



CANADIAN NAVAL REVIEW

VOLUME 6, NUMBER 3 (FALL 2010)

**Operating Within
Limits: Canada's
Maritime Forces and
the Challenges of the
Terrorist Era**

**Bourassa, Laurier
and the 1910 *Naval
Service Act*: Canadian
Identity and the Birth
of a Navy**

**National Security and
Canada's Shipping
Policy: We Can Do
Better**

**Laying the
Groundwork for
Success: Forward
Logistics and
*Operation Altair***



Our Sponsors and Supporters

The *Canadian Naval Review* (CNR) is a 'not-for-profit' publication depending upon its subscription base, the generosity of a small number of corporate sponsors, and a small sustaining grant from Dalhousie University's Centre for Foreign Policy Studies for funding. In addition, CNR is helped in meeting its objectives through the support of several professional and charitable organizations. Without that corporate support CNR

would not be able to maintain the content diversity and its high quality. Corporate and institutional support also makes it possible to put copies of CNR in the hands of Canadian political decision-makers. Without the help of all our supporters CNR would not be able to continue the extensive outreach program established to further public awareness of naval and maritime security and oceans issues in Canada.



To receive more information about the corporate sponsorship plan or to find out more about supporting CNR in other ways, such as through subscription donations and bulk institutional subscriptions, please contact us at naval.review@dal.ca.

CANADIAN NAVAL REVIEW

VOLUME 6, NUMBER 3 (FALL 2010)

Editorial Board

Dr. David Black, Dr. Aldo Chircop, Lucia Fanning, Gary Garnett, Dr. Richard Gimblett, Ken Hansen, Peter T. Haydon, Dr. Rob Huebert, Dr. Danford W. Middlemiss, Rear-Admiral (Ret'd) David Morse, Colonel (Ret'd) John Orr, Dr. Denis Stairs, Michael Young

Editor: Dr. Ann L. Griffiths

Assistant Editor: Douglas S. Thomas

Photos for this Issue: Peter T. Haydon

Subscriptions/Administration: Dr. Shelly Whitman and Shannon Langdon

Graphic Design: Kim squared Incorporated

Printing: Transcontinental Printing

The editorial offices of the *Canadian Naval Review* are located at the Centre for Foreign Policy Studies, 6299 South Street, Henry Hicks Building, Dalhousie University, Halifax, Nova Scotia, Canada B3H 4H6

Phone: (902) 494-3769

Fax: (902) 494-3825

Email: naval.review@dal.ca

Website: www.naval.review.cfps.dal.ca

The *Canadian Naval Review* is published quarterly by the Centre for Foreign Policy Studies (CFPS) at Dalhousie University. It is a professional journal examining a wide range of maritime security issues from a Canadian perspective. In particular it focuses on strategic concepts, policies, operations, history and procurement of the Canadian Navy, plus national security in general and marine/ocean affairs. This initiative brings together members of the Canadian defence and academic communities and is a component of the CFPS's Maritime Security Program.

The *Canadian Naval Review* has three primary objectives:

- provide a public forum for the discussion of the maritime dimension of Canada's national security;
- provide a public forum for the discussion of Canada's naval and maritime policies; and
- provide a source for the public examination of Canadian naval and maritime history and for the development of lessons learned.

The material included in *CNR* is presented for the professional and general education of the readers. Articles, commentaries and opinion pieces are invited from the widest possible spectrum for the purpose of informing, stimulating debate and generally challenging readers. The opinions expressed by the authors do not necessarily reflect the opinions of the Editors, Editorial Board, the Centre for Foreign Policy Studies, the Department of National Defence, or the Canadian Navy.

Articles, opinion pieces, book reviews and letters may be submitted via email or mailed (with an electronic copy) to the address given above. Send to the attention of the Editor, Dr. Ann Griffiths. Articles are to be in Word or WordPerfect format and no longer than 3,000 words. Articles must not have been published elsewhere. Citations should be kept to a minimum and articles must be accompanied by a 100-120 word abstract. Opinion pieces are to be 1,000-1,500 words. Authors of articles and opinion pieces which are published will be paid a small honorarium. Book reviews are to be 500-750 words. Photos may be submitted with articles or commentaries but they must be at least 300 dpi, at an equivalent size to 5 by 7 inches, and internet images cannot be used. Intellectual copyright will remain the property of the author, however, the right to re-publish articles initially published in the *Canadian Naval Review* remains with the Editorial Board. Articles and commentaries written in French are welcome and, if accepted, will be published in French.

Copyright © 2010. ISSN 1715-0213 *Canadian Naval Review*



Photo: DND

A Maritime Coastal Defence Vessel steering away from a large iceberg during Operation Nanook 2009.

