively creates a roadmap for the Navy which draws on extensive, successful experience with S-Band on Arleigh. It provides enhanced capability for DD(X) as well as a future growth path, and supports the advancement of radar technology necessary for the CG(X) cruiser. The industry partners, Northrop Grumman, Lockheed Martin and Raytheon have been exceptional in working cooperatively to allow this decision to be made, demonstrating their understanding of the benefits to the fleet and the priority they place on supporting the Navy and Marine Corps."

**USS CONSTITUTION decommissions**

"America's Flagship," USS CONSTITUTION (CV-64) was decommissioned Aug. 6 after 41 years, 10 months and 11 days of naval service in a ceremony at Naval Air Station North Island. Former President Ronald Reagan presented a Presidential Flag to the ship in 1981, and tagged CONSTITUTION with the nickname 'America's Flagship.' Ironically, the newly commissioned USS RONALD REagan (CVN-76) will replace CONSTITUTION when it arrives in San Diego next summer.

Commissioned at New York Naval Shipyard Oct. 27, 1961, CONSTITUTION is the third ship to be christened with the name, and bears the motto "Spirit of the Old, Pride of the New." It has seen service in the Vietnam War, Operation Desert Storm, Operation Southern Watch, Operation Enduring Freedom, and most recently, returning from a deployment in support of Operation Iraqi Freedom.

Since its commissioning, nearly 120,000 Sailors and Marines have served aboard 'America's Flagship.' The arresting gear aboard has amassed an impressive 436,000 'traps' or landings.

Connie, as the ship is known to the crew that served aboard her, was the second aircraft carrier ever be commissioned. She was completed 25 years ago. USS ENTERPRISE and USS Nimitz, the three remaining conventionally powered aircraft carriers in the fleet, are also known as "the Enterprise," "Nimitz" and "Connie."

Launching air strikes in support of Operation Iraqi Freedom, Connie subsequently flew more than 1,500 sorties, dropping more than 1.7 million pounds of ordnance on strategic military targets. In addition, she produced, packaged and dropped more than 600 million leaflets over Iraq, more than 25 for every man, woman, and child in Iraq.

CONSTITUTION has been honoured with more than 30 awards, including one Presidential Unit Citation.

**USS BAYLIEF** in Sydney Harbor. The Bayleif was a sister ship of the 'Leaf' class that remained in service until approximately 2005. Ten years after international shipping regulations banned single-hull tankers, the Bayleif is the latest in a series of small tankers with single hulls. "It should be noted that the RAN-IMSAW program will see the Bayleif class, a sister ship to the Leaf class, remain in service for at least another seven years, five years after the Marpol convention." The US Navy has decided that the Bayleif is the only single-hull tanker to remain in service for at least another seven years, five years after the Marpol convention.

**US Navy announces DD(X) S-Band radar**

The US Navy has decided to use S-Band rather than L-Band technology for the volume search radar that will be on the next-generation destroyer DD(X). This higher frequency radar will improve the ability of the destroyer to track aircraft and missiles and to counter attack shore-based ground or missile batteries that attempts to strike the ship.

"The ship with the nickname 'America's Flagship.' USS CONSTITUTION (CV-64) was decommissioned Aug. 6 after 41 years, 10 months and 11 days of naval service in a ceremony at Naval Air Station North Island. Former President Ronald Reagan presented a Presidential Flag to the ship in 1981, and tagged CONSTITUTION with the nickname 'America's Flagship.' Ironically, it will be replaced by the USS RONALD REAGAN (CVN-76) when it arrives in San Diego next summer.

Commissioned at New York Naval Shipyard Oct. 27, 1961, CONSTITUTION is the third ship to be christened with the name, and bears the motto "Spirit of the Old, Pride of the New." It has seen service in the Vietnam War, Operation Desert Storm, Operation Southern Watch, Operation Enduring Freedom, and most recently, returning from a deployment in support of Operation Iraqi Freedom.

Since its commissioning, nearly 120,000 Sailors and Marines have served aboard 'America's Flagship.' The arresting gear aboard has amassed an impressive 436,000 'traps' or landings.

