



Autumn-Winter 2001

AUSTRALIAN NAVAL INSTITUTE INC.

The Australian Naval Institute was formed and incorporated in the ACT in 1975. The main objectives of the Institute are:

- to encourage and promote the advancement of knowledge related to the Navy and the maritime profession; and
- to provide a forum for the exchange of ideas concerning subjects related to the Navy and the maritime profession.

The Institute is self-supporting and nonprofit-making. Views and opinions expressed in the Institute's publications are those of the authors and not necessarily those of the Institute or the Royal Australian Navy. The aim is to encourage discussion, dissemination of information, comment and opinion and the advancement of professional knowledge concerning naval and maritime matters.

The membership of the Institute is open to:

- Regular Members. Regular membership is open to members of the RAN, RANR, RNZN, RNZNVR and persons who, having qualified for regular membership, subsequently leave the service.
- Associate Members. Associate membership is open to people not qualified to be Regular Members, who profess an interest in the aims of the Institute.
- Honorary Members. Honorary Membership is awarded to people who have made a
 distinguished contribution to the Navy, the maritime profession or the Institute.

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Front Cover: HMAS *Canberra* leads the apprehended fishing vessel *South Tomi* and the Australian Fisheries Management Authority chartered Australian fisheries patrol vessel *Southern Supporter* into Fremantle. (RAN Photo).

Back Cover: HMNZS Te Mana (RNZN Photo)

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FROM THE PRESIDENT



Dear Members,

I am pleased to report a number of measures the Council has put into place to further the Institute's objectives. The most important has been the broadening of the Journal's distribution so that it reaches all ships, establishments, Reserve units and Naval Cadets' training ships.

The efforts of the newly established Editorial Board will, I am sure, result in the Journal broadening its appeal and providing a vital forum for ideas. I encourage all members to contribute when they feel inspired as well as notifying the Editorial Board of potential sources for articles.

Captain Paddy Hodgman, RANR has been appointed as the Council's liaison officer for the corporate Friends and Supporters. On this note I am pleased to welcome onboard Sikorsky Corporation and acknowledge the recently renewed and longstanding support of LOPAC.

In July the Institute will be jointly sponsoring the King-Hall Naval History Conference to be held at the Australian War Memorial on 26-27 July 2001. The program is an excellent one and the registration fee for attending the event very modest. I encourage all members to support the event.

On behalf of all members I would acknowledge the award of the Conspicuous Service Cross to Captain James Goldrick, announced in the 2001 Queen's Birthday Honours. James is a member of Council and a regular and thoughtful contributor to the journal. His sterling efforts as Director of the RAN Seapower Centre did much to advance the objectives and ideals of the Institute. The recognition is well deserved.

I would also take this opportunity to congratulate those members recently selected for promotion. I hope you will feel encouraged to continue to contribute to, and promote, the ideals of the Institute in your new appointments.

On 28 July Commander Rex Edwards, RNZN the NZ Chapter's representative on the ANI Council, returns to New Zealand. Rex has been a strong Chapter advocate during his three years on the Council and has done much to forge trans-Tasman links. On behalf of all members, I thank Rex for his efforts and wish him well in his new appointment as Senior Naval Officer – Christchurch. I also extend a warm welcome to his replacement on Council, Commander Kevin Corles, RNZN.

Finally, three matters of administration.

 First, at its meeting on 2 July, the ANI Council resolved to increase annual subscription rates to \$45.00. This increase has been necessitated by the advent of the GST, a cost the Institute has borne over the last year as we have sought to improve our management practices and to gauge the

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true impact of the new tax system. The new rate will apply to all new memberships or renewals effected after 1 July 2001.

- Second, a plea from the Secretary. Copies of the journal continue to be returned to the Institute
 marked 'Addressee no longer at this address'. Trying to establish the correct address is a time
 consuming exercise and, as we all know, time is limited. Please help us to deliver the journal
 promptly by updating your mailing address or personal details whenever they change. This can be
 done simply by returning the amended address sheet to the Secretary at PO Box 29, Red Hill,
 ACT, 2603 or, via email, to: a_n_l@bigpond.com
- Third, should any member know the whereabouts of 'lost' members Mr F.A.H. King (formerly of Canberra) or Mr J.R. Shipway (formerly of Crows Nest), could they advise the Secretary. They too are paid-up members but their copies of the journal continue to be returned 'address unknown'.

I hope you enjoy this issue.

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For more details contact Captain Paddy Hodgman email: a n i@bigpond.com.au



From the Editorial Board

The Council of the Australian Naval Institute has recently constituted an Editorial Board to further develop the standard of the Journal. The members are:

Captain Peter Jones

Commodore Karel DeLaat Dr David Stevens Dr John Reeve Commander Rex Edwards RNZN Commander Ray Griggs Commander John Shevlin Commander Mark Fitzpatrick Co-ordinating editor Strategy articles, and letters from attaches and exchange officers Reserve topics History Articles Book Reviews New Zealand articles Shiphandling articles Supply articles Legal articles (of the light variety)

In this edition of the Journal we are indeed fortunate to publish an article from Rear Admiral Peter McHaffie, the RNZN Chief of Naval Staff on the future directions of the RNZN following the Government Review on Defence. We are also pleased to publish an article by the eminent strategist Geoffrey Till. This paper is derived from his keynote address at the 2001 SLOC Conference. Of a more contemporary nature our cover story is by Lieutenant Commander Trevor Gibson who provides a first hand account of the apprehension of the fishing vessel *South Tomi* in the Indian Ocean.

STYLE GUIDE

The editorial guidelines for articles are that they are:

- in electronic format (e-mail or disk); letters to the editor will be accepted in any format
- · in MS Word; and
- either 250-400 words (letters and illumination rounds), 1500-2000 words (smaller articles) or 3000-5000 words (feature articles).

The ANI can support black and white photography and diagrams but please supply originals or electronic copies. Colour plates are limited within the journal and will normally be reserved for feature articles.

Editor's e-mail: a_n_i@bigpond.com.au



Letters to the Editor

Dear Editor,

I read the latest issue of *JANI* with great interest and was impressed with the quality and range of the articles appearing therein.

I was particularly taken by Captain Goldrick's telling remarks in *The Medium Power Navy in the 21st Century*. He writes with authority and conviction and it is difficult to disagree with his conclusion that medium navies 'need to understand themselves and their situations – and be much better than many of us have been in the past at explaining our roles to ourselves and to others.' It is a view given substance in the actions of Chief of Navy in developing a Communications Strategy for the Navy. It strikes a familiar chord with those committed to the ideals and objectives of the ANI. May we heed these calls!

The other matter that caught my eye – and a review of other recent issues of JANI has only reinforced the point – is that journal articles no longer appear to elicit comment or to stimulate debate. 'Letters to the Editor' are conspicuous by their omission and, as a measure of the health of the Institute and of our effectiveness in encouraging discussion and debate of naval matters, one might conclude that the patient is ailing. This decline (if it is real) needs to be checked.

Thus, heeding my own call and in an attempt to help check any decline, I would offer a number of personal observations about the Royal Navy - another medium power navy – that, I believe, also have relevance for the RAN. Indeed, whilst I enjoyed reading Commodore McCaffrie's perspective of the USN, its sheer size and complexity, the scale of operations and the level of funding available to it, make useful comparisons with the RAN more difficult and the application of USN solutions problematic. The position of the RN is, I suggest, a little different and more relevant.

I was fortunate to be attached to the Ministry of Defence in London for ten weeks earlier this year. The Spring weather was autumnal; the countryside was out-of-bounds; foot-and-mouth, mad cow disease and swine fever afflicted various sectors of the farming industry; and a general election was in the offing. Cheery stuff indeed! However, in spite of all of these hurdles, my attachment was very enjoyable and professionally rewarding. There was a certain familiarity in many of the challenges being faced and, in the solutions being considered, common threads were discernible.

We may lie 16,000 kms apart, but the navies of Australia and Great Britain retain a degree of 'sameness'. This is not intended as a disparaging remark. Rather, the remarkable point is that distance has not divided us and our common heritage and shared understanding of the role of government, the division of powers and the institutions of Defence, mean we approach issues from similar start-points and gravitate towards similar end-points. In these circumstances, the potential for collaboration and information sharing is very real.

This is particularly so in the more intellectual parts of our business. The development of doctrine and planning processes; defining future capability requirements; the challenge of recruitment and retention and the 'people' elements of capability; the management of major capital projects, procurement and acquisition; and the challenge of harnessing new emerging capabilities to maintain that sought after 'edge'. All of these provide opportunities for cooperation. Within the corridors of Whitehall and in the offices at Northwood, I discerned a ready willingness to discuss these issues with Australia and, I daresay, to work together.

Indeed, I sensed a desire to do so. Not for reasons of paternalism or to patronise but recognising the RAN (and the other Services) as a very capable, highly professional and respected equal. We may only be small but we have a deserved reputation for fighting effectively above our weight. The RN can learn from us - and we from them. That was certainly the experience of my attachment.

I observed that the distance between us, provides a certain 'safety net' as we are far enough apart not to be threatening. The separation encourages openness and the sharing of confidences – much as it is often easier to talk about personal matters to a distant cousin rather than the next-door neighbour with whom you may share a daily cuppa. It is an enviable position to be in and we should exploit the opportunity for access and information sharing it provides.

A London academic commented on this issue to me. He remarked on a visit to PJHQ at Northwood where a number of the NATO countries are represented on the staff. However, if a visitor secured access to the inner sanctum he would be unlikely to see French, German or Dutch officers sitting alongside their RN colleagues. On the other hand, he might well meet Australian or New Zealand officers! The ties of old Empire and the trust these bonds have earned for us should not be discounted lightly.

Australia's success in being able to define future force structure requirements for a strategic environment where no credible threat is discerned, has been grasped by the RN as a useful methodology that might help it chart its own course in the less certain post-Cold War Equally, the strategic flexibility era. demonstrated by the RN in securing the future of large fleet carriers, its enthusiastic embrace of private finance initiatives to fund the acquisition of new capabilities, and its willingness to develop and test prototype designs (such as the trimaran Triton), all represent practical pointers worthy of RAN consideration.

In London I was also reminded of the number of Defence-academic 'think-tanks' in the UK and the expertise and opportunities for learning they represent. Within a comfortable ten-minute walk of Whitehall the collected wisdom and experience of retired officers, academics and Defence commentators is waiting to be tapped. In such hallowed surrounds as the Royal United Services Institute in Whitehall, the Royal Institute for International Affairs at Chatham House, the International Institute for Strategic Studies at Arundel House, and the War Studies Group of Kings College, London, they lie in wait. The War Studies Group alone represents a collection of more than 80 Defence academics, many with close links to Whitehall or the new Joint Service Command and Staff College at Shrivenham.

Defence academia and MOD officials displayed a renewed interest in the Asia-Pacific region. There was a growing awareness of the potential of our neighbourhood – both good and bad, demonstrated and latent. Another opportunity for cooperation perhaps?

For all of these reasons, I would strongly encourage the reinvigoration of our links with the RN. My recent experience in London suggests such a course could provide a classic 'win-win' outcome. To my mind at least, the potential benefits would fully justify the necessary investment. Intellectual and staff engagement, rather than a predominantly operational focus, may be most beneficial.

I would see an enhanced RAN-RN exchange program supplementing, not supplanting, our close operational links with the USN. Its focus should be different but the potential contribution these traditional ties might make to the warfighting effectiveness of the RAN need be no less.

For one recent observer this prospect is sufficient reason for giving it a go. After all, there is certain logic in one medium power navy turning to another to gain a clearer insight into what defines us and what our role should be!

Yours Ave

John Shevlin, Commander, RAN

Dear Editor,

I am writing to congratulate the editorial staff of the Australian Naval Institute Journal on the Summer 2000-2001 edition. It is pleasing to see the journal revived in such a professional manner, and I look forward to receiving future editions. I would however, like to make some brief comments on Lieutenant Commander Richard Gimblett's prize-winning essay. Although a thoughtful and well written article, I believe that he has misjudged the RAN's role in East Timor. Specifically, he claims that the fleet was not first on the scene and, that when it did arrive, its power projection capabilities were employed in non-traditional fashions.

Although it might depend on your definition of when the East Timor experience began, it should be recognised that HMAS Darwin took up station as early as 6 September 1999, at which time the security threat was believed confined to UN personnel involved in the ballot. Darwin was tasked with surveillance and SAR duties, while simultaneously being available for the evacuation and medical support roles. The official announcement of the INTERFET Operation did not occur until 19 September by which time several other warships were already on station. Two days later, the maritime elements of the combined force placed the first troops ashore.

Moreover, while the RAN's warships may not have fired a shot, it would be wrong to believe that their operations were in any way non-traditional. Australia did not take it for granted that there would be no interference from Indonesia, and hence the land component required sustained and effective protection in addition to transport and logistic support. As has been the case so many times before, the attendance of highly capable and well-armed warships gave a clear indication of the expedition's sense of purpose and capacity for self-defence. As the INTERFET commander, Lieutenant General Cosgrove, later reported:

The persuasive, intimidatory or deterrent nature of major warships was not to me as the joint force commander an incidental, nice to have 'add on' but an important indicator of national and international resolve and most reassuring to all of us who relied on sea lifelines. It was a classic case of the 'presence' pillar of sea power.

While fully supporting much of what Lieutenant Commander Gimblett has written, I feel that he underestimates the role of maritime forces in East Timor. Indeed, the operation provides a perfect illustration of how the navy's traditional virtues of readiness and flexibility continue to be highly relevant as we enter the uncertainties of the 21st century.

Yours sincerely,

David Stevens

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On 8 May 2001 (ironically the anniversary of the Battle of the Coral Sea, 1942) the New Zealand Government announced its defence plans. The New Zealand Chief of Naval Staff, Rear Admiral Peter McHaffie, explains what the new plans mean for the RNZN.

W hen New Zealand's Labour-Alliance Coalition Government announced its sustainable defence plan on 8 May 2001, much of the focus was on the decision to scrap the RNZAF's air combat force. But the new defence plan involves more than just the future of the Skyhawks; the implications for the RNZN are also far reaching.

However, it is important to understand the Government's perspective. The Minister of Defence, the Hon. Mark Burton, pointed out their dilemma:

"We have world-class professionally-trained personnel, but the increasing cost of technology and military equipment, and domestic competition for financial resources, are factors that have placed strain on the ability to deliver defence outputs." The Prime Minister, Helen Clark, who has taken a very close interest in defence policy development, reinforced this point:

"Over the past ten years, the New Zealand Defence Force was asked to maintain a wide range of capabilities with inadequate equipment. It is not possible to rebuild everything, and to replace all obsolescent equipment, in the face of inflation and the increasing cost of technology.