Contents

EDITORIAL: MARITIME BLINDNESS, YOU SAY? PETER HAYDON	2
OLAND ESSAY CONTEST WINNER – OPERATING WITHIN LIMITS: CANADA'S MARITIME FORCES AND THE CHALLENGES OF THE TERRORIST ERA JULIAN BROWN	4
CNMT ESSAY CONTEST WINNER – BOURASSA, LAURIER AND THE 1910 NAVAL SERVICE ACT: CANADIAN IDENTITY AND THE BIRTH OF A NAVY COMMANDER MARTIN PELLETIER	10
NATIONAL SECURITY AND CANADA'S SHIPPING POLICY: WE CAN DO BETTER DICK HODGSON	16
LAYING THE GROUNDWORK FOR SUCCESS: FORWARD LOGISTICS AND OPERATION ALTAIR LIEUTENANT-COMMANDER DAVE COLBOURNE	22
SEARCHING THE FUTURE: NEW TECHNOLOGIES ON THE SCREEN JANET THORSTEINSON	27
MAKING WAVES BALANCE IS A MATTER OF PERSPECTIVE LUCIANO	29
WILL THE CANADIAN NAVY RESPOND IN THE GULF OF GUINEA? DAVE MUGRIDGE	30
SAFE NAVIGATION IN THE ARCTIC HERMES	32
A FEW COMMENTS ON <i>CNR</i> STEPHEN KNOWLES	33
COMMENT ON "TRADITIONS, 'BRANDING' AND THE FUTURE OF THE CANADIAN NAVY" CAPTAIN (N) HUGUES LÉTOURNEAU	34
WEARING NAVAL SWORDS LIEUTENANT-COMMANDER GENE C. FEDDERLY	34
PLAIN TALK: JSS ADRIFT IN A STRATEGIC BLACK HOLE SHARON HOBSON	35
THE VIEW FROM THE WEST: THE INTEROPERABLE NAVY: NETWORKING AT SEA CHRISTIAN BEDFORD, GEORGE GALDORISI, STEPHANIE HSZIEH	37
WARSHIP DEVELOPMENTS: TO BUY NEW OR USED? DOUG THOMAS	39
BOOK REVIEWS	41
IT'S A RUM BUSINESS JACQUI GOOD	44



Editorial: Maritime Blindness, You Say?

From Canberra to Washington and Ottawa, by way of the hallowed halls of Admiralty, *maritime blindness*, or *sea blindness* as it is more often called, is the latest pandemic to strike mankind. At least that is the conclusion one could draw from what some admirals and naval experts are saying. In Ottawa, for instance, two Chiefs of Canada's Maritime Staff have used *maritime blindness* recently to describe what they see as a disturbing lack of understanding by many Canadians about their navy and its importance to their country. But are those concerns valid? There isn't any obvious proof; there has never been any public outcry against naval policies or a public protest in Canada similar to that in New Zealand in the 1980s over the acquisition of frigates. Criticism mainly comes from the media.



Photo: MCpl Kevin Paul, Canadian Forces Combat Camera

HMCS Toronto at high speed during anti-piracy operations off Somalia in September 2007. Does the public really understand the navy's inherent operational flexibility?

Although there has been political dithering and delays in procurement, Canadian governments nearly always give the navy enough ships to meet its commitments. And the claim that when many Canadians were asked, they couldn't explain the function of their navy, could probably be made just as easily of any military service. Then, why the concern? Clearly, it's time to see what these claims of

blindness are all about and find out why, or if, we should be concerned.

The symptoms of maritime blindness and sea blindness seem to be similar but manifest themselves in different ways in different places. Sometimes the affliction is political and at other times it affects the general public. The common denominator is the existence of a significant difference of opinion between the view of the world of the future held by the maritime community and that held by the rest of society. Sometimes this dichotomy reflects concerns over naval employment as well as the nature of the force structure. All this could well be cause for concern if national security is in jeopardy.

Although rifts between naval leaders and their political masters date back to the beginning of history, the latest dimension of the feud has British roots. Last year, the retiring First Sea Lord, Sir Jonathon Band, publicly cautioned politicians, who he saw as visually impaired when required to look at naval problems, against making further cuts to the naval budget while also increasing demands for Royal Navy deployments into troubled areas. "A ship can't be in two places at once," he reminded his political masters.¹ Admiral Band also made it clear that the sea should still be at the heart of British strategic thinking because the combined effects of piracy, terrorism, drugs, people trafficking and the need to protect energy and trade routes indicated a greater rather than lesser naval role in national security in the future. Underlying his argument was the belief that politicians invariably fail to understand the implications of not providing enough money to keep the navy going as a flexible response force. That sentiment rings as true in Ottawa as it does in London, and is likely to be echoed in several other capitals as well!

Writing in the June 2009 issue of US Naval Institute *Proceedings*, Barrett Tillman addresses the American dimension of sea blindness and takes Admiral Band's concerns several steps further.² Audaciously, he questions the requirement for the US Navy's present-day configuration, which he sees as a Mahanian product of the Cold War focused on power projection, and asks if this structure is still relevant. Yet in discussing the future uses of American sea power, Tillman upholds traditional thinking



that navies are instruments of national policy needing endurance, mobility and flexibility to handle both simple and complex situations anywhere in the world. In this, he predicts an uncertain future in which armed conflict at sea cannot be ruled out. Why? His rationale echoes the concerns of Admiral Band that the economic importance of trade, which the world's population takes for granted, makes it a vital factor in national security especially since "95 percent of it passes through one of nine choke points."³ Tillman concludes that the onus to correct sea blindness and address parallel concerns over the US Navy's force structure is on the navy, rather than on anyone else.