Connie, as the ship is known to the crew that served aboard her, was the second aircraft carrier ever to be commissioned. She was completed 25 years ago. USS ENTERPRISE and USS Nimitz, the three remaining conventionally powered aircraft carriers in the fleet, are also known as "the Enterprise," "Nimitz" and "Connie."

Launching air strikes in support of Operation Iraqi Freedom, Connie subsequently flew more than 1,500 sorties, dropping more than 1.7 million pounds of ordnance on strategic military targets. In addition, she produced, packaged and dropped more than 600 million leaflets over Iraq, more than 25 for every man, woman, and child in Iraq.

CONSTITUTION has been honoured with more than 30 awards, including one Presidential Unit Citation.
proud and history of its crews and mission. I am as proud to have served as commanding officer, as each and every Sailor aboard has the right to say "I am proud to have served on America's Flagship."

In approximately a month, after the lowering of the commissioning pennant and ship's colors, and after the last watch is secured, Connie will be towed to an inactive ships' facility in Bremerton, Wash.

The keynote speaker at the decommissioning ceremony was U.S. Congressman Randy 'Duke' Cunningham, R-Calif. In 1972, then Lt. Duke Cunningham was a Navy F-4 pilot with Fighter Squadron (VF) 96 aboard Connie.

Cunningham and his radar intercept officer, Lt.j.g. Willie Driscoll, downed three enemy MiG-17s, that, combined with two earlier kills, made them the first aces of the Vietnam War and the first ever to accomplish that feat with all missiles.

HMS SPLENDID bids farewell

HMS SPLENDID sailed away from the Garretch for the last time on the 19 August 2003 following 23 years of sterling service with the Royal Navy.

With her 45 metre decommissioning pennant flying proudly in the breeze, Commander Paul Burke eased HMS SPLENDID away from a Faslanc quay for one final time en route Plymouth for her decommissioning ceremony was held to mark the successful completion of her service and to give thanks to the brave men who have served in her. It was with considerable pride that the men of HMS SPLENDID paraded at her decommissioning ceremony on Thursday 14 August in front of six Admirals. The current Flag Officer Scotland, Northern England and Northern Ireland, Rear Admiral Nick Harris-MBE served as the 1st Navigator of HMS SPLENDID and saw action in the Falklands campaign in 1982.

HMS SPLENDID has seen plenty of action since commissioning in 1981. During the Falklands she conducted vital surveillance operations in the South Atlantic as the Task Force desperately sought early warning of impending aircraft raids.

Following this 'hot' war she continued to provide service to the nation in the Cold War carrying out many missions, for which the results remain secret to this day. However, it was following the end of the Cold War and during her second commission that HMS SPLENDID was to see further action and fame.

She was the first UK Submarine to be fitted for and with Tomahawk Land Attack Missiles (TLAM) and was the first UK Submarine to use them in anger in the Kosovo campaign in 1999. Latterly in what was to be her final patrol, HMS SPLENDID fired again in anger, this time successfully destroying targets of the Iraqi regime.

Queen presents new Colour to RN

Her Majesty The Queen presented the Fleet with a new Colour aboard the helicopter carrier HMS OCEAN in Plymouth Sound on 23 July 2003. 20 other ships of the Royal Navy were drawn up for review off Devonport, while hundreds of spectators braved inclement weather to watch the ceremony from the shore.

The flag, first presented to the Fleet by King George V in 1926, and replaced by Her Majesty in 1969. comprises a gilt Royal Naval War Ensign adorned with the Crown and Royal Cipher.

When presenting the Colour, Her Majesty expressed her particular sympathies to those Service families bereaved by the fatalities suffered during the previous operations in Iraq. Accompanied by HRH The Duke of Edinburgh and Admiral Sir Jonathan Band, Commander in Chief Fleet, the Queen was greeted by a 21-gun salute from the frigate HMT NORFOLK and a flypast of Tornado GR4s from the Royal Air Force and the Royal Marine Band.

The ceremony was relayed on large television screens to the large crowds gathered at the South Shields Pier from where the English fleet sailed 415 years previously during the reign of the first Queen Elizabeth to meet the threat from the Spanish Armada.