"It is estimated that up to a \$1 billion dollar capital injection will be required over the next ten years, over and above the funding built up in the Defence Force depreciation account. The total capital investment required may be over two billion dollars over the next ten years.



HMNZ Ships Endeavour, Te Kaha, Canterbury and Manawanui- (RNZN Photo)

The Army, Navy and Air Force are being given well-defined roles, modern equipment to match those roles, and certainty of funding to ensure that they can effectively perform the tasks that New Zealand asks of them."

The essential point to appreciate is the steep bow wave of replacement equipment decisions: the RNZAF for example has almost totally Vietnam War-era front line aircraft; HMNZS *Canterbury* is now 30 years old; and, despite a steady stream of other new equipment, the Army still fielded 30 year-old APCs. This presents an impossible fiscal challenge and the new Government had made it clear from early last year that capabilities would have to be dropped, rather than have more across-theboard cuts.

Hence the approach involved reassessing the tasks of the NZDF, and choosing future equipment to match the required tasks. In summary the new plan involves:

 A joint approach to improve co-ordination between the Navy, Army and Air Force. This is being implemented though the newly-opened joint operational-level headquarters, HQ Joint Forces New Zealand, at Trentham near Wellington. As well, HQNZDF in Wellington is to be restructured to facilitate a Defence Force Team approach at the strategic level. • A modernised Army with a range of high quality equipment allowing it to perform as effectively and as safely as possible in a range of peace support roles, including combat.

Specific capital decisions for Army equipment include:

- the purchase of 105 GM Canada LAV III vehicles to replace the old M113s,
- new tactical radios, and
- forthcoming Light Operational Vehicles to replace the fifteen-year old Land Rover fleet.
- A refocused and updated Air Force:
 - The Government has decided to disband the Air Combat Force of the RNZAF, including Nos 2, 14 and 75 Sqns RNZAF.
 - The RNZAF will be refocused for key roles in maritime patrol, protecting New Zealand's strategic environment, and air transport.
 - Reviews to upgrade or replace the B727s, C-130s and Iroquois helicopters are underway.
- A sustainable funding plan to provide financial certainty:
 - Net operating funding will increase by \$300 Million over the next five years.
 - An estimated \$1Billion capital injection will be required over the next ten years.

For the RNZN the specific policy decisions were:

- A study to be completed by the end of September 2001 to identify the optimum composition of the future RNZN surface fleet. The study will take into account:
 - Military and foreign policy related requirements for Naval vessels,
 - The recommendations of the Maritime Patrol Review,
 - The need for an appropriate sealift capability,
 - The need for and the priority of the roles performed by the RNZNVR.
- Strategic sealift will be met through chartering ships as the need arises,
- · HMNZS Charles Upham to be sold,

- A full interdepartmental review of hydrographic survey,
- A report on the Naval Clinical Service Business Unit and the best location for the Hyperbaric Medicine Unit.
- As well, a new civil/military Maritime Coordination Centre will be established. The new MCC will provide a 'whole of government' capability to co-ordinate information management and operational activities related to 'civilian maritime surveillance needs.'

As I said at the time, I am looking forward to developing the 'practical' naval fleet that will start to take shape when the Maritime Surface Fleet Review is completed in September.

The Government requires that the recommendations of the recent Maritime Patrol Review (MPR) be taken into account. That Review (also released publicly on 8 May) had a narrow focus, in that it only assessed maritime surveillance needs against civil agency requirements – and only within our own EEZ and the South Pacific. Broader defence and security requirements in Australian, Asia-Pacific or global contexts were not specifically addressed by the MPR.

Notwithstanding the limited geopolitical context of the MPR, it is necessary to appreciate New Zealand's growing international responsibilities for surveillance and resource management over a vast ocean area. In 1999 New Zealand signed the UN Convention on Ocean Fish Stocks: that same year we committed our nation to charting and claiming the extended continental shelf under the provisions of UNCLOS III. As well, during February 1999 we deployed HMNZS Te Kaha into the Southern Ocean as an illustration of our commitment and capability to police the Convention on Conservation for Antarctic Marine Living Resources. In other words, successive governments have become increasingly focussed on our nation's growing responsibilities for the oceans around us. This is why the loose term, a 'practical' naval fleet, has gained some currency in Wellington.

The Maritime Surface Fleet Review will consider the options for replacing *Canterbury*, the provision of a tactical sealift capability, and the way ahead for NCS and MCM, while a parallel review will consider hydrographic survey. Hence most of our minor ships will be looked at in the course of the review process. The review will also examine the need for a number of vessels to carry out our national constabulary tasks, including patrols of our EEZ. Although these vessels have yet to be defined, there are already clear indications that some officials would favour medium range ships of about 70m length; big enough to handle typical seas in the oceans surrounding New Zealand.

But the other requirement affecting these proposed ships could be the need to operate helicopters. We now have the new Seasprites, and of course the value and versatility of ship-borne helicopters for a broad range of activities is well established. If a little extra hull length meant that the future ships could operate our Seasprites, then, I believe, any extra cost could be well worth it.



HMNZS Te Mana (RNZN Photo)

The Maritime Surface Fleet Review will be led by the MOD, with participation by Naval Staff, HQNZDF and a number of other Departments. With the review due to be completed in September, it could be considered by Cabinet during October or November. So the way ahead for the RNZN should become clear by the end of this year.

We will maintain our naval combat force, equipped with SH-2G Seasprite helicopters and supported by the replenishment tanker *Endeavour*. Given the Government's affirmation of the importance of the FPDA and of our defence relationship with Australia, I have no doubt that our surface combatants will continue to form the core of our national capability to make a valid and responsive contribution to our regional commitments. Equally, it will remain important to keep the naval combat force trained and equipped to be able to operate effectively in multi-national operations during the years ahead.

The prospect of new vessels means that the remainder of our fleet may change, as the RNZN adapts to its new tasks. There could be opportunities for New Zealand and Australian industry, once the subsequent project definition studies are completed.

But the key point of the MPR, and this is relevant to the subsequent Maritime Surface Fleet Review, is the recognition of the size and nature of our nation's maritime environment. Not only is New Zealand in the middle of a vast ocean, but the Asia/Pacific regions to which New Zealand's interests are linked, are also fundamentally maritime in nature. There should be no doubt that the RNZN has an important role within New Zealand's defence and security strategies for the 21st Century.

I foresee a busy, challenging and interesting period ahead for the RNZN as we put in place a Navy structured to meet the Government's requirements.

About the Author

Rear Admiral McHaffie joined the Navy in 1967. His early training at sea included attachment to the Chilean Sail Training Vessel Esmerelda and postings to HMNZ Ships Inverell and Waikato. He commanded two Fisheries Protection launches, HMNZ Ships Manga and Paea. In 1976 Admiral McHaffie undertook Principal Warfare Officer training and served as Operations Officer of HMNZS Canterbury (twice) and of HMS Arrow. In 1985 Admiral McHaffie was appointed Executive Officer of Canterbury and in 1989 Commanding Officer of HMNZS Wellington. Admiral McHaffie's shore appointments have included Fleet Operations Officer, attendance at the Canadian National Defence College. Chief of Naval Development, Director Joint Command Control Communications and Information Systems, Captain Fleet Personnel and Training, Maritime Commander New Zealand and now Chief of Naval Staff.



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FUTURE NAVAL POWER

By

Wing Commander Saridporn Soonthornkit, Royal Thai Air Force

The author, a recent student at the Australian Defence Force Academy, provides a thought provoking article on future naval power.

Alwin and Heidi Toffler argue that the successful application of the 'Third Wave' warform in the 1991 Gulf War has profoundly influenced the strategic thinking of many nations.¹ Modern conventional wars will be dominated by information superiority, aerospace power, precision weapons and a joint warfare environment. Based on informationintensive technology, modern armed forces will be relatively smaller, highly mobile, more capable, and optimised for power projection.

In addition, Shultz and Pfaltzgraft suggest that the present international security environment is characterised by great uncertainty and dramatic changes.² Many security concepts of the Cold War have become irrelevant while new security problems are emerging. Consequently, these factors will induce significant or fundamental changes in the grand and military strategies of those nations as well as the roles, operational doctrines, and structures of their armed forces.

The objective of this essay is to discuss the future of naval power. The essay consists of three parts. The first section will discuss the evolving security environment and emerging threats. The second section will discuss naval strategy in general and the trend of navies in the foreseeable future. The emphasis will be placed on Western navies since their strategies are more transparent and probably more influential. The third section will discuss some possible flaws in the new strategic concepts as well as the obstacles to their implementation. Finally, the essay will summarise a general naval strategy for the future as well as the most likely form and functions of a future navy.

The new security environment largely determines naval strategy and the future of navies. Ideally, a naval strategy and the shape of a future navy should be primarily based on perceived threats. Practically, this is not always the case because, as history indicates, international politics, strategic setting, arms races, domestic politics, available funds, interservice rivalry, and parochial interests are also significant factors. Cebrowski and Wayne suggest that there are four types of navy: vesterday's navy, today's navy, tomorrow's navy, and the ideal navy after next.³ The fact that the navy being procured for tomorrow is usually different from the ideal navy seems to support this point.

Rhodes describes the early 1990s as a transitional period for two major reasons.⁴ First, the global security environment was ambiguous in regard to the kind of peacetime policy a navy would have to support, and the kind of war a navy would have to fight. Second, the end of

¹ Toffler, Alvin and Toffler, Heidi, *War and Anti-War: Survival at the Dawn of the 21st Century*, Little, Brown & Company, Boston, 1993, pp. 180-181

² Shultz, Richard H. Jr., and Pfaltzgraff, Robert L. Jr., *The Role of Naval Forces in 21^M-Century Operations*, Brassey's, Washington, D.C., 2000.

³ Cebrowski, Arthur K. and Wayne, P. Hughes Jr., 'Rebalancing the Fleet', *Proceedings*, Vol. 125, No. 11, Nov 1999, p. 2.

⁴ Rhodes, Edward, "….From the Sea" and back again: Naval Power in the Second American Century', *Naval War College Review*, Vol. 52, No. 2, Spring 1999, p. 3.



A fiery plume of smoke and fire erupts from the aft missile deck as a *Tomahawk* cruise missile is launched from the guided missile destroyer USS *Gonzalez* (DDG 66) during *Operation Allied Force* in Yugoslavia. In the future more navies will possess this long range land attack capability. (U.S. Navy Photo)

the Cold War and the impact of the Gulf War forced nations to revise their strategies and restructure their armed forces. With the collapse of the Soviet Union, the US no longer faces a peer rival in military terms. The consequent Russian withdrawal of forward deployed naval forces back to home waters makes open-ocean battles unlikely.

According to Thomas, the 'unipolar' environment has led to many security implications.⁵ The number of low intensity conflicts and regional crises has significantly increased. The collapse of communist regimes has unleashed 'chaos'. State disintegrations and civil wars have become common. Transnational actors, including terrorist and criminal organizations, have become more powerful. WMD and delivery technologies have proliferated to 'rogue states' and terrorists. Various asymmetric means have been developed to counter the overwhelming power of the West. China, with its increasing economic power, may soon replace the former USSR as a new global rival of the US. Speed has become an essential factor in crisis response and there is a possibility of simultaneous crises that cannot be easily handled. Consequently, navies have to perform more tasks with fewer resources. Most importantly, strategic planning is extremely difficult because of the 'complete' uncertainty.

One of the implications of the new security environment is that littoral operations are likely to dominate naval activities both in peacetime and wartime. Although the littoral regions of the world only constitute a small portion of the earth's surface, they contain over 75% of the world's population and over 80% of the world's capital cities, as well as most industrialised/economic zones, international

⁵ Thomas, P.M., 'Top Ten Post-Cold War Myths', *Proceedings*, Vol. 127, No. 2, Feb 2001, pp. 1-10.

ports, and naval installations.⁶ These are the places where crises and wars are most likely to occur, and where military operations are most likely to take place. This point is supported by the view of Cebrowski and Wayne that even a very powerful navy 'cannot afford to abandon a contested littoral and expect to prevail.'⁷

Future navies will probably exercise sea denial, broadly speaking, more often than sea control. Sea control will remain a necessity for the protection of blue-water SLOCs and the defence of home waters that are vital to maritime trade and logistic supply.

In littoral warfare, sea control is also essential because other naval or joint operations are unlikely to succeed without naval superiority in all dimensions. However, in the new security environment, advanced sensors, and long-range smart weapons may lessen the requirement for sea control in the traditional form. First, an inferior navy is unlikely to engage in combat with a far superior one because, as the Gulf War has demonstrated, it would be a suicidal act. Second, advanced sensors are capable of continuously monitoring the movement of the enemy's fleets; thus, decisive actions (if required) are likely to take place early in the conflict and will probably be very brief because of the precision and destructive power of modern weapons. Third, it may be possible to localise a low intensity conflict in a confined theatre or contain it within the desired limits. According to Corbett, command of the sea may exist in various degrees: general or local, and permanent or temporary.8 In these cases, local or temporary sea control may be sufficient for safe and successful conducts of other operations. Fourth, future long-range smart weapons or UAVs may be used to attack naval or land targets precisely from distant locations, thus modifying the way in which sea control is maintained in the contested littoral regions. Long-range attack capability is probably a more viable option for advanced navies that cannot afford to build up a powerful Mahanian fleet like the USN.

From a practical perspective, Kitfield believes that while a global war is unlikely, the possibility of regional armed conflicts is increasing as regional powers become more assertive.9 The India-Pakistan conflict, the Taiwan issue, the South China Sea disputes, and the Middle East conflicts, all have high potential to escalate. In addition, the trend towards peacekeeping and peace enforcement operations that has dominated the last two decades will continue. Aggressions are likely to be contained by international economic sanctions and/or naval blockades. Under these circumstances, the navies of disputing parties or interveners may just aim at a limited (local or temporary) rather than an absolute (general and permanent) control of the sea depending on the necessity for sea control and/or sheer naval strength. As a result, sea denial, though not the first priority, will probably be the major task of naval forces in littoral warfare.

In addition, Gray suggests that future navies will face a tougher peacetime environment of increasing marine traffic, greater pressure on resources, and more challenges to state authority.10 There is an increasing economic interdependence. Sea transport will remain vital to both global commerce and the military because of its costeffectiveness in transporting heavy and bulky cargoes. For example, 95% of US foreign trade and 90% of US military supplies are, or will be shifted by sea. Consequently, navies will be increasingly required to conduct peacetime missions such as humanitarian assistance, maritime environment and economic resources protection, and international/domestic lawenforcement at sea (e.g. against piracy, smuggling of goods/drugs/weapons, and illegal immigrants).