Another dimension of sea blindness comes from a 2010 article by Diego Ruiz Palmer entitled "The End of the Naval Era?" in which he criticizes the public's benign neglect of maritime security issues, which he refers to as *strategic myopia*.⁴ Although mainly concerned with environmental issues and lawlessness at sea in the new era of maritime security, he concedes that the risk of naval competition cannot be ignored especially in view of concern over the security of sea lines of communication and freedom of navigation. Much of his focus is on post-naval era force structures and the trend away from 'blue-water' fleets to 'green-water' and 'brown-water' fleets for employment in coastal (littoral) zones and for constabulary operations. He explains that the related strategic concept of responding to small, local skirmishes and general policing of the coastal seas, rather than focusing on sea control and power projection, is not universally embraced, especially in the United States and in Asia where blue-water fleets are still maintained for those purposes.

Sea blindness, in the form of public apathy towards maritime issues, is also a concern in Australia where Professor Lee Cordner of the University of Wollongong sees it as a constraint on the development of realistic maritime strategies.⁵ The heart of the problem, he points out, lies in not recognizing that the sea is the medium by which national economies are sustained and thus cannot be taken for granted. In this, there will always be situations requiring government intervention in the interests of national security. But this view is not completely accepted. For instance, while the Australians have made a strong commitment to enforcement and compliance, the need for general-purpose naval forces remains contentious.

It seems that the primary symptom of sea blindness is political and public apathy to the economic importance of the oceans. A secondary factor is the lack of consensus on the size and type of naval forces needed to maintain order at sea and how it should be done. Ironically, environmental threats to the oceans are widely viewed with concern while the economic argument seems far less important.



Photo: DND

Naval operations during *Operation Apollo*. Do the strategic concepts of the post-naval era spell the end of navies as instruments of foreign policy?

Canadians, for instance, freely express concern for environmental issues but are not as vocal over the role the oceans play in maintaining their high standard of living. Apparently, it matters not to the Canadian public whether the navy is configured for blue-water or littoral operations or if operations are conducted jointly with other services or as part of a whole-of-government approach to national maritime security. If they are concerned, they are remarkably quiet about it. Is this blindness, or is it ambivalence? Or simply lack of understanding?

Maybe we have to ask if they understand the issues. Has the Canadian Navy connected with the Canadian public sufficiently to explain the basic maritime security facts? Do politicians and the media understand these issues well enough to make good decisions and pass judgement responsibly? Is it up to the navy to be the educators?

Assuming that it is the navy's role to educate, perhaps there is a requirement to return to the question Professor Samuel P. Huntington raised in the 1950s, when he asked of the US Navy "[w]hat function do you perform which obligates society to assume responsibility for your maintenance?"⁶ As Huntington pointed out, failure to answer this question adequately is a reason why individual services do not enjoy public support. If the rationale for maintaining specific naval capabilities and the consequences of failing to do so are crystal clear, the ambivalence to maritime security should go away. So, if the Canadian Navy can answer Huntington's question to everybody's satisfaction, there could well be a return to 20/20 maritime vision. 🍷

Peter Haydon

Notes

1. "Ministers Accused of 'Sea Blindness' by Britain's Most Senior Royal Navy Figure," *Telegraph*, 12 August 2010.
2. Barrett Tillman, "Fear and Loathing in the Post-Naval Era," US Naval Institute, *Proceedings*, Vol. 135 (June 2009), available at www.usni.org/magazines/proceedings/2009-06/fear-and-loathing-post-naval-era.
3. *Ibid.*
4. Diego Ruiz Palmer, "The End of the Naval Era?" *NATO Review*, 2010, available at http://www.nato.int/docu/review/2010/Maritime_Security/end_of_nav_era/EN/index.htm.
5. Lee Cordner quoted by Jodie Minus, "Sea Blindness Hits Maritime Industry," *Illawarra Mercury*, 2 February 2008.
6. Samuel P. Huntington, "National Policy and the Transoceanic Navy," US Naval Institute *Proceedings*, Vol. 80 (May 1954).

Winner of Bruce S. Oland Essay Competition

Operating Within Limits: Canada's Maritime Forces and the Challenges of the Terrorist Era

Julian Brown

The most significant event of the 21st century thus far was no doubt 9/11. The slow-moving post-Cold War era was rapidly put to an end. This caused a rethinking of vital institutions, a re-organization of government controls, and drove home the significance of new threats. This event shocked the world into the terrorist era.

As a result, Cold War conceptions of conflict have been re-imagined and reshaped. These changes, however, have been faster in some areas than in others. The Canadian maritime forces still operate largely in a Cold War structure and use threat-based planning on a regular basis. Evidence of this can be seen throughout the navy vision put forth in *Leadmark: The Navy's Strategy for 2020*, published in 2001. The navy acknowledges a range of threats but stresses in particular traditional conflict-based thinking. It is not the idea of preparing for these threats that is problematic, it is the weight and specificity given to them that is at issue. The ability to plan and develop strategy for unexpected, asymmetric threats needs to be the new priority for the Canadian Navy. Threat-based planning suggests that there is a build-up over time as a state prepares for war. This suggests that there will be a window of time in which to prepare. But as we know from experience in the post-9/11 world, there is no time to prepare for asymmetric threats. The best way to prepare is to be capable of a quick and balanced response that can address a variety of issues. Given the nature of asymmetric threats, what is the best way for Canada's maritime forces to be prepared? With what roles should they concern themselves?