US Navy christens PCU VIRGINIA

"In the name of the United States, I christen thee, VIRGINIA. May God bless her and all who sail in her."

With those words and a swinging of a champagne bottle, PCU VIRGINIA (SSN-774) sponsor Lynda Johnson Robbins, wife of former U.S. Senator Charles S. Robbins of Virginia and daughter of former President Lyndon B. Johnson, christened PCU VIRGINIA on 16 Aug. PCU VIRGINIA is the ninth ship to bear the name. Six previous VIRGINIA's served in the U.S. Navy and two more served in the Confederate States Navy. This VIRGINIA is far different from those ships, and despite its resemblance to a Los Angeles or Seawolf-class submarine, it is far different from other submarines, as well.

VIRGINIA is lighter than the Seawolf-class submarines. It is also longer by 24 feet and has a beam six-feet less than its predecessor. VIRGINIA has a payload of 40 weapons, and can accommodate special operations forces, an Advanced SEAL Delivery System (ASDS) and unmanned underwater vehicles. VIRGINIA and its 132-member crew can launch Tomahawk land-attack missiles from 12 vertical launch system tubes and Mark 48 advanced capability torpedoes from four 21-inch torpedo tubes.

Status of USN Pacific Fleet Aircraft Carriers

With most of the USN back home, the after affects of Operation Iraqi Freedom have begun to ease, as the surge of ships to the Persian Gulf left the USN short of ships in other areas.

As the Pacific based aircraft carriers USS ABRAHAM LINCOLN (CVN-77) and USS KITTY HAWK (CV-63) returned to their homeports for extended overhauls, and the USS CONSTELLATION decommissioned on 7 August, it has fallen to the three remaining Pacific Fleet Aircraft carriers to cover the gap.

USS NIMITZ (CVN-68) remains in the Gulf and was due to leave there in late August after being replaced by the Atlantic fleet carrier USS ENTERPRISE (CV-65). After NIMITZ returns it is expected to enter overhaul status for several months.

USS JOHN C. STENNIS (CVN-74) has been conducting both flight training and carrier qualifications off the US west coast prior to her 2004 deployment. The USS CARL VISION (CVN-70) and her Strike Group was conducting workouts in January 2003 with two F/A-18E/F Super Hornet squadrons when the Strike Group was ordered to deploy to the Western Pacific to cover the Gulf bound KITTY HAWK. What was to be a three-week cruise for the CARL VISION Strike Group has turned into a six-month deployment that will end in November 2003. In early 2004 CARL VISION will sail for Newport News, Virginia, where she will go through a 33-month refueling and overhaul.

The newest carrier in the USN, the USS RONALD REAGAN (CVN-76) commissioned into the USN on 12 July, but is not expected to arrive in the Pacific until mid-2004, when it will operate out of San Diego, California.

KITTY HAWK will complete her extended maintenance period at Yokosuka, Japan, in late September 2003 while the ABRAHAM LINCOLN is scheduled to finish her overhaul in early 2004.

By mid 2004 there will be only four operational aircraft carriers in the Pacific Fleet. USS KITTY HAWK, based in Japan, USS ABRAHAM LINCOLN, USS JOHN C. STENNIS and USS RONALD REAGAN, with the fifth carrier, USS NIMITZ in overhaul.

The strain is most telling on the Carrier Air Wings, Carrier Air Wing Four (CVW-4) embarked aboard CARL VISION after only six months off the JOHN C. STENNIS for a Gulf Deployment. In the past 24 months the squadrons of Carrier Air Wing Nine have been deployed for nearly 18 months and it is slowly taking a toll on men and equipment. After their current deployment is planned that Carrier Air Wing Nine will move to the RONALD REAGAN in January 2004.

Carrier Air Wing Two was onboard CONSTELLATION and was due to transfer to the newest carrier in the fleet USS RONALD REAGAN, but with the higher tempo of operations Carrier Air Wing Two, with several new F/A-18E/F Super Hornet squadrons, has been assigned to the ABRAHAM LINCOLN once its overhaul is completed in early 2004.