The emerging asymmetric threats deserve special attention. Scales believes that enemies are adaptive, and that 'every successful technological or tactical innovation that provides a dominant military advantage eventually yields to a countervailing response that shifts the advantage to the opposing

⁶ Gibson, John D., 'Sir Julian Corbett on Amphibious Operations, *Marine Corps Gazette*, Vol. 82, No. 3, p. 5.

Cebrowski and Wayne, p. 4.

^{*} Corbett, Julian S., *Some Principles of Maritime Strategy*, Naval Institute Press, Annapolis, 1988 (first published 1911), pp. 103-104

⁹ Kitfield, James, 'The Dangerous World of 2015', *Air Force*, Vol. 84, No. 3, Mar 2001, pp. 60-61

¹⁰ Gray, Colin S., 'A Coast Guard for the Future: America's Maritime Guardian', *Comparative Strategy*, Vol. 18, No. 2, 1999, pp. 111-117

force.'11 While the number of friendly casualties in the Gulf War was very low and there was virtually no casualty in Kosovo, terrorist attacks have created a higher number of peacetime casualties. The terrorist attacks against the USMC barracks in Lebanon and the USS Cole in Yemen are examples of how military installations and platforms are vulnerable to asymmetric threats.¹² Linn believes that WMD threats are real because these weapons are cheap, available, potent, and very difficult to detect.¹³ Kitfield also warns that states or non-state actors may be able to deliver conventional or WMD warheads against the forward bases or populated centers of the West.14

Naval Strategy and the Trend of Navies

In terms of naval strategy, the 1992 USN/USMC white paper ...From the Sea marked a fundamental shift in US maritime strategy.¹⁵ The Maritime Strategy adopted by the USN during the Cold War was largely based on Mahan's concept of an offensive 'blue water' navy capable of destroying the enemy's fleet and controlling the high seas. Due to the absence of major sea-control challenges, the new direction shifted the emphasis from war at sea (open-ocean battles) to the concept previously advocated by Corbett - maritime power projection from the sea into 'littoral' regions of the world (those areas adjacent to the oceans and seas that are within direct control of, and vulnerable to the striking power of seabased forces). The 'landward' concept was updated in 1994 by *Forward...From the Sea* to emphasise 'forward presence' and the unique contributions of maritime expeditionary forces.

In response to the US *Joint Vision 2010* conceptual template, the 1997 *Forward...From the Sea: The Navy Operational Concept* outlined the Navy's integral role in future joint warfare that will be characterised by dominant manoeuvre, precision engagement, full dimensional protection, and focused logistics.¹⁶ Recently, the US *Joint Vision 2020* continues to stress the transformation of the US armed forces into a true joint force capable of achieving 'full spectrum dominance', namely being persuasive in peace, decisive in war, and preeminent in any form of conflict.¹⁷

Forward...From the Sea provides comprehensive arguments from a naval perspective as to why naval power will remain relevant in the future. The current US military strategy consists of three components: peacetime engagement, deterrence and conflict prevention, and fight and win. The role of the Navy is 'to project power and influence of the nation across the seas to foreign waters and shores in both peace and war.' The Navy and maritime expeditionary forces contribute to national objectives in the areas of power projection, forward presence, strategic deterrence, sea control and maritime supremacy, and strategic sealift.

In peacetime, the Navy is a visible instrument of foreign policy to shape the security environment in ways that promote regional economic and political stability as well as American values and practices. Forwarddeployed naval forces contribute to deterrence and conflict prevention by demonstrating US interests and overwhelming military power, and by signalling US strategic intentions to potential adversaries/aggressors while reassuring its allies.

In time of crisis, naval forces operating in international waters or covertly underwater

 ¹¹ Scales, Robert H., Jr., 'Adaptive Enemies: Dealing with the Strategic Threat after 2010', *Strategic Review*, Vol. 27, No. 1, Winter, 1999, p. 13
 ¹² Baer, George W., *One Hundred Years of Sea Power: The U.S. Navy, 1890-1990*, Stanford University Press, Stanford, CA, 1994, p. 446; and Truver, Scott C., 'Tomorrow's U.S. Fleet', *Proceedings*, Vol. 127, No. 3, Mar 2001, p. 3.

¹³ Linn, Thomas C., 'Adversarial Use of Weapons of Mass Destruction, *Joint Force Quarterly*, No. 23, Autumn/Winter 1999-2000, pp. 59-64

¹⁴ Kitfield, p. 61

¹⁵ Correll, John T., 'Visions', *Air Force*, Vol. 83, No. 9, Sep 2000, pp. 35-39; Hall, N.J., "...From the Sea" and Beyond', *The Naval Review*, Vol. 87, No. 2, Apr 1999, pp. 120-124; Dept of the Navy, ...*From the Sea*, Dept of the Navy, Washington DC, 1992, pp. 1-12; Dept of the Navy, Washington DC, 1992, pp. 1-12; Dept of the Navy, *Forward...From the Sea*, Department of the Navy, Washington DC, 1994, pp. 1-10; USN, 'Chapter 1: Today's Vision...Tomorrow's Reality', in *Vision...Presence...Power*, USN, Washington DC, 2000, pp. 1-4; and The USN, *Forward...From the Sea*: *The Navy Operational Concept*, USN, Washington DC, 1997, pp. 1-8

¹⁶ Office of the Joint Chiefs of Staff, *Joint Vision* 2010, US Government Printing Office, Washington DC, 1996, p. 1.

¹⁷ Office of the Joint Chiefs of Staff, *Joint Vision* 2020, US Govt Printing Office, Washington DC, 2000, p. 1.

are free from political constraints and less vulnerable to conventional and asymmetric threats. They can respond quickly and may be able to terminate or restrain the crisis. They can support the evacuation of American and allied citizens from trouble spots ashore and provide assistance in natural disasters. China's maritime sovereignty, coastal cities, maritime resources, and extensive SLOCs, While the USN is being reduced in size, the PLA-N is being expanded to meet the challenge from the sea. Chinese military theorists are writing about anti-access warfare based on subsurface forces such as submarines, undersea

Future navies will generally have three major roles: sea control, maritime power projection, and the maintenance of good order at sea.

In wartime, naval forces can secure maritime access to the theatre of operations and provide area protection. They can operate both independently or jointly to project power ashore. They can also be employed as a strategic deception to divert the enemy's attention. They can serve as forward command posts and continuously provide ground forces ashore with operational and logistics support. Self-contained naval forces can be deployed and remain on scene as long as the situation requires.

The US concepts will certainly more or less influence its Western allies. Hanlon observes that, while the navies of many industrialised nations are being reduced in size, their expeditionary capabilities for overseas interventions such as sealift and littoral capabilities are increasing.¹⁸

However, navies of other major regional powers or developing nations may pursue different strategies. For example, You Ji effectively suggests that China's naval strategy is quite defensive or sea denial in nature though naval power is a means to extend its regional influence.¹⁹ The PLA-N is tasked to protect mine-laying robots, and seabed military bases.²⁰ In addition, cyber-attacks will soon be used as an asymmetric means to counter the information superiority of the West. Pfaltzgraff and Wright also note that while the US is reducing its submarine forces, there is a submarine arms race among regional powers and developing nations.²¹ According to Krug and Byrum, some nations have looked to submarines, mines, and missiles as low cost options to counter the technological and numerical superiority of their adversaries.²²

According to Till, future navies will generally have three major roles: sea control, maritime power projection, and the maintenance of good order at sea.²³ Sea control

¹⁸ Hanlon, Edward Jr., 'Taking the Long View: Littoral Warfare Challenge', in Shultz, Richard H. Jr., and Pfaltzgraff, Robert L. Jr., *The Role of Naval Forces in 21^{al}-Century Operations*, Brassey's, Washington, D.C., 2000, p. 155

¹⁹ You, Ji, 'The Chinese Navy and National Interest', in McCaffrie, Jack and Hinge, Alan (eds.), Sea Power in the New Century: Maritime Operations in Asia-Pacific beyond 2000, Australian

Defence Studies Center, University College, ADFA, Canberra, 1998, pp. 15-35

²⁰ Krepinevich, Andrew F. Jr., 'The Impact of Precision Weaponry', in Shultz, Richard H. Jr., and Pfaltzgraff, Robert L. Jr., *The Role of Naval Forces in 21st-Century Operations*, Brassey's, Washington, D.C., 2000, p. 197

²¹ Pfaltzgraff, Robert L. Jr. and Wright, Stephen E., 'The Spectrum of Conflict: Symmetrical or Asymmetrical Challenge?', in Shultz, Richard H. Jr., and Pfaltzgraff, Robert L. Jr., *The Role of Naval Forces in 21st-Century Operations*, Brassey's, Washington, D.C., 2000, pp. 10-11

²² Byrum, Bruce, 'Cruise Missile Defense from the Sea', *Proceedings*, Vol. 126, No. 7, Jul 2000, p.1, (Proquest); and Kurg, Rainer, 'The Future Role of Undersea Warfare', *Naval Forces*, Vol. 21, No. 2, 2000, p. 1.

²³ Till, Geoffrey, Lecture given at the University College, ADFA, Canberra, Apr 2001

is concerned with defending one's own trade and attacking that of the enemy. Maritime power projection can be in the forms of strategic deterrence, expeditionary operations, naval diplomacy, or the enforcement of good order from the sea. The maintenance of good order at sea includes the monitoring of maritime transportation, resources, and environment as well as the assertion of maritime territorial sovereignty.

In Till's view, the primary emphasis has shifted from sea control to maritime power projection and the maintenance of good order at sea, namely littoral or coastal operations. Nevertheless, anti-shipping operations will remain relevant in protracted war. While high intensity conflicts are unlikely in the near future, naval diplomacy that can be used to compel the enemy, create deterrence, or strengthen coalition building has become a major function of navies today.

In terms of force structure, Gray and Baer agree that future navies will be largely composed of smaller and more advanced surface warships, and will be more capable despite their smaller sizes.²⁴ Their visions are supported by President Bush's direction that the future US armed forces will be 'agile, lethal, readily deployable, and require a minimum logistics support' despite their reductions in size.²⁵ Although the USN argues that 'the numbers also matter', the 600-ship fleet proposed in the mid 1980s is to be reduced to 305 ships by 2003, and probably to 240 ships by 2025. Nevertheless, the overall capability of the fleet will be increased by concentrating combat power in network-centric warfare rather than individual platforms.26 The USN claims

²⁶ Albert, David S., et al., Network Centric Warfare: Developing and Leveraging Information Superiority 2nd Edition (Revised), C4ISR Cooperative Research Program (CCRP), Washington, D.C., 1999, p. 2; and Kuzmick, James J. and McNamara, Christopher P., 'Land Attack from the Sea', Proceedings, Vol. 125, No. 8, Aug 1999, pp. 52-55, p. 2, Note: Networkcentric warfare, as opposed to platform-centric warfare, is defined as 'an information superiorityenabled concept of operation that generates increased combat power by networking sensors, decision makers, and shooters to achieve shared awareness, increased speed of command, higher that its planning time for a crisis has been reduced from days to hours, thus allowing an immediate dispatch of its carrier battle groups to settle the crisis quickly.²⁷ The force structure will also be optimised for littoral operations as seen by the new design of small and stealthy shallow-water *Virginia* class submarine.²⁸

For other world navies, a recent study by Baker seems to confirm the trend.²⁹ New naval construction programs in 2000 were dominated by major surface combatants, submarines, and amphibious/sealift ships. Auxiliary and maritime air elements of many navies as well as coast guards, maritime border guards, customs service, and marine police forces of many nations were also noticeably expanded.

Some Possible Flaws and Obstacles

Like the Dreadnought revolution, JV2010 and ... From the Sea will probably have some significant global impacts in terms of foreign policy, military and naval strategies, and the future of world navies. This does not necessarily mean that the entire US concepts will be adopted. While many nations may follow the US direction to some extent, others may pursue different strategies to suit their strategic imperatives or aspirations as discussed earlier. Nonetheless, an analysis of the US concepts will help us to determine the major trend - whether these concepts can, and will happen. Many scholars and naval strategists have already pointed out some possible flaws in these concepts as well as obstacles to their implementation. While some of the problems are universally applicable, others are applicable to specific nations.

Hoffman argues that the development of *JV2010* has raised a number of concerns.³⁰ First, the techno-centric approach largely

²⁴ Baer, p. 445-446; and Colin, p. 111.

²⁵ Truver, Scott C., 'Force for Change', *Jane's Defense Weekly*, Vol. 35, No. 14, 4 Apr 2001, p. 23

tempo of operations, greater lethality, increased survivability, and a degree of self-synchronization.'

²⁷ Cebrowski, Arthur K. and Garstka, P. John J., 'Network-Centric Warfare: Its Origin & Future', *Proceedings*, Vol. 124, No. 1, Jan 1998, p. 6.

²⁸ Smith, William D., 'Superstealth Submarines for the Next Century', *Naval Forces*, Vol. 21, No. 1, 2000, pp. 1-2.

²⁰⁰⁰, pp. 1-2.
²⁹ Baker, A.D. III, 'World Navies in Review', *Proceedings*, Vol. 127, No. 3, Mar 2001, pp. 1 and 23.

³⁰ Hoffman, F.G., 'JV 2010: A Different Perspective', *Marine Corps Gazette*, Vol. 81, No. 12, Dec 1997, pp. 1-6.

disregards the moral/human factor, professional training, and physical presence on land that are important factors in wars of friction, fog, and chance. Second, the concept relies solely on a single strategic approach. Creativity and diversity in strategic thinking will be limited by a narrow, rigid, and sterile approach in planning and organisation, thus making a military inflexible, uncreative, and very predictable. Third, if a joint doctrine is not allowed to evolve via experimentation and validation that are free from bureaucratic influence, it will limit innovation and combat effectiveness. And fourth, there is a mismatch between the future security environment and the envisaged capabilities. In fact, it is extremely difficult for high-tech conventional forces to prepare for all possible asymmetric threats. Based on the assumptions of the past, JV2010 appears to avoid discussing the real emerging threats and how to handle them effectively. In brief, Hoffman suggests that the US military should emphasise not only 'war fighting' but also 'shaping the strategic environment'.

Rhodes argues the Navy's strategy is based on what would be required to shape peacetime environment and control crises rather than to fight and win a war.31 Similarly, Tritten argues that the Navy trains its forces under the 'most likely' rather than the 'worst case' scenarios.32 ... From the Sea was formulated on four principles: an expeditionary role, joint power projection, forward presence, and structuring to meet specific operational demands. While the naval forces structured accordingly might be effective against niche competitors in regional contingencies, they might be ineffective against near-peer competitors such as Russia and China in global conflicts. The sister services also argue that there are alternative ways to project power and fight a transoceanic counter-military war. Rhodes suggests that this challenge should not be viewed as mere inter-service rivalry for a leading role and a fair share in the limited budget.