The defining characteristic of the terrorist era is the rise of the asymmetric threat. Traditional threat-based planning can no longer identify clear threats in a way that is useful to modern forces. Thus planning within this model would be a mistake. It is not easy to change 100 years of naval threat-based thinking and it will not happen overnight – but it needs to happen. Asymmetric threats must be prepared for. The difficulty in planning to meet asymmetric threats is that you are planning for the unexpected and the unknown. It is precisely for this reason that a balanced maritime force is required to respond in unpredictable cases.



The World Trade Center on 11 September 2001.

What do I mean by balance? Balance refers here to having the greatest possible range of capabilities within a specific scope. Scope refers to any roles the maritime forces undertake and all responsibilities, factors and variables that are contained within that field of view. While a larger scope, may appear to allow more variables to be considered, more roles and thus more involvement and greater inputs, in fact it has the opposite effect. When considering vulnerability and capability, the Canadian Forces must narrow their scope, and focus on specific roles and tasks and address specific threats and objectives. Too large a scope causes a thinning of resources, leaving key areas vulnerable. This article will argue that within the Canadian context, the scope of the roles and tasks conducted by the maritime forces must be limited so that they are appropriate and reasonable.

For Canada, a stronger emphasis on a constabulary role



Photos: Internet

The impact of terrorism. Tavistock Square, London, after the July 2005 attack (left), and USS *Cole* leaving Aden for transport back to the United States after the 12 October 2000 terrorist attack.

might be the answer. This would provide the navy with the ability to perform a range of operations while taking a step back from the more expensive military role. With this focus the navy could still maintain the ability to pursue national interests. At the same time this narrowing of scope would allow the maritime forces to focus more to ensure a full range of capabilities within the identified scope. What a constabulary approach lacks in a combat-based military role should be made up for in the ability to be more effective in other areas – areas in which Canadian naval forces are regularly utilized.

more constabulary roles such as interoperability and stewardship. The goal of such a shift would be to increase effectiveness and usefulness in these constabulary roles instead of struggling to maintain the more independent and costly military roles.

This article will begin by introducing the major weaknesses facing the Canadian maritime forces and address them as limiting factors that ultimately shape the scope of Canada's abilities. The current weaknesses mean that an active military role is impossible. The article will then discuss the critical elements that underpin a changing vision of the Canadian maritime forces. This discussion will look at three areas critical to the success of the Canadian Navy, and will highlight opportunities provided by a shift in mentality. Finally, this article will suggest that the best approach for Canada is to step away from maritime military operations in order to develop a more balanced approach as a middle power in a constabulary role.

While the events of 9/11 and the birth of asymmetric threats may represent a huge strategic challenge for the Canadian Navy, perhaps equally huge – and more traditional – are the direct limitations it faces. What roles the Canadian maritime forces can undertake are related to these limitations. According to *Leadmark*, “[a]t the outset of the 21st century, Canada had in its service arguably the best balanced and most capable navy in its history.”¹ This created a sense of capability and a larger capacity than exists since the cutting of Cold War budgets. The current condition of the Canadian Forces suggests that this sense of capability is now grossly exaggerated. The current forces are suffering a serious lack of manpower, financing and material to maintain the fleet.² Canada's state of readiness is increasingly compromised because of the status of the fleet. As Senator Colin Kenny, Chair of the Senate Standing Committee on National Security and Defence, has argued, “[a]t the most obvious level, there isn't one type of vessel in the Navy's fleet that doesn't have problems. Every class of vessel has several deficiencies, and either they can't be fixed, or they don't get fixed, until they've gone further downhill.”³ These are seriously crippling factors in the current structure and size of the navy.

Photo: DND



The Canadian task group; does it have a future?

What an increased mid-level constabulary role will look like is a matter of great debate. A balanced constabulary approach is potentially much more sustainable in the long term than a navy primarily focused on state-on-state conflict. As well, it will provide a stronger overall role for Canada's maritime forces. By and large, changing to a greater focus on a constabulary role would mean a decrease in ship size in exchange for an increase in ability within a more limited operational scope. Essentially the navy would move away from high-level military roles such as fleet engagement and power projection – areas Canada currently struggles to maintain – in favour of



Photo: Corporal Shilo Adamson,
Canadian Forces Combat Camera

The availability of trained sailors is always a factor. Here, technicians aboard HMCS Fredericton work on the Close-In Weapon System in November 2009.

The Canadian Navy is classified as a Rank 3: Medium Global Force Projection Navy.⁴ This means Canada's abilities are not as complete as those of Ranks 1 and 2. Rank 3 navies are limited to cooperative actions, and while they can operate at significant distances from home, they are limited to operating in one theatre at any given time.⁵ If current problems are not addressed Canada will be unable to maintain even a Rank 3 status. In order to maintain this rank while changing the scope of operations, the navy must be able to do more with less. It is these realities that further shape the image of Canada's maritime forces.