Carrier Air Wing Eleven is with USS NIMITZ in the Gulf as part of a seven-month deployment. Carrier Air Wing Two, as with USS JOHN C. STENNIS conducting workouts prior to her Gulf deployment in early 2004. Carrier Air Wing Five is based in Japan as is now assigned to the KITTY HAWK.

By Jan Johnson
ILLEGAL IMMIGRATION - A DIFFERENCE IN NUMBERS

From time to time a small craft is detected approaching the Australian coast and believed to be carrying folk who have not complied with immigration procedures.

The Government quickly asserts its determination to protect the country's integrity, the media becomes agitated, the Opposition demands a Coastguard and the armed forces are called in to arrest or drive the intruders away.

Our American friends have a similar problem, but on a rather different scale. The June issue of the prestigious US Naval Institute Journal PROCEEDINGS refers to what is stated to be the "largest migration of illegal aliens by maritime means in modern history". The article goes on to say "since 2000 alone an estimated 234,000-350,000 Ecuadorians have approached their country by maritime means with more than six thousand inhabited - and a population well in excess of 200 million people living in conditions quite different to those enjoyed in Australia: For various reasons the media has often been highly critical of Australia's neighbour."

In view of the obvious strategic importance of Indonesia to Australia and in response to the Government's desire to strengthen relations with Indonesia at a non-government level, the Navy League in 1980 moved to establish a link with Indonesia similar to those it had with Navy Leagues in Europe, North America, New Zealand and South Africa. The League was unsuccessful, in the main because there was no organisation remotely resembling the Navy League with which it could negotiate; it must also be said that at the time not all Indonesian Ministers were well-disposed towards Australia.

Due to the persistence of both Labor and Coalition Governments - notably the work of the Ministers directly involved and their Departments - Australia's relations with Indonesia became closer during the 'nineties'.

The analyses to which I refer were in respect of a number of First World War and Second World War leaders, the names of whom will be familiar to most:

- Chauvel.
- White.
- Sturdee.
- Monash.
- Bridges.
- Morishotd.
- Lawack.
- Robertson.
- Scherger.
- Wilson.
- Vasey.
- Herring.
- Rowell.
- Blamey.
- Henry Gordon Bennett.
- Creswell.

No Australian naval officers reached positions of senior command in the First World War, and in the Second World War, only Collins and Farncombe commanded the Australian Squadron in action.

Admiral Sir John Crace RN commanded the Australian Squadron during the Battle of the Coral Sea, but although he was born in Australia, he was a Royal Navy Officer detached to the Royal Australian Navy and he returned to Britain soon after the battle.

The three Chiefs of Naval Staff during the Second World War were all British Officers.

During the Second World War Collins was Commodore Commanding China Force in 1942 and in 1944 and 1945 he was Commodore Commanding the Australian Squadron in important battles in the Pacific.

As Australia's senior naval commander during the Second World War it seems unfortunate that the performance of Collins has received somewhat less historical attention than the leaders to whom I have referred. However, as the military historian, D.M. Horner, points out, we do have Collins' autobiography, "As Luck Would Have It".
In his Doctoral thesis, the historian Stephen Weilher in 1970 correctly described the prominent role that the ‘First Naval Member of the Australian Naval Board Rear Admiral Sir William Rooke Creswell (1852-1933) played in the defence and development of the Australian Navy. Creswell was a key figure in the evolution of the Australian Navy, from its inception in the Royal Navy of Queen Victoria, to its establishment as an independent entity in its own right.

Creswell was part of the debate surrounding Australian naval defence, as a member of the Royal Marine Colours. His appointment as Naval Member of the Australian Naval Board was a significant milestone in the development of the Australian Navy, as it signalled the government's commitment to building a national defence force.

Creswell's long and distinguished career in the Royal Navy of Queen Victoria, and later in the Royal Australian Navy, saw him play a pivotal role in the development of Australian naval policy and strategy. He was instrumental in the development of the first Australian warship, the Thalia, and played a key role in the establishment of the Royal Australian Naval Service.

During World War I, Creswell served as Commander-in-Chief of the Australian Naval and Military Forces, and played a key role in the development of the Australian Naval and Military Forces in China. He was credited with the design and construction of the first Australian warship, the HMAS Protector, which became the first warship to be built in Australia.