There are many inter-service counterarguments against ... From the Sea.³³

From the perspective of ground forces, the concept does not explain how littoral operations would vield political-military leverage. Moreover, the concept might be irrelevant to other forms of war such as irregular/nonconventional warfare and urban operations simply because technology is not a universal solution to all strategic problems. In some situations, an offshore virtual, transient, or distant presence might be ineffective to deter or defeat aggression; hence, a physical or highly visible presence on land would be required. Overseas presence may need to be ashore rather than offshore because deterrence is based on perception. Nevertheless, it can be argued that appropriate sea-based ground forces could provide credible deterrence in such circumstances. In addition, most of America's potential adversaries are land-based powers. Over-reliance on sea or air power may discourage allies from joining coalitions; thus, the US war effort would be affected by the lack of political legitimacy and international support.

The Air Force argues that aerospace power and technology would allow the US to shape the environment and strike the enemy from distant CONUS airbases and space; thus, forward engagement might be unnecessary.34 The Air Force believes that it is the massed precision attack capability rather than forward presence that really creates deterrence. Rhodes concludes that perhaps naval strategists should start thinking about shifting naval strategy 'back to the sea' with an emphasis on the global control of maritime commerce. Similarly, Correll argues that it is unclear how the Navy would project power deep inland since sealaunched cruise missiles are costly while its strike aircraft are non-stealthy.35 The Navy itself accepts that land-based cruise missiles and space-based satellite targeting potentially pose a threat to its naval forces. In response to the Navy's claim that theatre airbases might be denied and that only the Navy could provide access to the theatre, the Air Force argues that such airbases would normally be made available if the interests of allies were threatened. Moreover, the Air Force claims that it could deploy an Aerospace Expeditionary Force (AEF) within 48 hours, 'fast enough to curb many crises before they escalate', plus

³¹ Rhodes, pp. 9-25.

¹² Tritten, James J., 'Joint Mission-Essential Tasks, Joint Vision 2010, Core Competencies, and Global engagement: Short versus Long View', *Airpower Journal*, Vol. 11, No. 3, Fall 1997, pp. 5 and 8.

³³ Rhodes, loc. cit.

³⁴ ibid

¹⁵ Correll, pp. 37 and 39

four more within 15 days. With access to space assets, their 'forward support footprint' could be substantially reduced. In brief, Correll criticises the Navy for incorrectly focusing on peacetime missions instead of wartime roles.

While it may be too early to decide whether these concepts will work, it is a fact that the use of force without a very careful political consideration, whether based on a military innovation or not, has often been ineffective in resolving the fundamental conflict. For example in civil wars arising from religious, ethnic, and ideological conflicts. As a result, many of these conflicts re-escalate without any solution or end. Because technological advantages appear to have allowed a superior power to coerce an inferior enemy effectively, the military in general may be too confident in regard to technology-based solutions. It should be noted that many of today's conflicts are in unconventional forms such as urban guerilla warfare and terrorism. Even the employment of ground forces is often found to have been ineffective in these kinds of conflict; therefore, it is unlikely that the new technology-based concepts will provide a better long-term solution. As wars are simultaneously fought in both physical and psychological dimensions, an effective strategy should have a balance between the two. It should also address what should be done prior to, during, and after a war.

Legacy is a major problem for any navy. For example, Donnelly argues that aircraft carriers and manned aircraft will prevent the USN from exploiting innovative technologies and restructuring its major combat elements for decades.36 The new JSF aircraft lack some air superiority capabilities required for fleet protection and are not totally stealthy for ground-attack missions. The survivability of the new CVNX carriers is also doubtful while their acquisition and operating costs are extremely high. Consequently, the Navy will have to bear the burden, maintain a large number of personnel, and operate in fundamentally the same way as it does today for decades. Peters similarly argues that heavy investments in legacy systems will preclude the innovation necessary to transform the military

³⁶ Donnelly, Tom, 'Revolution?, What Revolution?', Jane's Defense Weekly, Vol. 33, No. 23, Jun 2000, pp. 24-25 into a relevant force for the future.³⁷ For example, the Navy has dropped the innovative 'arsenal ship' project in favour of the new carriers, attack aircraft, and submarines.³⁸ While the legacy problem is unavoidable for many navies due to budgetary limitations, for other navies it is sometimes a choice.

The fact that America's European counterparts do not totally share its views is another factor. Codner argues that there are many reasons why other NATO allies may not fully endorse the US concepts.³⁹ First, while Britain, France, and Germany may be interested in developing force projection capabilities, other members are unlikely to share the same aspiration. The strategic requirements of European members may be different from those of the US although they share regional interests, and to a lesser extent, global interests.

Second, European members may not be so concerned about the technological edge although they certainly want to improve the effectiveness and efficiency of their armed forces. A high level of joint research and development could be too costly and risky. Subsequent acquisitions of high-tech equipment from the US might be financially unfeasible and politically unacceptable. It would also be very difficult to get rid of old equipment and keep up with US developments. Most importantly, European members might fear that they would be dominated by the US both politically and militarily.

Third, there is a move toward greater autonomy. Boyer notes that an absence of a common threat, monetary and trade issues have already started to undermine the NATO

³⁹ Codner, Michael, 'Some European Concerns about Joint Vision 2010, *RUSI Journal*, Vol. 145, No. 2, Apr 2000, pp. 3-6.

³⁷ Peters, Katherine McIntire, 'The Right Stuff', *Government Executive*, Vol. 31, No. 12, Dec 1999, pp. 4-7.

³⁸ Krepinevich, p. 201; Note: The 'arsenal ship' was a conceptual design of a stealthy semi-submersible platform capable of launching hundreds of precision land-attack, naval-attack, and air defence missiles as well as UAVs. It would be manned by a crew of fewer than a hundred, as compared to over five thousand crew of a carrier. It could be positioned up to 1,200 miles from the theater and could be controlled from remote locations. The development of 'arsenal ship' would have threatened the future of aircraft carriers and submarines as well as resulted in a great reduction in the number of personnel.

alliance.⁴⁰ For example, France stresses that a truly multi-polar international system is necessary. Britain and France are pushing the European Union (EU) toward great power status in its own right. This is consistent with Baker's observation that an increasing number of sealift programs in Europe may reveal the political unity of EU members toward being able to intervene overseas independently without resorting to NATO.⁴¹



Navies will continue to conduct a wide spectrum of operations including multinational interception operations. Here a Seahawk from HMAS *Melbourne* conducts a boarding party insertion. (RAN Photo)

Fourth, recent experiences have demonstrated that the use of overwhelming power may be unsuitable for the enforcement of international law or a mandate - the most likely scenario in Europe. This concern, shared by the US Army and European nations, is supported by

Hanifen's argument that small-scale contingencies such as Bosnia and Kosovo still require significant impending changes in the ground combat situation for conflict termination.42 While it is clear that aerospace power (including carrier-based airpower and sea-launched missiles) has fundamentally changed the nature of warfare, it remains debatable whether aerospace power is dominant and decisive under these circumstances. Hanifen believes that it is the synergistic and simultaneous combined arms engagement of the entire joint force in an overwhelming operational tempo that is capable of breaking the enemy's will or ending the conflict rapidly. Thus, the contribution of maritime expeditionary forces will remain a significant factor in the outcome of a limited war. In brief, the US may have great difficulty going ahead without a sufficient number of partners. Consequently, the concepts may not be fully implemented.

Whether the new concepts can, and will happen also depends largely on the military itself. The military bureaucracy is often the main resisting force against a fundamental or revolutionary change of a military organisation. Kimminau believes that *JV2010* has provided the right direction for the future but it cannot be fully realised without a complete revision of priorities, doctrines, and force structures.⁴³ Cushman adds that the services have to drop some of their parochial interests and start thinking from a truly joint perspective in order to bring about the fruition of *JV2010*.⁴⁴

Conclusion

In summary, a naval strategy for the future will have to address not only wartime threats but also peacetime tasks. A military strategy is effectively a result of political consensus.⁴⁵ It is a fact that military strategies are often dictated by politics rather than threats, and by the

⁴⁰ Boyer, Yves, 'Joint Vision 2010 and the Allies: When Conventional Wisdom Meets Strategic Issues', *RUSI Journal*, Vol. 145, No. 2, Apr 2000, p. 4.

⁴¹ Baker, p. 1.

⁴² Hanifen, Timothy C., 'The Themes of Airpower theory, Joint Vision 2010, and Some Comparison Implications for Maritime Aviation', *Marine Corps Gazette*, Vol. 84, No. 5, May 2000, pp. 1-4.

⁴³ Kimminau, Jon A., "Joint Vision 2010": Hale or Hollow?', *Proceedings*, Vol. 123, No. 9, Sep 1997, pp. 80-81

⁴⁴ Cushman, John H., 'Joint Vision 2010: Can It Happen?', *Proceedings*, Vol. 123, No. 1., Jan 1997, p. 43

⁴⁵ Reeve, John, Lecture given at the University College, ADFA, Canberra, Apr 2001

survival of military organisations in peace rather than in war. History suggests that a navy must develop a naval strategy that is relevant to both peacetime and wartime in order not to become redundant. The most likely peacetime scenarios in the foreseeable future are national and regional contingencies such as natural disasters, civil wars, and low intensity conflicts. While the possibility of a global/general nuclear/conventional war is low, the most likely wartime scenarios in the near term are high intensity conflicts and limited conventional wars with an increasing possibility of asymmetric threats.



Littoral operations will loom large in future operations and amphibious ships will have to be flexible and capacious platforms. (RAN Official)

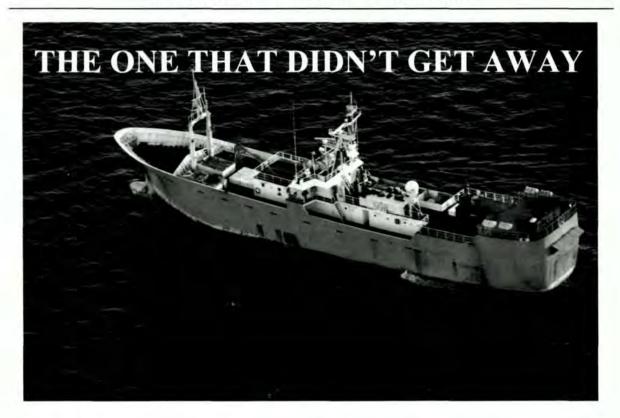
The primary role of a future navy will remain to fight and win. However, it will have to assume more peacetime roles with fewer resources. In peacetime and during crises, naval power will be used to shape the security environment and resolve crises by means of strategic deterrence, naval diplomacy, and military interventions. Naval forces will also be used to protect maritime interests, maintain good order at sea, and provide humanitarian assistance. In wartime, naval power will be used to achieve control of the sea and deny the enemy's use of the sea. Fundamentally, bluewater SLOCs and home waters will have to be secured if possible. Naturally, while an inferior navy will be limited to sea denial in an attempt to deny the enemy's access from the sea, a superior navy will try to achieve a limited or an absolute degree of sea control depending on the necessity and relative naval strengths. Naval

expeditionary forces will have to maintain access to the theatre of operations, transport troops and equipment across the sea, and provide logistics support. They will project power ashore either by independently attacking the enemy or by supporting other services in joint operations. Most of these peacetime and wartime activities will be littoral as opposed to open-ocean operations.

In general, the most likely form of a future navy is a smaller technology-based fleet optimised for littoral operations and dominated by surface warships. The US concepts will significantly influence the strategic thinking of many nations although they may be unable to pursue the same strategy due to political, technological, and budgetary constraints. Consequently, future world navies may be quite different in terms of force structure. The USN will largely remain a Mahanian navy with its four combat fleets of twelve carrier battle groups despite its doctrinal shift to littoral warfare. The Russian Navy will continue to rely primarily on submarines for strategic and sea denial roles. The navies of many leading industrialised nations will probably increase their sealift, fleet protection, and amphibious capabilities necessary for overseas interventions. Subject to economic situations and regional confrontations, the navies of other major regional powers will probably expand in terms of small aircraft or helicopter carriers and submarines. This will allow them to seek to achieve local control of regional seas, deny the US naval dominance, and deny the use of the sea by their regional adversaries. Those smaller nations hostile to the West will probably rely on submarines, mines, missiles, and other asymmetric means to deny access from the sea.

About the Author

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By Lieutenant Commander Trevor Gibson, RAN

On a pleasant Sunday morning on the 8th of April I was in my office clearing out some files when I received a call from Captain Vin Thompson from Maritime Headquarters. He posed a simple question to me – *How would I like to go to South Africa for a few weeks?*

Needless to say alarms bells started to ring but I asked him to continue. He briefed me that, on the 29th March 2001, a Togo-registered fishing vessel, the South Tomi, was detected in the Heard Island and MacDonald Island (HIMI) area by the Australian Fisheries Management Authority (AFMA) chartered Australian fisheries patrol vessel Southern Supporter. It was suspected (by AFMA) that the South Tomi was illegally fishing in Australian waters for Patagonian Toothfish. The South Tomi had initially followed the instructions of AFMA officers and started to head towards Fremantle for 'further investigations'. However, as soon as she was outside the Australian Exclusive Economic Zone (EEZ) (200nm), the South

Tomi made a hard left turn and headed out into the Indian Ocean. Unfortunately the *Southern Supporter* was unable to effect a boarding due to the weather conditions and so began what was termed a 'gentlemanly chase'¹ at 10 knots across the Indian Ocean.

AFMA, in consultation with a number of other Government agencies (including the ADF) started to work on contingencies to allow the *South Tomi* to be intercepted and returned to Australia. Once it was determined that the *South Tomi* would pass just south of South Africa, a joint operation between the Australian and South African governments was authorised. Volunteers were being requested from within

¹ Sun-Herald 6 May 2001

the ADF to form the boarding and steaming parties. Captain Thompson [CSO (O)] stated that I would be leading the operation as the Commander Joint Task Force (CJTF) and would be away for two to three weeks.