These perceived weaknesses as a military force provide an opportunity to redefine and re-assert the role of the Canadian maritime forces. Given the constraints and context, Canada is best served by a balanced maritime force that can operate effectively within one scope rather than a large force that is limited in ability but has a broader operational scope. This is primarily because of the inevitable cost of upkeep and maintenance as well as manpower required for operation. It is more important to accept the limitations facing Canada's navy and prepare to manage them rather than to struggle for funding that is not available in order to preserve appearances, a sense of preparedness and capability that cannot be maintained under current conditions. Canada is at a vital stage when a shift in thinking is possible given the repairs and refits that will be necessary within the next decade.

In a balanced, mid-level constabulary role, three elements are central. First is the ability to maintain maritime forces in a state of readiness. Second is the ability to operate credibly in a variety of combined capacities. Third is the ability to respond appropriately to national needs and objectives. It is these three elements that should underlie any future vision of the role of the Canadian Navy.

It is in terms of the first element – the ability to maintain maritime forces in a state of readiness – that Canada has its most significant challenges/problems. The two most

critical problems are a lack of personnel and a lack of funds. But these problems also provide opportunities to shift the focus of the navy. Both of these significant problems could be ameliorated by gradually introducing smaller, more efficient vessels with capabilities beyond the combat sphere. This shift to smaller vessels would naturally meet resistance, however budget constraints and personnel issues make the shift imperative for the sake of sustainability and long-term viability. According to Senator Kenny in "Wounded: Canada's Military and the Legacy of Neglect" a report of the Standing Committee on National Security and Defence, due to the issues of funding and a lack of personnel,

The Canadian navy has difficulty keeping high readiness ships at the full level of readiness required, and it cannot always meet departmentally mandated maintenance and realty asset repair targets. It is unable to sustain equipment and combat platforms, let alone upgrade them at the rate that it would like.⁶

Maritime Command could redistribute personnel and organize the navy around ships requiring fewer crew members and thereby greatly improving readiness capabilities. *Leadmark* argues for many of the constabulary roles suggested here, but it puts more emphasis on the ability to act in a larger military capacity and the need for



Photo: Saint John Shipbuilding

Despite some shipyard closures, a Canadian capability to build warships remains.



HMC Ships *Toronto* and *Athabaskan* refueling from USNS *Patuxent* as they deploy to the Gulf of Mexico to provide help in the wake of Hurricane Katrina in September 2005.

larger naval operations. Unfortunately, this vision requires increased funding, making it highly unsustainable (and unlikely in the current fiscal environment).

The greatest benefits to this shift would be an ability to maintain lower cost vessels and a more efficient dispersion of personnel. Perhaps the greatest opportunity in this vision is the possibility to increase shipbuilding and maintenance domestically. Canadian shipyards have a significant maritime capacity and are under-utilized the majority of the time as a consequence of Canada's boom and bust style of purchasing ships.⁷ With a lack of sailors available for repair and refit work, it might be possible to expand this aspect into the civilian sphere.⁸ A shift in thinking could open significant avenues for Canadian industry in both maritime and technology-based industries – an important consideration at a time when Canadian manufacturing jobs are disappearing. Many of the ships required for the constabulary roles have not yet been designed, or even envisioned, which provides an opportunity to promote domestic industry to design, develop and produce ships based on Canadian criteria. Ultimately the maritime forces will still be constrained by budgetary constraints and personnel shortages, but a shift toward a balanced constabulary role could maximize efficiency and ability while lowering costs over time, as well as promoting industry in the domestic sphere.

With regard to the second element – the ability to operate in a variety of combined capacities – the important thing to note is that Canada is tied to its allies. This is a practical, historical, and simple reality. Canada's security depends as much on allies as it does on its own abilities. Canadian credibility heavily depends on successful international relationships. Canada has a history of combined action, one worth taking pride in. In this respect, developing and improving maritime capabilities to highlight the pre-existing elements of this cooperative history should not mean a significant change in thinking. However such a change may make all the difference in planning for the future. The capacity to operate with allies in a variety of situations has been identified at various levels and is an integral part of naval thinking. There is virtually universal agreement that it is important to be able to work with

allies – there is disagreement, however, about the ability to act autonomously. *Leadmark* identifies a need for both combined action and autonomous action.

Specifically *Leadmark* suggests that Canada's navy should be able to perform the following operational roles: sea control; sea denial; fleet-in-being; and maritime power projection.⁹ Typically these are operational roles that exist within the military sphere. Although *Leadmark* stresses the need to be able to undertake these roles, they have rarely been exercised by Canadian forces at sea since the Korean War. Additionally, when action is taken militarily, it is done so in a combined structure befitting the position of a Rank 3 navy – i.e., Canada does not do it alone. This is why it should be possible to convert these roles into roles more suitable to a constabulary vision. Instead of control, denial and fleet-in-being, national authority, presence and oceans management could provide the same strengths with less of a strong-arm style. This shift would not remove Canada from its current responsibilities but would only affect the ability to act autonomously on a large scale. Canadian responsibilities and commitments would remain the same. Only the specific duties performed would be subject to change. This shift would soften the size of the fleet-in-being, weakening power projection. This is not necessarily a problem, however, because the potential for improved effectiveness in Canadian allied commitments could easily balance the perceived loss. The result might be that Canada would contribute less in terms of size in exchange for undertaking more specific abilities within littoral waters, troop landing, or sealift support. By shifting thinking slightly the Canadian Navy could perform largely the same roles in a more task-appropriate scope aiding its allies more effectively and improving credibility.