Creswell's contributions to the development of the Australian Navy were recognized with the award of the Order of the British Empire, and he was made a Companion of the Order of the Crown of the United Kingdom. He was also awarded the Legion of Honour by the French government for his services during the First World War.

Creswell's legacy is one of leadership, dedication, and service to the nation. He was a true naval officer, and his contributions to the development of the Australian Navy will be remembered for generations to come.
In July 1913 all Royal Naval Establishments in Australia were transferred to Australian control. Creswell was 67 years of age at the time of his retirement to a farming property in Silvan, situated outside Melbourne. The loss of two of Creswell’s three sons during the 1914-1918 Great War was a heavy blow to Creswell. Randolph, a Captain in the Camel Corps, was killed whilst serving in Palestine in November 1917. Colin, a Naval Lieutenant, who served in submarines, was lost in August the same year. A third son, Edmund, who served as a Lieutenant in the Australian Pioneers, was severely wounded at Bullecourt in France, in May 1917.

During the remaining years of his life, Creswell continued to take a keen interest in issues of public importance. Among other things, he proposed a scheme, which he advocated most audaciously, for giving the Murray River direct communication with the sea by extending the Coorong Channel to Lake Walker Bay.

Creswell died on 20 April 1933, in his 81st year, and is buried in Brighton General Cemetery, Melbourne, Victoria, together with his daughter Margaret, who died on 5 April 1913, aged 20 years, and his wife Adelaide, who died on 14 February 1945.

Captain (later Admiral) Bertram Chambers, Second Naval Member of the first Naval Board appointed on 11 March 1911, said of Creswell:

“His life story is one which should be held in remembrance by coming generations of naval officers, for his career was unique and one which can never be duplicated for the conditions which led to the creation of the present Australian Navy can hardly arise again in any other part of the British Empire.”

Creswell’s place in history as the professional father of our Navy is secure and publicly acknowledged by the commissioning of the naval establishment HMAS CRESWELL, at Jervis Bay, in 1958.

I believe that, were he alive today, Creswell would applaud the motto assigned to the Establishment which bears his name: “HONOR: INTEGRAT VIRTUS” (Honor, Integrity, Virtue).
Sea Harrier Over the Falklands
By Commander 'Sharkey' Ward DSC, AFC, RN
Reprinted and published by Cassell Military Paperbacks
Price £20.00 approx
Reviewed by Ian Johnson

From bringing the Sea Harrier into service with the Royal Navy to over sixty combat missions in the South Atlantic, 'Sharkey' Ward goes into detail about the effects of bad decisions on operational units due to ignorance of the Sea Harrier’s capabilities by Flag Officers, and how inter-service rivalry with the RAF limited the RN’s Fleet Air Arm’s effectiveness to nearly nothing at the very time it was needed the most. He shows the successful use of the Fleet Air Arm in protecting the Task Force, and destroys the myth of the use of land-based aircraft protecting a naval task force in the middle of the ocean.

This book should be mandatory reading by anyone interested in how not to go to war. 'Sharkey' Ward doesn’t mince words in Sea Harrier Over the Falklands. He freely admits that he had to fight the Flag Staff on HMS Hermes as much as he did the Argentinean Air Force, even to the point when orders from Hermes would have put both the Task Force, and his pilots in 801 Squadron in extreme danger of losing the war, he puts the German battleships’ missions into perspective, as well as the failure of the Royal Navy’s public affairs office to tell the British public about what the Task Force was doing down in the South Atlantic Ocean.

Many of 'Sharkey’ Ward’s comments could well describe the armed forces of any country, including Australia. Yet he knew he was fighting a losing battle with both the Flag Staff and the MOD bureaucracy and frustrated with the lack of opportunity provided by the Fleet Air Arm and the RN he left the service, a great loss to the Royal Navy.

Sea Harrier Over the Falklands is a thought-provoking read and a realistic insight into the Falklands War without the victory propaganda. Thoroughly Recommended.