Not wishing to provide an answer without doing some research, and without receiving approval from COMSURFGRP (Commodore Les Pataky) and COMAUSHOMERON 1 (Mrs Gibson), I informed CSO (O) that I would get back to him as soon as possible with an answer. I started my research by logging on to the AFMA website² and found out that:

- Heard Island and McDonald Island are external territories of Australia located in the Southern Indian Ocean about 4,000 km SouthWest of Perth. This area is closed to fishing with only two boats authorised to fish for Patagonian Toothfish. Waters surrounding HIMI (out to 200 nm) are part of the Australian Fishing Zone (AFZ) which is managed by AFMA.
- The Patagonian Toothfish (Dissostichus eleginoides) is widely distributed throughout large areas of the sub-Antarctic oceans. It is a demersal (found at or near the sea bottom) species found at depths up to 2,500 metres and is one of the two largest species of fish occurring in the Antarctic, reaching up to 2.2 metres in length and up to 100 kg in weight. They are fished in the EEZ of several countries although illegal fishing has decimated stocks in several of these areas (where protection has not been sufficient). Although it is an ugly fish³ its properties are quite unique. The skin is black and the flesh is white with no pin bones. When filleted, it is a solid piece of white flesh. One valuable characteristic is that the flesh contains a high level of Omega 3 fatty acids that are released when cooked. Omega 3 fatty acids have become recognised for their health benefits, particularly in combating asthma.

With my research completed, and having gained the approval of COMAUSHOMERON 1

(and my other boss), I informed CSO (O) that I was available for deployment. However, I also determined that I would probably be away for up to four weeks given the distances involved and the fact that the South Tomi had a maximum speed of only 14 knots. I therefore found myself (the next morning) in the office of CSO (O) receiving a more up to date brief of events. He stated that personnel were being seconded from the SCFEG. FIMA WATERHEN, FIMA SYDNEY, HMAS SYDNEY, HMAS TOBRUK, HMAS WATSON and other ADF bases to form the boarding and steaming parties.

The briefing was finished by 0730 and, with my Executive Officer (XO) in tow (Lieutenant Luke Mathick), I headed out to the airport. By 1100 we were on a QANTAS 747 bound for Johannesburg as the advance party. We arrived late on Monday afternoon (don't forget the time differences) and met up with Mr Martin Walker from the Australian High Commission (HICOM). Following a dinner with the HICOM himself (Mr David Hallett), and a further update, we bedded ourselves down at about 0100 on Tuesday morning.

We were at the Australian HICOM offices early the same morning so as to prepare for a high level conference between Australian and South African Government and military personnel. This meeting resolved a number of logistic and operational matters. The South African Government provided an extensive array of resources including a ship to transport personnel to the intercept point (the hydrographic vessel SAS Protea), an escort vessel (the missile patrol boat SAS Galeshewe), helicopter support, two fast inflatable boats and two SANDF Clearance Divers as boat drivers. A number of options were discussed with a final plan being agreed on by all. With most of the operational planning now being completed the remaining logistic issues were addressed. The HICOM staff provided excellent support and allowed us to concentrate on operational aspects while they looked after all the logistics.

The remainder of the TF arrived in the afternoon of Tuesday (again with a little more than 24 hours notice to deploy) along with Commander Daryl Bates, RAN, (CO HMAS *Sydney*) who was to assume the role of CJTF for the boarding phase of the operation. After a quick head count the TF was bundled into a bus

² www.afma.gov.au

³ Writers opinion only

and transported to a military airfield to travel to Capetown by C130. On arrival at Capetown it was into another bus for a journey to Simonstown where we went onboard the SAS *Outaqaniqua* at about 0200 Wednesday morning for some rest (some call it sleep). Everyone was up again by 0600 and transferred to the *Protea* who sailed at 1200 (Wednesday). Following some rehearsals the TF settled down for some well-deserved rest given that the plan was to intercept the *South Tomi* at lunchtime the next day (Thursday).

By mid morning Thursday we had detected the South Tomi on radar and sighted her only a half an hour later. Just after 1100 we informed the Southern Supporter to initiate a challenge for her to stop. This was important, as the Southern Supporter (with AFMA officers embarked) had been conducting what is called a 'hot pursuit' since leaving the HIMI area. A hot pursuit, IAW Article 111 of UNCLOS, may be undertaken when a competent authority (AFMA) of a coastal State (Australia) has good reason to believe that the ship had violated the laws and regulations of that State (illegal fishing of Patagonian Toothfish). The hot pursuit was continuous throughout the voyage, as the Southern Supporter had remained within approximately 5nm of the South Tomi the entire way across the Indian Ocean.

The response from the South Tomi was that they did not want to stop and were claiming the Right of Innocent Passage. However, the AFMA officers continued to state that ADF Fisheries officers were going to stop and board the vessel. At this stage the Galeshewe was performing a 'marking manoeuvre' which is conducted by all RAN units when investigating illegal fishing vessels. Put simply, the Galeshewe positioned herself within 200 yards of the South Tomi's starboard quarter. Given that the South Tomi was indicating that she would not stop the CJTF ordered our boats (with the armed boarding party) to be launched. Shortly after this the boats proceeded alongside the South Tomi and personnel boarded her using jumping ladders. Within a very short period of time the bridge and engineering spaces were secured and all the crew manifested and mustered. Overall, a very professional boarding occurred with little or no opposition (thankfully).

We quickly established where we would sleep which allowed the South Tomi crew to remain in their own sleeping quarters with access to their galley, eating area and an upperdeck area for recreation. Following the transfer of our luggage the South Tomi established a racetrack some 30nm off the South African coast in the vicinity of Capetown. In the meantime the Southern Supporter returned to Simonstown to refuel and pick up the stores we had ordered. As it was going to be a couple of days before the Southern Supporter returned I took the opportunity to 'round the Cape of Good Hope' (which is something not many RAN mariners can say they have accomplished).

I assumed CJTF duties following a short resupply phase and then both the *South Tomi* and *Southern Supporter* began their 24day, 4500nm return journey to Fremantle. There were, of course, some problems on the ship and along the way including:

- The weather. For the first week and a half we encountered sea state seven (plus) with very cold and windy conditions (at times only allowing speeds of less than one knot). Despite the arduous conditions, 1 remain convinced that it was the efforts of the team that allowed us to return home safely to Australia. The seamen kept us going in the right direction (and afloat) while the technical ratings ensured that all the machinery (both mechanical and electrical) was operating at peak efficiency.
- Sleeping conditions. The only space available for the ADF team was either on a conveyor belt or in the bait preparation area. Not all the members had sleeping bags, blankets or pillows, as these did not arrive until the Southern Supporter returned from their refuelling stop. As such, most members ended up sleeping on pieces of cardboard used as mattresses for the first five days. Additionally, the sleeping spaces did not have air conditioning, only natural ventilation. Therefore, if we keep hatches and doors open for ventilation both sleeping spaces become water logged with several centimetres of water in both (due to the weather conditions). If we closed the hatches and doors then both spaces filled

with diesel fumes (a real catch 22 situation).

- Stench of the vessel. There was an everpresent stench of fish, decaying meat, vomit, cooking, body excrements, body odour and more fish. Many of these odours could not be removed despite continuous and ongoing attempts by the TF with many litres of disinfectant. At times the stench was so concentrated and putrid it caused some members to vomit.
- Condition of the vessel. The *South Tomi* was considered to be in an extremely low condition of safety compared to ANY Australian vessel (including Australian fishing vessels). The galley was nowhere near as hygienic as it could have been, the safety and fire-fighting equipment onboard was virtually non-existent and the heads were like those found in Asia, ie NO pedestal. It was certainly a very interesting evolution trying to go to the heads in sea state 7.

Notwithstanding all of these obstacles the South Tomi arrived in Fremantle on 5th May SAFELY and all ADF personnel returned to their respective units. This apprehension has been classified as the longest 'hot pursuit' in Australian history and displayed the Australian Governments resolve to protect the Australian fishing industry, and their resources, from illegal activity by foreign fishing vessels. It is of note that the South Tomi, at its time of apprehension, was carrying a haul of some 113 tonnes of Patagonian Toothfish worth approximately \$1.5 million. The boat itself was bonded for several million dollars and is classified as a 'Toothfish Killer', ie it is a purpose built (illegal) fishing boat with a very large holding area and enough fuel to remain at sea (continuously) for up to six months. Noting that a large percentage of Patagonian Toothfish

is fished illegally this is the sort of boat that should not be allowed to return to the seas.

Finally, I would like to state that the professional performance of the ADF personnel onboard the South Tomi was second to none and is a true indication of the pride and competence of the personnel in question. They maintained their focus throughout a very complex, tiresome and extended operation. They were called upon to leave home at very short notice, travel halfway around the world, travel by sea nearly 5,000nm back to Australia (over 24 days) as well as having to put up with living conditions that are not expected anywhere else in the ADF. Their personal sacrifice with regard to these living conditions should not be overlooked and they have the author's total respect, admiration and loyalty. They certainly made my role as the CJTF a very easy task.

About the Author

Lieutenant Commander Gibson joined the RAN in 1971 as a Junior Recruit and pursued a career as a communications sailor. He completed his Radio Operators (RO) course in 1973 and transferred to the relatively new branch of Radio Operator Electronic Warfare (ROEW) in 1974 raising to the rank of Chief Petty Officer by 1981. Lieutenant Commander Gibson became an officer in 1986 and eventually a Principle Warfare Officer (PWO) in 1990, specialising in communications and EW. As a PWO, Lieutenant Commander Gibson has completed tours of duty onboard HMA Ships Canberra and Hobart, acted as the Operations Co-ordinator (OPSCO) at MHO and was posted as the Staff Officer Electronic Warfare (SOEW) at the Directorate of Naval warfare (DNW) from 1995 to 1998. Lieutenant Commander Gibson completed the RAN Staff Course in 1995 and commanded HMAS Fremantle (1999-2000).

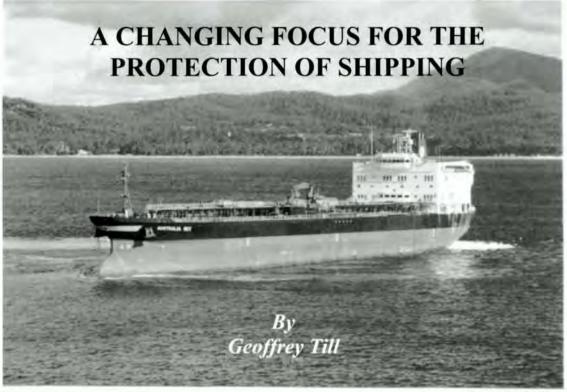


Photo: John Mortimer

The Australian Sky seen here in Twofold Bay is one of a dwindling fleet of Australian flagged vessels. Professor Geoffrey Till discusses, among other things, the importance of national flags in this wide-ranging article. It is based on his keynote address to the Strategic Importance of Seaborne Trade and Shipping Conference held in Canberra on 3-4 April 2001.

T he end of the Cold War brought hope of a global peace dividend whereby the universal reduction in armed forces would mark a new era of worldwide security and prosperity.² As the shadow of super power conflict has lifted, however, regional disputes based on national, ethnic and religious issues have flared around the world. In true Machiavellian fashion, countries such as the US and UK have placed an increased emphasis on the use of armed forces to respond to these humanitarian and security concerns. For naval forces in particular, this has resulted in a change of emphasis from sea control to power projection.³

Above all the sea is, and always has been, a means of transport. Consequently there have usually been the closest of links between naval power and merchant shipping. Thus Lord Haversham:

Your fleet and your trade have so near a relation and such mutual influence on each other, they cannot well be separated; your trade is the mother and nurse of your seamen; your seamen are the life of the fleet and your fleet is the security and protection of your trade[1]

This was about the British case but it could apply to most other maritime countries. Merchant shipping was both a source of maritime power and something that navies naturally needed to defend. So important was this latter function of navies that Mahan came close to suggesting it was the main reason for having a navy in the first place: "The necessity of a navy," the great man said"...springs from the existence of peaceful shipping and disappears with it, except in the case of a nation which has aggressive tendencies, and keeps up a navy merely as a branch of the military establishment."[2]

Accordingly great maritime wars often saw major operations in which the attack and defence of sea-borne trade were major features. Indeed, in the blackest days of 1917 and 1941-3, it looked to many as though this could easily prove to be the decisive form of maritime war. Had there ever have been a third world war, the defence of Atlantic SLOCS and even local SLOCs around Europe's waters would have been crucial, and certainly preoccupied NATO's naval planners. More recently, the security of the Coalition's SLOCS for Desert Shield/Storm was a significant concern; although the threat was low, the political consequences of a successful attack might have been very serious.[3]

Neither is it hard to see the reason for this concern for the safety of the SLOCs Merchant shipping was central to the health of an economy forced by largely geographic circumstances to be maritime. In the 18th Century, English country squires used to while away their idle hours by reading the monthly Gentlemen's Magazine effectively the then equivalent of the Readers' Digest. Whenever England was at war with France [which was most of the time] there was a section at the back which listed British merchant ships lost and French and Spanish ones taken, complete with precise valuations of their cargoes, a comparative reckoning and a clear verdict on who had won that month. It was for all the world like scoring a cricket match.

Nor was there anything reprehensible about this very commercial approach to maritime strategy since mercantile prosperity was what Britain stood for. Thus Robert Earl Nugent in a debate in the Lords in September 1745;

Let us remember that we are superior to other nations, principally by our riches; that those riches are the gifts of commerce, and that commerce can subsist only while we maintain a naval force superior to that of other princes. A naval power, and an extended trade reciprocally produce each other; without trade we shall want sailors for our ships of war, and without ships of war we shall soon discover that the oppressive ambition of our neighbours will not suffice us to trade.

[If] our trade be lost, who can inform us how long we shall be suffered to enjoy our laws our liberties, or our religion ? Without trade, what wealth shall we possess ? And without wealth, what alliances can be formed ?[4]

His point was that maritime trade depended on but also sustained a financial infrastructure that in turn provided the wherewithal to finance the war effort, keep the economy going and to subsidise allies. As recent studies have made crystal clear, it was this whole system that financed Britain's industrial revolution, and underpinned Britain's strategy.[5]

It is also important to remember that there has always been far more to maritime power than merchant ships. These are merely the outward sign of a vast maritime system which also includes shipbuilding and repair, the fisheries, ports and land communications, marine insurance and a capitalist infrastructure to underpin the whole. In the 18th Century the British Royal Navy may have been the biggest industrial enterprise in the world [6] but it depended absolutely on the health of the maritime economy in general and on the skilled seamen, navigators, shipwrights and artisans, shipyards and materials supplies associated with the merchant shipping industry in particular.

The merchant fleet was important for more immediate reasons too. It was the third [or the fourth, depending on whether you count the Air Force] arm of defence. Its centrality to strategic success seemed perfectly obvious. The magisterial British Official History of British merchant shipping in the Second World War quotes one Director General as saying:

In the end with the assistance of our American and other allies, we were able to assemble the necessary quantity of shipping for every major operation, but every major operation was, notwithstanding, either curtailed in scope or delayed in time as a result of the limitations imposed by a shortage of the suitable shipping.[7]

In fact the Official Historian goes on to cast some doubt on this proposition, but makes the point that it took major efforts and a recognition of the absolute strategic importance of merchant shipping, and everything that went with it, to ensure that this was much less the case than it might have been.