Where thinking would have to change is in a reliance on non-military elements. A cooperative combined force should be able to utilize non-military actors. This may include non-governmental organizations, private companies, policing institutions, civil authority and various other groups. This type of cooperation greatly increases the scope and types of actions in which maritime forces can be involved. Operating credibly will greatly depend upon an ability to be effective as part of a combined force. A re-envisioning in this respect should provide the Canadian Navy with the opportunity to *act* rather than simply *be present* in these task forces. This may require giving up some size in exchange for more rounded abilities such as amphibious capabilities.

A movement away from more military-style operations to a focus on constabulary abilities would put added influence on maritime characteristics of enablement, assertion

and augmentation. More emphasis on a constabulary role also means added importance is given to the key components already identified as vital by the navy in *Leadmark*: aid of the civil power; assistance to other government departments; search and rescue; disaster relief; and oceans management.¹⁰ An increased capability with respect to civil-military relations would only strength the effectiveness in these areas. A balanced, sustainable constabulary role could build upon established foundations and pursue new avenues of cooperation.

The final element – the ability to respond to national needs – is somewhat hypothetical given that asymmetric threats require planning for the unknown and responding to a broad array of possible scenarios. In a practical sense, however, this point refers to the idea of diversification within the maritime forces and the ability to adjust and respond within a range of needs. The changes discussed here would result in a more diverse range of vessels and capabilities being utilized. Or, at the very least, this should be the goal. Giving up size implies giving up a degree of power projection. As a counterbalance to this, diversification could increase the effectiveness in a variety of activities thus heightening the international profile of the maritime forces.

What is most critical to realize is that at a theoretical level all of the issues identified as critical to national interests can be addressed in some form or another through a constabulary role. While this may not necessarily mean a traditional response, the maritime forces would still be able to respond fully to any threat to Canadian interests.

In Canada's domestic space this diversification might mean a shift away from destroyers and frigates in favour of ships that could be more effective in patrolling Canada's coasts



Photo: DND

HMCS Toronto, is she over-equipped?

or operating within littoral waters. Without a constabulary coast guard the navy is charged with protecting and patrolling the coasts. Destroyers and frigates are over-equipped to handle this type of constabulary duty. Shifting to a patrol ship creates the ability to act forcefully in littoral waters as well as conduct coastal patrols. Smaller, faster ships designed with a constabulary role in mind are more appropriately matched to perform the duties required in Canadian waters and as such are able to operate within the necessary scope in a way that the current maritime forces cannot.

This diversification would have significant impact on Canada's role abroad as well. Currently the naval forces lack the ability to land troops. A sealift capacity would drastically increase Canada's ability to move material and personnel. This capacity would have the potential to provide capabilities for fleet replenishment at sea,



HMAS Pirie, one of the new Australian Armidale-class patrol vessels (left) and an artist's impression of the 915-ton Baynunah-class corvettes built in France for the United Arab Emirates.



Photos: Royal Australian Navy and Internet

transportation for troops and joint force headquarters.¹¹ The ability to operate in littoral waters is another area where Canada's maritime forces are lacking significant capability. All of these elements can be addressed through a re-envisioning (and re-equipping) of the maritime forces as a mid-level constabulary unit.

A changing vision to meet changing needs is required. How this materializes will likely be the subject of many arguments to come. In my opinion, what it should look like is a shift from Cold War thought into a balanced medium power constabulary role. The advent of the terrorist era has driven this need for change. The problem of asymmetric threats should inform this new vision as it is the most significant threat facing Canada. The maritime forces face a series of limitations that must be addressed if Canada is to maintain its status as a Rank 3 Medium Global Force Projection Navy and honour its commitments to its allies. This is precisely the idea of doing more with less. The critical issues of budget, personnel and management can be dealt with through this rethinking of the scope of Canada's maritime role. The key is efficiency.

What the Canadian Navy needs is the ability to maintain its objectives and perform its responsibilities while stepping back from a larger military vision. This more constabulary middle power approach means decreasing ship size to match personnel resources while still maintaining a capable fleet. Within this sphere, emphasis on Canadian industry provides opportunity for both the navy and Canadian industry to grow and develop with parallel visions, increasing mutual support to both.

Operating in a combined capacity is not new for Canada – it is a part of Canada's definition of a Rank 3 naval power and is a significant part of Canadian history. A re-envisioning gives Canada the means to be a better partner to its allies and globally. Rather than sending larger, under-crewed, older vessels on extended power projection missions, a constabulary vision suggests sending smaller but more effective vessels to perform specific tasks more efficiently. The elements and strengths lost in one area can be made up for with more flexible fleet capabilities allowing the Canadian Navy to step in and perform actions effectively even if it is in a smaller capacity.