The Face of Naval Battle
The Human Experience of Modern Warfare at Sea
Edited by John Reeve and David Seve’s
Allen & Unwin 2003
Soft Cover: 363 pp illustrated
Reviewed by Paul D. Johnston

The first thing that strikes the reader about this particular book is the wide range of experience and expertise of those who have contributed to its writing. The editors have chosen well when constructing this book as to whom to use and where to place these in-depth and often profound descriptions of naval actions, command, control and the various challenges faced by those who answer the call of the sea and the service of their nation.

The combined writers have successfully stripped away the ageless propaganda so often mistaken as truth in historical accounts, proving material in a refreshing perspective. In doing so the blurrers of race, ethnicity, religion and culture are also not obscured the vividly revealed challenges faced by friend, foe or ally alike. Brought are the International and domestic challenges and pressures of the various eras faced by politicians, ordinary people and military leaders in times of peace and also in times of conflict which have ultimately served to shape so much of international history.

The writer’s ability to avoid jingoistic rhetoric and attitudes of assumed superiority towards assuring that a broad scope of fact has been examined. The German, Russian and Japanese Navies and their subsequent high and lows are also explored without animosity recognising their technical, leadership and military contributions towards modern naval warfare.

Whether it be from a perspective, a stifling and confined engine room, from the air or a ship’s bridge the perspective derived in the heart of battle is examined and discussed providing an evocative perspective of events, attitudes, fears and folly as observed and felt by sailors of all ranks and nations. As one contributor points out it is difficult to recreate a sea battle to make a scale model or walk over a naval battlefield to appreciate what has occurred and to etch it into your collective memory.

A large contributor to the success of this book has been that it is as an easy read while still encompassing depth of detail and providing a broad and informed series of arguments. Extending from times before Nelson until now the span of analysis is excellent whilst not condemning the book to being a boring history but a sensational novel. The Face of Naval Battle: The Human Experience at Sea comes as highly recommended not only for the historian and tactician but also for those whom enjoy healthy stimuli and a smooth style of prose.

Evolved as a quarterly publication by Conway Maritime Press and the nearby National Maritime Museum in Greenwich, Sea Harrier has made better use of the superb Conway Picture library coupled with the resources of the Museum.

Warship has, and continues to attain a very high level of editorial content with a variety of quality contributors and as in past volumes, is lavishly illustrated with high standard black and white photographs.


My one disappointment with this volume of Warship is that the feature article ‘The Riddle of the Shells’ which has caused endless controversy since the Battle of Jutland in 1916 is only Part One. This part traces the Royal Navy’s dissatisfaction with the 10-inch bombardment of Alexandria in 1882 and its subsequent hunt for effective fuzing for its heavy shells. Apposite whetted, one sadly now has to wait for Parts Two and Three which will appear in the next two eagerly awaited editions of Warship.

George Moore’s article ‘The Battle Class Destroyers’ is an analytical look at the evolution and circumstances of the construction of these controversial fleet destroyers which naturally includes Australia’s Anzac and Teobald.

Pierre Hervieux provides an interesting insight into the World War Two German ‘raumkriege’ (or ‘raubschiffe’). These active motor minelayers played a major part in the fighting in coastal waters.

Warship Notes’ as always, is somewhat of a wealth of information and a wonderful source of debate. Included in this edition is the campaign to save Britain’s last Victorian gunboat. George Moore’s article ‘The Battle Class Destroyers’ is an analytical look at the evolution and circumstances of the construction of these controversial fleet destroyers which naturally includes Australia’s Anzac and Teobald.

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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 ASFAN 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 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 unmanned surveillance aircraft such as the GLOBAL HAWK 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.
The Japanese Maritime Self Defence Force Asagiri class destroyer SAWAGIRI leaving Melbourne after a port visit. SAWAGIRI was also accompanied by the Hatsuyuki class destroyer HAMAYUKI. (Kevin Dunn, Fleetline)

The Royal Danish Navy submarine, Her Danish Majesty’s Ship HDMS SAGAEN is lifted aboard the German contact vessel GRIETJE. The submarine was transported from Bahrain to Denmark inside GRIETJE as a cost-saving trial (USN).
The newest Anzac class frigate HMAS PARRAMATTA is on sea trials in Bass Strait. PARRAMATTA is due to be commissioned at Sydney's Garden Island during the life of this edition of THE NAVY Times.
PLEASE NOTE

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