The conclusion to be drawn from this great store of hard-won experience was obvious. Merchant shipping, and its accoutrements, was crucial to the prosperity of nations, and to their safety. Naval power depended on it; protecting it was arguably second only in importance as a naval imperative to protection of the homeland against invasion. Navies that forgot that did so to their nation's peril. Hence in most great maritime wars there were large scale campaigns in the attack and defence of trade involving the imposition of blockades, raiding, and a variety of *guerre de course* tactics on the one hand; classic convoy-andescort operations on the other. Thus the experience of the ages.

But is it all different now ?

Perhaps never has this familiar view been under more challenge than it is now, as we move into the 21st Century. This is for a whole variety of different reasons. Many are economic, others are technological, political, or strategic. Let us consider some of the more common propositions in turn.

Merchant shipping matters less, Financially

According to most prognostications, the volume of world trade is set to rise enormously over the next decade or two. The UK Chamber of Shipping anticipates that world sea-borne trade measured in shippers are operating to tighter and tighter margins. This means they must pay increasing attention to the costs of insurance, crews, fuel charges, mortgage rates, all of which are themselves critically dependent on exchange rates which are themselves determined by a range of influences that have little to do with the terms of maritime trade [9].

The actual operation of conventional merchant shipping is also a less important part even of the maritime economy, not least because of the increasing sophistication and diversification of its financial infrastructure maritime and the increasing relative importance of marine resource industries. This explains why London with all its support services is still the centre of the world's maritime economy even though Britain's merchant fleet has diminished almost to vanishing point[10]

But all this is unseen and in Britain, maritime activists worry that the *image* of sea-faring is declining too, and remain concerned about a kind of creeping seablindness as people travel by air, as the size of the sea-faring community and its social attractiveness diminishes.[11]In a way, the merchant shipping industry is a victim of its own success; the more shipping costs

More fundamentally shipping connections and information technology have done much to create the phenomenon of globalisation.

ton-miles will nearly double during this period, barring further recession. But, importantly, this does not make it more important. Despite these increases, it is the electronic web which now joins the world's markets that dominates the transfer and accumulation of capital.[8] This does not mean that merchant shipping does not matter, it merely suggests that it matters relatively less.

In the old days, it used to be said that a spice merchant could ship six cargoes and lose five yet still make a profit when the sixth was sold. But now the continuing over-capacity of the world's merchant fleet and the great reduction in the transport element in the cost of products means that reduce [and they have gone down 10 fold since the 1980s] the less important shipping seems to be !

Merchant Shipping is a Global Phenomenon

More fundamentally shipping connections and information technology have done much to create the phenomenon of globalisation. The fact that an average container goes around the world 8.5 times a year shows just how global the maritime economy has become. [12] It is now

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common for beneficial ownership of merchant hulls to be vested in shifting multinational shipping alliances, the finance extended by one country, the cargo owned by another set of companies, the ship in transit from one state to another and crewed by people from a range of other countries. So, when a ship is attacked, it is often hard to tell who is being hurt, apart from the immediate victims. In such a globalised world, it may seem curiously anachronistic to expect nation-based entities like navies to be tasked with the protection of other people's property, especially in conditions when it is not particularly easy to discover who those other people are. Shipping is best thought of a global rather than a national phenomenon needing to be treated as such.

There is much less synergy between navies and merchant fleets these days

Another consequence of globalisation is the decline of the national flag fleets so often lamented by traditionalists. This raises familiar concerns about the state's ability to charter essential foreign flagged or owned shipping in times of crisis. In the Gulf War 14 of the 15 ships that transported the British 7th Armoured Brigade to Saudi Arabia were foreign but this did not seem to be a problem. [13] Nonetheless, the confidence that this problem can be solved by throwing enough money at it as easily as it was in Desert Shield/Storm may well prove unfounded. In a suppliers' market when the required ships are scarce, prices will rise. Even so shippers may prove increasingly reluctant to risk long-term market share by breaking existing charters and contracts, whatever the short-term incentive. Merchant seamen themselves are becoming a rarer commodity, and in the future it may not prove quite as easy as it used to be to replace one crew by another if political conditions demand it.[14]

Moreover, chronic and expanding over capacity in the world shipping fleet has encouraged tighter and tighter margins. Development of a justenough just-in-time approach to shipping now tends to increase the tension between liberalised commercial operation on the one hand and the kind of restriction and regulation inevitably associated with military use and even military protection on the other. In the old days, this was simply a question of merchant shippers being reluctant to form up into convoys because of the delays involved in assembly and the port congestion so often encountered on arrival. While these tensions may now take different forms, they are at least as acute now, especially in conditions short of war.

One illustration of this tension is the declining strategic value of much of the world's merchant fleet. Commercial pressures and the irresistible rise of the container and huge container ships like the Sovereign Maersk are leading to the disappearance of the smaller Ro-Ro and general freighters so useful to navies for purposes of sea-lift. Light though most expeditionary forces are, much of their equipment is really basically unsuitable for containerisation. Nor, often, are there the kinds of sophisticated port infrastructures needed to load and unload containerised expeditionary forces in the parts of the world in which such forces are likely to be operating. The United States, to some extent the UK and some others have consequently decided that it is only wise to reduce strategic dependence on commercial shipping, at least to some extent by setting up their own specialised military sea-lift fleets and by developing a particular interest in fast ships.

The same tension is evidenced in other ways too. Port authorities often exhibit less than total enthusiasm for the moving of defence cargoes, especially ordnance and ammunition through commercial facilities. In the first phase of *Desert Storm* for example only one lay berth could be made available at Savannah Georgia for the load-out of the Military Sealift Command's fast sealift ships. [15]

Unlikelihood of serious attack

It is hard to imagine circumstances in which one state might seek, or even be able, to attack the shipping of another. In conditions short of outright war, globalisation would hugely increase the commercial and political penalties of trying to do so. An attack on any part of the world's economic system could so easily rebound on the transgressor himself. The much-discussed notion of the PRC putting pressure on Taiwan by harassing its shipping for instance might be strategically effective but would probably be very expensive in commercial as well as political terms. Moreover, shipping is now but a part of a complex intermodal goods distribution shipping involving ports, railways and roads in which the essential unit is increasingly the container being transported by a variety of means. It may well turn out to be much easier to disrupt this system by threatening the port or its approaches, or launching a cyber attack on the computerised logistics system that keeps the process going rather than seeking to threaten the container ship on passage. But, again, the consequences of success might well turn out to be unexpectedly painful for the perpetrating state.

This does not, of course exclude the prospect of isolated terrorist assaults or sporadic state-based attacks such as those that occurred during the Iran-Iraq tanker war [although it is hard to think of another example]. But the strategic effectiveness of attacks of this sort may be less than appears. The tanker war did indeed lead to very significant naval involvement but less than 2 per cent of the shipping in the area was actually attacked, there was no shortage of tankers content to take their chance and the price of oil rose by barely one per cent. Isolated terrorist attacks moreover also seem very unlikely when there are so many much easier and more rewarding targets ashore. Finally the prospect of a longdrawn out assault on merchant shipping of the sort that occurred in the First and Second World wars is very hard indeed to envisage, even if one could dream up some believable belligerents. Such campaigns tend to take place over time, and it is difficult to imagine conditions in which they might re-occur, but again this does not exclude short-term and limited attacks of the sort that took place during the last two Arab-Israeli wars and Indo-Pakistan wars. But these, of course, were, by virtue of their limitation, hardly decisive to the outcome.

A Lower Priority for Navies

For all these reasons, Western navies at least pay much less attention to the fourth arm of defence than they used to. The merchant fleets themselves are much less an element of naval power than they were. There are fewer prospects of serious attack in times of conflict – and very importantly there are much more important things for navies to be doing in this expeditionary age.



The passenger ship Deutschland off Singapore.

(Photo: John Mortimer)

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Their emphasis these days is on two things. First, and this applies to the great majority of the world's navies, to the protection and supervision of their own local waters. This requires a multitude of smallish vessels unsuited for oceanic operation but also useful for low-intensity and constabulary tasks.

Second, and this is the preoccupation of the larger Western navies, the interest is in maritime power projection against the shore, and on the battle to gain [or contest] the necessary level of sea control. This often involves some tension with the requirements of SLOC protection. In theory, sea control makes shipping safer. For instance once the British mastered the Baltic marine insurance rates fell tenfold between 1808 and 1814.[16] But often sea control competes with SLOC protection, or even seems to make it more difficult. The Royal Navy of the 1930s, for example, is often held to have neglected the hum-drum business of preparing to deal with threats to merchant shipping in favour of readying the battlefleet for its apparently more important sea control campaign. The defeat of the enemy's battlefleet sometimes seems actually to make the SLOC situation worse, as after the great battles of Trafalgar and Jutland.

Because of the contemporary preoccupation with maritime power projection, amphibious warfare vessels, aircraft carriers, tomahawk-shooters, powerful general purpose sea control ships are all the rage rather than oceanic escorts. Admittedly expeditionary operations have a crucial dependence on integral sea-lift, but the value of their cargoes leads to the vessels carrying it being treated as though they were warships. Rather than SLOC defence in the traditional sense, it now seems to more a question of integrated force protection off hazardous coasts.

Not surprisingly therefore the general protection of trade in the classic sense does not figure largely in the doctrines of most Western navies. It takes up about 2 pages of The Royal Navy's 250 page *British Maritime Doctrine*, rather less in *Australian Maritime Doctrine* and it hardly figures at all in the US Navy's *Forward. From the Sea* family of concepts.[17]

Finally most navies are getting smaller in physical terms. Increasingly, they are composed of fewer but bigger and more powerful units that are unsuited for such humdrum tasks as convoy protection. The suspicion arises that even the most capable of the world's navies could not protect shipping in a serious way even if they wanted to – on their own at least. Indeed, it must have occurred to some merchant ship masters to wonder who in the Gulf was protecting whom, given their relative sizes and the greater vulnerability of warships to missile hits !

Conclusions: So What is to be done?

If these are the challenges to traditional thinking about the defence of SLOCS, how are modern navies responding to them ? And how should they ?

A remaining task

Clearly the direct defence of shipping remains as a residual duty of navies even though it may have less salience than it did. In fact SLOC defence is often [though not always as we have seen] subsumed within the requirements of the sea control needed for expeditionary operations. It is a fundamental principle of maritime strategy through the ages, that assured sea control is the best means of protecting shipping [or indeed of attacking it]. It is for this reason that preparing for sea control usually takes priority in peacetime construction programmes. The notion that the size and shape of navies should be based on the requirement to protect shipping is universally resisted. If we are strong, the argument goes, merchant ships will seek our protection when they need to - as the reflagging of Kuwaiti tankers in 1987 seems to show.

Although naval strength offers this kind of indirect protection direct defence is sometimes also necessary especially in unavoidable chokepoints and terminal areas of conflict such as the Straits of Hormuz and the Gulf respectively. During the Iran-Iraq war some 450 ships were attacked and at the height of the campaign 60 Western and 29 Soviet warships were deployed to the area to afford protection. The Royal Navy's Armilla patrol was by far the most extensive operation of this sort seeing some 1026 ships "accompanied" through the Straits up to November 1988 [18] All the navies found this a complex business involving different kinds of threats [mines, air launched missiles and boghammers], difficult topographical and climate conditions, complex political arrangements with allies and restraints with the locals and always the danger of getting sucked into other peoples' deadly guarrels.

Admittedly, the scale of the Gulf operation has so far proved quite exceptional, but it may be possible to imagine smaller scale contingencies of the sort in the Asia-Pacific, in the troubled waters around Indonesia or through some confrontation between hostile neighbours [the two Koreas, the PRC and Taiwan].

Lastly, navies will obviously need to protect the sea-lift and support ships that expeditionary operations depend on. The embarrassing mining of the *Bridgeton*, the Scud missile that landed on the docks at Al-Jubayl within a few yards of 5000 tons of ammunition and the fate of the USS *Cole* were salutary reminders that the safety of shipping, even warships, cannot be taken for granted in hazardous areas and sea control capacities may need to be supplemented by theatre missile defence, mine-sweeping and port security measures.[19]

This type of 'maritime enablement' requires navies to stay alongside the merchant shipping community in a less literal way as well. It will still be necessary to take ships up from trade for example, and this demands sophisticated means of tracking developments in the shipping industry. Best commercial practice in every aspect of shipconstruction and operation will also always have something to offer to the efficiency of modern navies. It is hard to believe, for instance, defence logistics organisations could not learn a thing or two from an organisation like *Federal Express* which handles 1.5 million orders every day, world wide !

In Defence of the Maritime Economy

The worth of ocean-based trade may be less than it was as a proportion of global market turn-over but it is still a crucial, indeed indispensable component in the economic health of the planet. For this reason, in the sensible words of one US Navy Captain, 'it is readily apparent that our economic well-being remains closely linked to the security and stability of the seas.' [20]

The maritime element of the world economy should moreover be seen as a global system characterised by countless interconnections such that a disturbance in one component will affect all the others. A hi-jacked oil tanker could founder on a distant reef, cause pollution, require naval forces to break off from their exercises, put up marine insurance rates, bankrupt a P & I club in London, rescue a Dutch salvage firm, devastate local fisheries, set local countries at odds with each other and ruin a nearby tourist resort. This kind of example shows that the maritime economy has to be thought of and treated *as a whole*.

It is therefore increasingly impossible, indeed improper to seek to disentangle merchant shipping from the rest of the total process. The defence of SLOCS is only part of the demands on modern navies in defence of the maritime economy, and is not necessarily the most important part of it at that. Navies have a substantial role to play in the defence of the system as a whole. The constructive use of maritime power should provide the best conditions for maritime trade of all sorts. It might be used to:

- defeat or deter hostile forces [whether terrorist or state based] that might threaten it;
- influence political behaviour ashore by coalition-building and other forms of naval activity;
- maintain good order at sea against often globalised forms of criminal activity such as piracy;
- protect the maritime economy against the indirect threats posed by such illicit uses of the sea as smuggled goods, drugs, arms, illegal immigrants; and
- maintain free navigation against illegal encroachment.

It is worth making the point that many of these are to the common interest of all states in the maritime economy. Generating agreement on cooperative anti-piracy measures in areas like the Straits of Malacca, may be slow and difficult because of the political sensitivities of local states, but it is a way of improving those relations, and that can only help maritime trade. The same can be said about the recent heads of Coastguard meeting in Tokyo which sought to improve cooperation between the Japanese, Korean, Russian and American coastguard forces in the battle against common threats like the drugs trade, pollution and so forth [21].