Having a diversified force that can respond appropriately to its duties is the ultimate goal of this vision. Canada's larger ships are over-qualified to perform the duties most frequently required of them, and the most frequent duties the navy has been asked to perform in recent years are constabulary duties, not military ones. No other vessels within the fleet have an effective capacity to perform these tasks. A change in vision means building to address the



An RCMP boarding team arresting a yacht suspected of smuggling drugs in a 'whole-of-government' exercise off the Nova Scotia coast in which HMCS St. John's acted as on-scene commander.

unique issues facing the Canadian maritime forces and building to operate within the scope regularly required.

Existing Canadian ships are better equipped for combat on the open ocean than they are for patrol of Canada's coastline. This is a significant misjudgement of the contemporary threats facing Canada. Ultimately, Canada needs to be more prepared to tackle the missions that come up most frequently. This means accepting a mid-level role and becoming an effective constabulary force whose diversified capabilities would enhance Canada's ability to act with allies at sea and to protect its own maritime interests. Developing a greater constabulary ability is necessary based on limitations that the navy faces. Such a change would be based on need but it would provide ample opportunity for action and the maintenance of Canada's commitments abroad and in home waters. Canadian maritime forces based on a balanced constabulary role within limited middle power combat capabilities is the best vision for Canada in the terrorist era. 🇨🇦

Notes

1. Department of National Defence (DND), *Leadmark: The Navy's Strategy for 2020* (Ottawa: Directorate of Maritime Strategy, 2001), p. 63.
2. Senate Standing Committee on National Security and Defence, Colin Kenny, Chair, "Wounded: Canada's Military and the Legacy of Neglect," 2005, available at <http://www.parl.gc.ca/38/1/parlbus/commbus/senate/com-e/defe-e/rep-e/repintsep05-e.htm>.
3. *Ibid.*, p. 48.
4. DND, *Leadmark*, p. 44.
5. *Ibid.*, p. 44.
6. Senate Standing Committee on National Security and Defence, "Wounded: Canada's Military and the Legacy of Neglect," p. 54.
7. See Brian Tobin, "A New Policy Framework for the Canadian Shipbuilding and Industrial Marine Industry: Focusing on Opportunities 2001" (Ottawa: Industry Canada, 2001).
8. Senate Standing Committee on National Security and Defence, "Wounded: Canada's Military and the Legacy of Neglect."
9. DND, *Leadmark*, pp. 95-98.
10. *Ibid.*, p. 99.
11. Elinor C. Sloan, *Security and Defence in the Terrorist Era: Canada and North America* (Montreal: McGill-Queen's University Press, 2005), p. 124.

Julian Brown is a recent graduate of Dalhousie University having received a BA (Honours) degree with a double major in Political Science and History.

Winner of the Canadian Naval Memorial Trust Essay Competition

Bourassa, Laurier and the 1910 Naval Service Act: Canadian Identity and the Birth of a Navy

Commander Martin Pelletier*

Introduction

Canada has always been a maritime country, engaged in fisheries, shipbuilding and trade and participating in the world beyond its shores. The need to protect Canadian maritime interests is clear. At the time of Confederation in 1867, Canada benefited from the protection of the Royal Navy (RN), which had been operating from Halifax since 1759.

In the last decade of the 1800s, the RN became concerned about the high cost of naval shipbuilding necessary to maintain its superiority, mainly against Germany. Britain entered into discussions with its colonies with a view to obtaining financial assistance in the naval defence of the Empire. It would have been easy for Canada to comply and contribute financially to the RN, which had provided security for its territory for so long. Why then create a Canadian Navy?

Many take the view that the navy was born as a result of the desire by Canadians to gain autonomy from Britain. Most descriptions of the debate on this issue involve on one side Canadian naval autonomists and on the other imperialists who favoured contribution to the RN. There was, however, a third side rarely discussed – the French-Canadian nationalists who opposed the creation of a Canadian Navy because for them it represented another form of subordination to Britain. Their most prominent leader was Henri Bourassa, a young Liberal Party Member of Parliament (MP) from Quebec, who obtained significant support from French-Canadian MPs and constituents.

The purpose of this article is to test the view that the adoption of the 1910 *Naval Service Act* was the result of an autonomist evolution in Canadian society. My argument is that it was not. Indeed, it is the support for the naval defence of the British Empire that conditioned the debate, the only main actor consistently supporting true autonomy from Britain in Canadian public opinion was Henri Bourassa, and he was *against* the creation of a navy. His views from 100 years ago may be relevant to contemporary discussions about what the Canadian Navy's focus should be in the future.



The original group of naval cadets serving in CGS *Canada* (first row and back row) with some Fisheries Officers (middle row).