The fact that this was a Coastguardled operation under PACCOM, shows that the defence of the maritime economy is likely to require a multi-agency approach, in which navies will need to work with other maritime forces, scientific bodies, customs,

commercial interests, conservation groups and so on. Because the maritime economy does not stop at the water's edge, joint action with shore-bound agencies, and of course with the other services, appears set to increase. Finally, and most obviously, the global nature of the maritime economy will require a globalised response, navies are needing to cooperate with each other ever more closely. The multinational naval activities seen recently in the Gulf and the Adriatic are likely to become a common pattern across extending areas of activity.

If this approach requires some compromise on the traditional independence of outlook of navies on the one hand, it is familiar territory in other ways. That this breadth of interest would not be new for navies is suggested by the following remark:

I don't think we ever thought very much about War with a big W; we looked on the Navy more as a world Police force than a warlike institution. We considered that our job was to safeguard law and order throughout the world-safeguard civilisation, put out fires on shore, and act as a guide philosopher and friend to the merchant ships of all nations.[22]

In many ways the immediate future seems likely to see the world's navies reverting to the wide-ranging norms of the 19th Century after the narrowly strategic pre-occupations of much of the 20th.

Selling and Knowing the Sea

Sailors, it has been remarked, live on the fringes of settled society. The Greek philosopher Diogenes did not know whether they should be counted amongst the living or the dead.[23] In some ways therefore, the biggest threat to the maritime economy is the insidious one of the ignorance and neglect of the importance of the 'sea affair' amongst the general population and some parts of government. All too often the image of the sea is associated with images of decline, reducing fisheries, environmental catastrophes, ship-wrecks. Even the common phrase 'all at sea' betokens chaos and confusion. It is also true that we probably know more, scientifically, about the surface of the moon than we do about the bottom of the sea. It would seem dangerous to base, even partly, the maritime economy on such insecure foundations.

Navies are in a good position proactively to help sell the sea in all its aspects, strategic, commercial and environmental, because they are often in the public eye, they are inevitably involved in scientific and oceanographic exploration, institutionally they are integrated into government at the national level and operationally they are multinational at the regional, if not global, levels.

Encouraging the development, or, in Australia's case, the consolidation, of a proper oceans policy might become an important, if indirect, means by which navies can help to protect the shipping that is the focus of this conference.[23]

Conclusion

While the direct defence of shipping might be less important than it was, its indirect defence through wide-ranging operations in support of the maritime economy as a whole is ever more crucial to international prosperity and security.

About the Author

Geoffrey Till is the Dean of Academic Studies at the Joint Services Command and Staff College, UK. He is one of the today's pre-eminent maritime strategic theorists. His books include Maritime Strategy and the Nuclear Age, The Sea in Soviet Strategy and Seapower, Theory, Theory and Practice. He has recently edited and had published Seapower at the Millennium.

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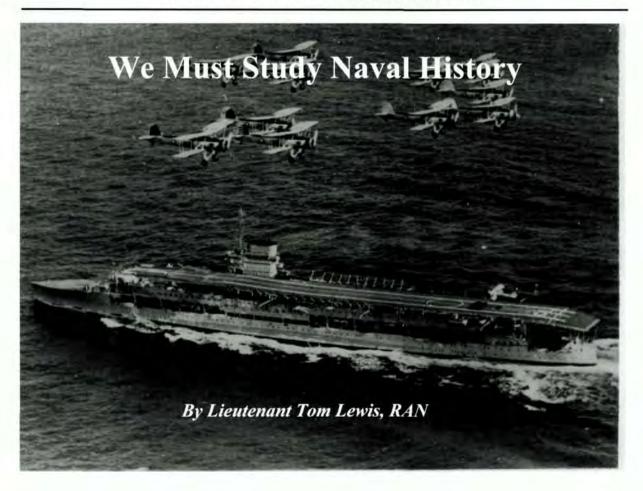
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Lieutenant Tom Lewis argues that the lessons of the loss of HMS *Glorious* are still relevant to today's navies. The study of history by officers and sailors has important benefits to their better understanding of the organisation they have joined but also to their longer term morale and retention.

Is historical naval knowledge important? We can call up the ghosts of past warriors, political leaders and philosophers and thinkers who attest that it is.

The father of naval strategic thinking, the American naval officer and writer Alfred Thayer Mahan was of the opinion that: "The study of military history lies at the foundation of all sound military conclusions and practice".

Another great thinker on the art of war, French general Antoine-Henri Jomini (1779-1869), one of Napoleon's staff officers and a contemporary of Clausewitz, thought: "Military history, accompanied by sound criticism, is indeed the true school of war." His master Napoleon Bonaparte, perhaps one of the greatest soldiers of all time, said: "The science of strategy is only to be acquired by experience and by studying the campaigns of the great captains..."

Otto von Bismarck, nineteenth century German statesman and the father of the German Empire, said: "Fools learn by experience. I learn from the experiences of others". The Spanish philosopher (1863-1952) George Santayana, gave us one of the most-repeated maxims of the subject: "Those who cannot remember the past are condemned to repeat it".

Anyone who knows the lesson from history that surprise is an essential of war is not themselves surprised by the USS Cole attack. The Greek forces at Salamis similarly took the enemy by surprise. Firstly they deployed their galleys in narrow straits where the superior Persian numbers could not come at them in strength. Secondly they lured the enemy into thinking they were demoralised by planting a false "traitor" in the Persian camp, and this double agent was able to plant a story of demoralisation. The Persians were even surprised by the Greek sailors' ability to swim when their galleys were sunk - this being not the norm and resulting in (usually) drowning sailors climbing aboard their friends' galleys and continuing the fight. The naval member schooled in the history of unexpected naval war knows that unexpected naval war is constantly achievable: by hiding in the radar shadow of land - as Norwegian forces do; by hiding one's surfaced submarine at night within a fleet of fishing boats - as WWII submarines had once done.

Therefore a historically-minded naval member is not surprised by surprise - and if so equipped, does not become an off-guard enemy such as the Cole nearly lost from a raft full of explosive. (This is not to decry the Cole's efforts at self-protection - the inquiry surrounding that incident is not yet concluded and there are indeed various reasons why the Cole could have poorly protected herself. One possibility is that she was forced into harbour where civilian services were utilised through budget cuts denying her the ability to refuel at sea from US forces.) And indeed, while it may be "drawing a long bow" to link the Cole incident with a lack of training on the part of the USN, it may well be the case that a naval officer schooled in surprise does not in turn become surprised, or at least has less chance of that.

Similarly a naval member who has studied history knows of the dangers of air attack and what may or may not protect one against it. The member knows that it was air attack that crippled the *Bismarck* and allowed the ships of the Royal Navy to find her and sink her. The member knows that air attack – by itself – may sink even the strongest ship-borne defence, by remembering the loss of HM ships *Repulse* and *Prince of Wales*, sunk by Japanese air forces off Malaysia just before the fall of Singapore. Armed with such knowledge, navy personnel would be wary of sending ships into the possibility of attack by air forces – knowing that they indeed can overwhelm a ship's anti-air assets. The fact that the action was a WWII action is not significant; what is significant was the mind-set of naval thinking before the loss: that capital ships if gunned up enough would never fall to airpower. Perhaps in summary that lesson is "never say never..."

If those in the navy need evidence of what poor ship morale and inter-departmental infighting can do one has ample evidence – from history. The lessons of arrogance are depicted through the loss of HMS *Glorious* in 1940. In this case two German cruisers, who approached completely undetected until their shells were bursting around the hapless British, surprised the aircraft carrier and her two destroyer escorts. Not **one** aircraft was flying in a Combat Air Patrol, largely because the ship's captain was too little concerned with the group's flying routine, for unfortunately he hated aviators and all they stood for.¹

Finally, let us examine the muchmentioned 'teamwork', something that many armed forces spend long training periods trying to foster and instil. How do we know that teamwork is a necessary thing for the efficient operation of any battle unit - ship, tank, platoon or whatever? To a certain degree it is obvious that 'first the ship, then the sailors, then the men' should be a necessary part of a leader's methodology. The team must come first because if working as a collection of individuals (in, for example, a damaged ship) we will have more chance of failure. But how should teams be structured - as a whole ship; a platoon-size; as a department? By studying WWII history, we can learn something vital about the structure of teams within an armed force. The US Army spent much time and effort on analysing the situation², and through it they came to a very different view as to why its members fought. If they are deployed into

For an excellent account see Winton, John. Carrier Glorious. London, Arrow Books, 1989.

² The studies were conducted by 'American Historical Teams' under General SLA Marshall. see Keegan, John. *The Face of Battle*. London: Barrie and Jenkins, 1976.

small units – perhaps six members - of 'friends' their 'mutual acquaintanceship' ensures no one shirks. In particular, the study found:

...fear is general among men, but...men are commonly loath that their fear will be expressed in specific acts which their comrades will recognize as cowardice. The majority are unwilling to take extraordinary risks and do not aspire to a hero's role, but they are equally unwilling that they should be considered the least unworthy among those present.

Of course, there are other reasons why team formation is a good thing, but the illustration above gives us good information as to how to best form them.

The Parlous State of the RAN's Naval History Training

Surely, given the examples above, we would think that all RAN personnel would study a common core of history training. This is not the case. Firstly let us look at a solitary example from initial sailor training. Sailors at their training establishment receive 'barely any history instruction during initial training....³ according to one trainee who went through that establishment in the last few years. This contrasts vividly with 'around 40 hours' that another student⁴ of the establishment recalls from the early 1980s.

Officer training is a little better off. They enter the force in a variety of ways. Here the entry process of the officer corps members is outlined, and the amount of naval history they encounter, depending on their type of entry.

Most naval officers enter through the Naval College New Entry Officer Course (NEOC) process, undertaking a 22 week course at the Naval College in Jervis Bay. If unqualified to degree standard after that, many officers transfer to the Australian Defence Force Academy (ADFA) for a three year degree.

The NEOC course undertakes nine hours of formal classroom instruction in history. Their course has been boosted in the last two years by the addition of a three-day trip to Spectacle Island; Garden Island and the Australian Maritime Museum. In this way they are processed through a theory and practical history course. The RAN College here has a very useful module of history training.

However, there are other methods of becoming an officer. By contrast the Qualified Entry Officer Course has no history component at all; save for a one-hour familiarisation with the Naval College that mentions historical aspects. Why is this so? Apparently⁵ the category sponsor of much of the entry – medical and dental officers – does not see a need for its personnel to receive that education. Some of this seems to be related to the fact that such officers do not spend many years in the Navy – some leaving before eight years have passed.

Reserve Entry Officers receive their historical lessons by means of undergoing their "Phase II" course, which involves a distance learning module designed around the submission of a number of essays. These are of a regurgitory nature, simply restating in one's own words the material drawn from the class textbook, George Odgers' *Navy Australia*. It is probable they remember little of this content in future years.

The Royal Melbourne Institute of Technology Entry Officer Course and the intake of pilots, observers and engineers from ADFA do not process through the NEOC but rather undertake modified courses. This intake undergoes the three day trip to Spectacle Island, but their classroom training at RANC consists of only two hours.

Thus we can see that history training is non-existent in the initial training of some naval personnel; minimal for others, and excellent for admittedly the majority.⁶ Officers will receive some history as part of their strategic studies training in later courses, but for the initial entry

³ SBLT Luke T. Dixon, recruit processed through HMAS *Cerberus* Mar-Jun 99. After passing out as a sailor in the RAN, SBLT Dixon subsequently applied for an Officer's Commission and graduated from the RAN College's New Entry Officer Course in Dec 00. He was interviewed by the writer during his Junior Officers' Leadership Course in Apr 01. ⁴ Officer on Junior Officers' Management Course Oct 00. (name withheld)

⁵ Discussions with LCDR Neil Gilmour, RANC, 2000. LCDR Gilmour is concerned with the curriculums of the RANC.

⁶ The two NEOC intakes constitute the majority of RAN initial officer training each year.

at least, the teaching of naval history is splintered in the extreme - or non-existent.

Of course, to digress briefly, many an instructor in the variety of training that takes place in the Navy might draw upon history for examples. The RAN School of Ship Survivability and Safety, for example, uses the sinking of the *General Belgrano*; lessons learned from the RN Falklands experience in general, and the lessons from *Sheffield, Ardent, Antelope* and *Glamorgan* in detail during the Falklands War as subject matter. The lessons discuss example of the presence or need for effective damage control and sea deployment routines in those ships – and the need for such knowledge today.⁷

Of course, studying the history of anything in isolation may lead to lessened understanding by the recipient. History may well best be taught in relation to the subject. Perhaps that is one reason for the decline of the subject. History taught by the mere recitation of facts and in particular history left unconnected with its raison d'etre - to learn for the present from the past - will be particularly ignored by many a student. Thus, the Navy is probably served best by bringing in 'the people who were there'; items for examination; visits to historical sites, and the use of many of the excellent movies that bring the subject to life. Films such as Tora, Tora, Tora; The Cruel Sea; Patton and so on can make points about the Principles of War such as highlighting Surprise and Security in the first film; the attainment or dismissal of Morale in the second; and Initiative in the third example.8 One might usefully avoid, however, historical distortion⁹ such as that seen in U-571.

Thus, it is preferable that History must be experienced as much as possible, not merely related to an audience, for the student to absorb its true lessons.

⁷ Discussions with the (1996-2000) Head of RAN School of Survivability and Ship Safety, LCDR Tony Mills-Thom, 7 April 2001. What does happen if students do not have a level of history training? The first and most obvious consequence is the inability to have learnt many lessons from history that would have been imparted. All of these 'lessons' discussed above are fairly standard in naval history courses. The unfortunate naval member who does not know about them stands a greater chance of making the same mistakes as his or her historical predecessor.

Furthermore, in later naval training such as that given in the Junior Officers' Management Course and Junior Officers' Strategic Studies Course, the officer will be at a disadvantage when the content matter of strategic warfare is mentioned. Crucial naval engagements such as the defeat of the Spanish Armada; Salamis; Trafalgar; Jutland; the Battle of the Atlantic; the Battle of the Coral Sea; Midway and Leyte Gulf are all subject matter in those courses. And when they are mentioned as passing references, the strategy, the tactics and even the end result are presumed knowledge. From where is a naval officer in these courses supposed to learn of them if he or she has not had a comprehensive initial education in naval history?

Finally, the student suffers a lack of naval identity. He or she does not know where they stand in the great story of the Royal Australian Navy - and that can lead to a lowering of morale: a feeling that the Navy is 'just another job': a feeling that one's efforts are not more significant that they seem. Thus, the stoker ensuring a ship's steady passage is only a mechanic tending a very big engine, not a sailor of the RAN driving a ship to carry out his country's will. The doctor might reflect that more money can be made "on the outside" and so separates, whereas with a greater naval identify might well come to the conclusion that serving one's country in a grand tradition is more important than dollars. Thus lack of naval identity contributes to a negative view of life in the Navy and to their separation. Indeed, it may have¹⁰ consequences in higher separation rates for the Navy.

⁸ It should be acknowledged that history is further taught in initial officer training in a subject entitled "The Principles of Maritime Conflict". However, this too is splintered in that only the NEOC pursues the full curriculum of seven hours.

⁹ *U-571* depicts the German Enigma coding machine being captured by Americans, when in fact it was captured by a British destroyer before the USA entered the war.

¹⁰ Commander Richard Rowan, RANR, highlighted this possibility in his presentations to the RAN College's Junior Officers' Strategic Studies Courses, during their Canberra component, in the two courses conducted in 2000. Commander Rowan was studying reasons behind separation and morale factors within the Navy.

What constitutes a useful level of History training? The model used in the NEOC course at present has produced a consistent stream of satisfactory test marks over the last two years, and perhaps as importantly, extremely positive Quality Control feedback. This might not be a marque for history teaching, but perhaps it can serve as a departure point. This model has nine hours of classroom training, but perhaps more importantly, three days of fieldwork where personnel receive an important practical grounding in matters historical.

Perhaps one of the most critical points though, is that all naval officers should, if this subject is so important, receive the same level of training. Otherwise, surely the system is producing officers of different levels of education. As importantly, the system is also producing officers who will have different levels of identity, and therefore morale.

It must be admitted in closing that the RAN is doing a good job of programming initial history training for the vast majority of its officer intake. And to adjust the module within the courses where it is minimally programmed would be difficult: to increase one module's time means to reduce the amount programmed in other areas. As expected, the proponents of all modules will 'fight for their side' and most of them doubtless see their module as just as important as others. Compromise on these shorter courses is unavoidable. However, perhaps this paper will encourage the sponsors of those courses to query the list of included modules; the lengths of some, and the importance of all. And a complete absence of history training – as is the case in the QEOC and sailor entry levels – is still summarised within this paper as detrimental to the corporate identity of those members' make-up.

What should be done?

The RAN should implement a minimum and compulsory model of naval historical training of nine hours of classroom instruction and three days of practical field work into all initial training courses.

About the Author

Lieutenant Tom Lewis teaches history, politics and strategic studies at the RAN College. He holds an MA, BA and Dip.Ed. Tom has 15 years of experience in teaching at high-school level in Australian schools. In addition he has worked as an intelligence analyst. As a historian he has had five books published and is writing a history of RAN leaders.

BOOK REVIEWS



The Australian Centenary History of Defence, Volume III The Royal Australian Navy

Edited by Dr David Stevens Oxford University Press, 253 Normanby Road, South Melbourne, Australia ISBN 0-19-554116-2

 $T_{he\ Royal\ Australian\ Navy}$ is the third volume in the Australian Centenary History of Defence series. It has been edited by Dr David Stevens, the Director of Naval Historical Studies, and authored by him and five other noted naval historians. All have had a long association with the Navy as historians and academics and all have served in the Navy, most with long experience as serving officers. Between them, the authors are widely published on a range of navy and maritime related subjects.

The book chronicles the development of the RAN from its genesis in the colonial naval forces at the end of the 19th Century, through the creation of the Commonwealth Naval Forces at Federation, the grant of the title *Royal Australian Navy* by King George V on 10 July 1911, and the arrival of the Australian Fleet in Sydney in 1913. Subsequent sections of the book cover World War I, the interwar years, World War II, Korea, the move from Forward Defence to Self-Reliance, and the change, uncertainty and reforms that have taken place in the RAN in the last twenty years.

The description of historical events is quite detailed but very readable. While the famous events of RAN history, such as the *Sydney-Emden* battle, are all well covered, it is perhaps more interesting to learn just how many other, sometimes obscure, operations the RAN has been involved in, in both peace and war. It is striking that there is no period in the last 100 years when the RAN has not been almost continuously engaged in operations, independently, jointly, or in concert with allies and coalition partners.

But, if the chronicle of events is both interesting and useful, perhaps the greater strength of this book is the way it puts these events into their political, strategic and technological context. The book clearly shows how government and the RAN assessed and responded to the events of the day, and how the force structure and personnel base waxed and waned over time. Herein lies one of the most valuable lessons of the book. If we did not already know it, the current period of major change, budgetary constraints and Defence reform is, in many respects, not new. Nor are current difficulties with recruiting and retention of people; this book clearly reveals that this has been a recurring problem throughout the RAN's history.

Another theme of the book is the quest for a balanced fleet. This has always been a goal for the RAN, and one that has been achieved to a credible level by the standards of the day on a number of occasions. Nevertheless, the book makes it clear that it has been a constant struggle to achieve and maintain such a force structure. Two of many possible examples make the point. The RAN has fielded a submarine force since early in World War I, with the 'J' Class from 1919-22, the 'O' Class from 1927-30, and then the Oberon and subsequent Collins Classes from the mid-1960's. Similarly, Fleet Air Arm fixed wing and helicopter forces have undergone major changes. In recent times the RAN has had to work very hard to restructure the aviation force around Seahawk (and soon Super Seasprite) helicopters operating from frigates. It is interesting to learn, however, that in the late 1950's the future of the Fleet Air Arm was under real threat. It was a hard fought battle, under the then Minister for the Navy John Gorton, which eventually led to

decisions to acquire Wessex, Tracker and Skyhawk aircraft between 1961 and 1965. One lesson of these and other examples is that the loss and subsequent reintroduction of major naval capabilities has occurred quite regularly, and has always been a traumatic experience. Navy can, therefore, be well pleased with the direction set in *Defence 2000: Our Future Defence Force*, but history suggests that full implementation of the program will require a long and hard fought struggle.

Oxford University Press has very attractively produced the book. The format includes foldouts showing interesting cut away drawings of some of the more important classes of RAN ships. The appendices contain a wealth of information; the charts showing the development of the RAN force structure through the 20th Century provide a particularly useful reference that supports the text very well.

Overall, *The Royal Australian Navy* is a most interesting and readable book. It should be a standard reference for all those with a professional or more general interest in the RAN and its vital importance to Australia's security. And here, perhaps, may lie its most important contribution to the defence debate in Australia. For a maritime nation, Australians in general are not well informed about the long term and continuing importance of maritime issues to Australia. This book goes a long way towards addressing this lack of understanding.

Reviewed by Captain Peter Leschen

Stoker's Submarine

By Fred and Elizabeth Brenchley Harper Collins Paperback 280 pp., illustrated Retail price \$29.95

Nearly every Australian can tell you the basic history of the landing at Anzac Cove on 25 April 1915, of the men of the Australian Imperial Force at Gallipoli. Many could also relate the history of the ill-fated campaign that lasted for eight months and culminated in the evacuation of the peninsula in December 1915. Few if any could tell the story of HMA Submarine *AE2*, with its half Australian and half British crew under the command of the debonair Irishman Stoker. *AE 2* penetrated the Dardanelles in the early hours of 25 April and caused havoc and confusion behind Turkish lines while the first ANZAC's were going ashore. *Stoker's Submarine* is their story.

Stoker's Submarine follows the story of Commander Henry Hugh Gordon Dacre Stoker, and his band of happy go lucky submariners as they crossed the globe from England to Australia in 1914 to deliver one of Australia's first submarines to its new Navy. A year later Stoker and his men made history when they became the first Allied submarine to penetrate the heavily mined straits with orders to 'run amok' and sow disorder in the Turkish rear. News of their success reached the British General commanding the assault on Gallipoli, just when he was considering evacuating the entire force in the face of stiff opposition. He saw *AE2's* success as an omen of good fortune and gave the order to the ANZAC's: 'You have got through the difficult business. Now you only have to dig, dig, dig until you are safe.' For good or ill, without *AE2* there would have been no ANZAC legend created at Gallipoli.

Unfortunately the submariners' success was short-lived. AE2 was sunk a few days later and Stoker and his men became prisoners of the Turks, enduring three and a half years of living hell in forced labour camps with conditions similar to those endured by prisoners of the Japanese in World War II. The book follows the lives of the men as they attempted to resume some semblance of normality after the war and seeks to explain why Stoker and his crew were poorly rewarded for their deeds. It also follows the history of the AE2 itself, whose wreck was rediscovered in 1998, lying 35 fathoms deep in the mud of the Sea of Marmara. The future of the wreck is now the subject of discussion between the Governments of Australia and Turkey.



Fred and Elizabeth Brenchley have done an excellent job of research in which they have pieced together many disparate and previously unknown facts about Stoker and his men into a highly readable and entertaining story. The book contains photographs of Stoker and his crew as well as recent underwater shots of the wreck of the *AE2*. Many of these illustrations have never before been published. For those interested, be prepared to read an exciting story of wartime bravery and suffering endured by an often forgotten but important group of Australian servicemen.

Reviewed by Lieutenant Commander Greg Swinden.

Southern Trident: Strategy, History and the Rise of Australian Naval Power

Edited by Dr David Stevens and Dr John Reeve Allen and Unwin Hard cover, 363pp., illustrated Retail price: \$50.00

Within the specialised field of naval strategy and history, the term 'eclectic' does not spring readily to mind as the major quality of a collection of learned work. David Stevens and John Reeve have breathed new life into the strategic and historical aspects of the development of Australia's Navy.

Described by the Chief of Navy as 'a uniquely penetrating look at the early years of Australian sea power', which 'places the formation of an Australian Navy in its broader political,

technological and strategic context', *Southern Trident* provides insights and perspectives on the RAN which are infrequently encountered. It is the combination of these insights and perspectives with discussion of various prominent strategic thinkers which gives interest to this book.

Southern Trident has its origin in the inaugural King-Hall Naval History Conference of 1999, and is a combined initiative of the RAN and UNSW-ADFA. The book has two main sections. The first deals with concepts and approaches to naval strategy and the second traces issues related to the emergence of Australia's Navy. I found much interest in the wide-ranging discussion of strategy. The scene is well set by John Reeve's excellent historical overview of the development of naval strategy. Most interesting - and, perhaps at first, unexpected in naval discussion - is Jon Sumida's analysis of the work of Clausewitz. I found this chapter quite fascinating. Its theme is the dichotomy between detailed analytical and theoretical approaches to war on the one hand and a view framed more on the uncertain and interactive nature of war, and the extent to which it is influenced by the human and moral factors of will, judgement and decision. Such thoughts are a timely reminder of the human factors involved in turning ships and systems into capabilities. Peter Hore discusses the relativities of Mahan's naval strategy of decisive fleet engagement and of Corbett's maritime strategy - inextricably linked with operations on land. In the Mahanian view it seems as if the means to strategic ends have become ends in themselves. Hence, I find it easy to agree with Hore's preference for Corbett. A feature of this first section is the way it succeeds in bringing several great strategic thinkers within the reach of those of us for whom their work is not normal daily fare. This is achieved through effective linkages between concepts and more practical realities and reflects the intellectual quality of the book.

In discussing the emergence of Australia's Navy, it is easy to propagate the conventional wisdom that Britain was obstructionist and the visit of the Great White Fleet a corrective. Nicholas Lambert exposes an entirely different context for what was actually Admiralty support for an Australian Fleet Unit. James Reckner casts light on the American perspective on the US Fleet visit of 1908. Transition from a past involving conflict to a situation of friendship and alliance is an interesting process, and nowhere more so than in the case of the United States' relationships with current allies such as Australia and Britain. Nicholas Tracy's chapter on the juxtaposition of imperial and Canadian interests provides interesting comparisons with issues underpinning the development of Australia's Navy. David Stevens' account of the early recognition of what is now Australia's predominant strategic reality - the sea-air gap to the north illuminates the national side of the same national-global dialogue. He gives fascinating insights into the extent to which flawed personal relations can diminish an organisation's potential. James Goldrick's contribution strikes the balance between national territorial defence and global interests. More important is the distinction he draws between acquiring a fleet and achieving a navy. Many will recall Vice Admiral Ian MacDougall's comments as CNS on the subject of Australia's path to self reliance. Goldrick highlights this issue and suggests what it means for Australia's relationship with its Navy. The business of getting a Navy is a fundamental assertion of national status and interest, bringing its own substance to our national independence. In Australia's case, as Southern Trident shows, the getting of a Navy has been more of a substantial assertion of emerging Australian interests than is often recognised.

Each of the chapters in *Southern Trident* attracts interest and provokes discussion. Some open new doors, others combine learning with an easy touch, and still others call for concentration but are very definitely worth the effort. I have referred briefly to a selection from very good company. Anyone with an interest in naval matters - Australian or international - will find *Southern Trident* an interesting, informative and rewarding read. I expect that many readers will find value, as I will, in returning to it out of professional purpose and personal interest.

Reviewed by Captain Paddy Hodgman RANR.

THE FIRST WESTERN PACIFIC NAVAL SYMPOSIUM MINE COUNTERMEASURE EXERCISE 2001



(US Navy Photo)

The staging of the first Western Pacific Naval Symposium Mine Countermeasure Exercise (MCMEX 2001) from 11-22 June 2001 off Singapore is a major development in regional naval co-operation.

MCMEX 2001 was the first time that naval forces have been assigned to a Western Pacific Naval Symposium (WPNS) sponsored event. The WPNS was conceived in 1987 by Admiral M.W. Hudson AC RAN as a high level initiative to promote regional engagement. The bi-annual symposias attended by Chiefs of regional navies have spawned various workshops and now the MCMEX. The MCMEX was the idea of Commander John Mortimer RANR as an ambitious but achievable step towards greater regional naval co-operation.

The stated aim of the MCMEX is an effort to maintain the safe navigation of international waterways by using mine hunting and disposal techniques of the participating navies.

MCMEX 2001 was very ably hosted by Singapore. The exercise included participants from Australia (two Huon Class and a Clearance Diving Team), China, Canada (diving team) France, India (diving team), Indonesia (three vessels and a diving team), Japan (three vessels and a diving team), Malaysia, Papua New Guinea, Russia, Singapore (two vessels and a diving team), South Korea, Thailand (two vessels and a diving team), United States (three vessels and a diving team), and Vietnam.



A MH-53E Sea Dragon of Helicopter Mine Countermeasures Squadron 15 pulls a sled during MCMEX 2001. (US Navy Photo).