The Idea for a Canadian Navy

Sir Wilfrid Laurier, leader of the Liberal Party, first became Prime Minister in 1896. In 1897, he rejected British calls for a financial contribution to imperial defence, a position squarely in line with his vision of an autonomous Canada. Yet, these autonomist ambitions were challenged at the outbreak of the Boer War in 1899. Laurier was not inclined to involve Canada in what was essentially a British conflict. However, faced with the possibility that private contingents of soldiers would be sent to South Africa to assist Britain, he reluctantly agreed to support the organization of a contingent of volunteers without involving Parliament, as this divisive issue may have torn apart his party. Nevertheless, Henri Bourassa, the strongest opponent of Canada's involvement in that war, resigned in 1899 over the issue. He found many supporters, establishing himself as a significant political figure for years to come. He was re-elected as an independent MP in 1900 and served until 1907. He then became active in political affairs, mainly

through the Montreal newspaper *Le Devoir* which he founded in 1910.

At the 1902 Imperial Conference – at the end of hostilities in South Africa – Laurier again objected to demands from Britain for a financial contribution to the RN on the basis that it was contrary to the principle of colonial self-government. He did, however, commit to consider forming on both coasts a Naval Reserve that would likely be made up of fishermen. This position set Canada apart from other colonies such as Australia and New Zealand which had agreed to pay together one-half of the cost of maintaining an RN squadron in their waters.

The Minister of Marine and Fisheries undertook to modernize and equip the Fisheries Protection Service fleet in line with Canada's commitment to the protection of its coasts. Two modern armed fisheries protection cruisers were purchased in 1904, including *Canada*, which was considered a small warship with a crew trained in naval fashion and dressed in naval uniforms. Once operational, she conducted a successful cruise in the Caribbean, making port visits as if she was a warship.

In addition to re-equipping the Fisheries Protection Service, the Minister had legislation drafted for the creation of a naval militia as a complement to the *Militia Act*, which modernized Canada's forces in 1904. The bill was never tabled and no public discussion ever took place regarding its content. It appears that Laurier was aware of the divisive potential of the naval issue. Even if he demonstrated a healthy independence for Canada on naval defence on the international scene, such expression of Canadian identity on the diplomatic front did not translate into a popular movement at home.

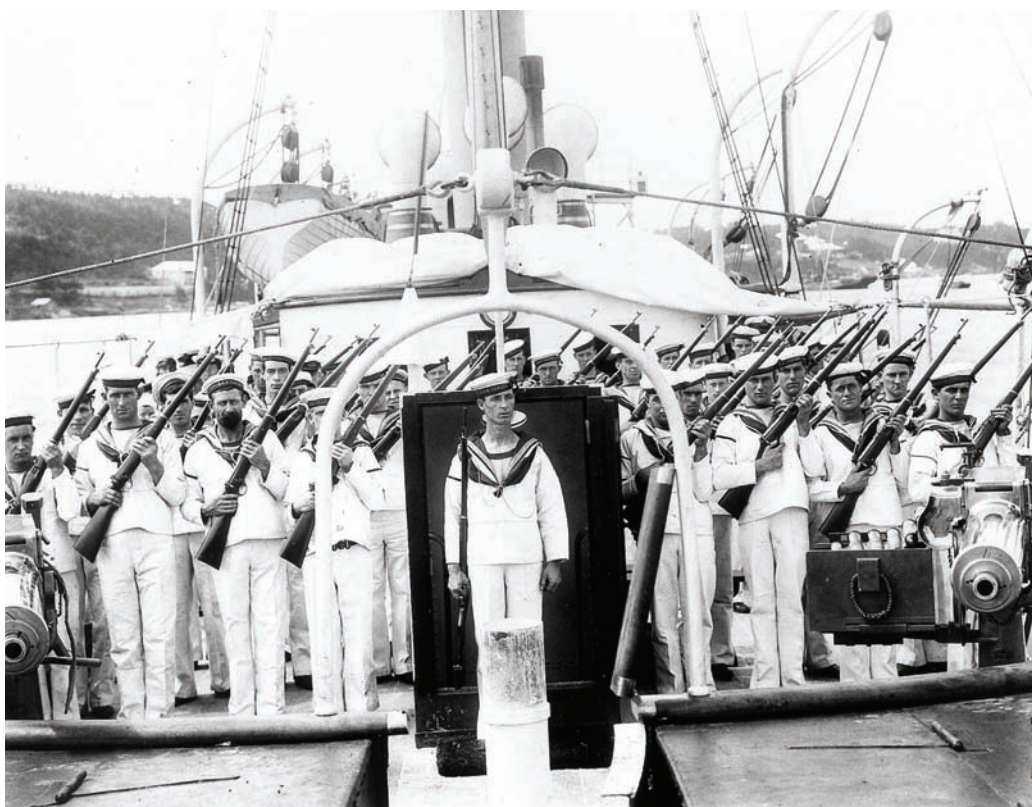
Most Canadians did not seem to care that much about the creation of a navy but those who did care, cared a lot. The Imperial Union Movement supported payments to the RN, arguing that defence was a public service to be paid for and that naval forces had to be operated as one – there was no need for a distinct Canadian Navy. Others were against as they believed such subsidies constituted a form of taxation without representation. They saw equal partnership as the best way to promote naval defence. The Navy League became one of the main actors in the

debate but was itself split – the pro-navy Toronto Branch was locked in a disagreement with the Victoria Branch which was calling for financial contributions to the RN. In Quebec, Bourassa argued that Canada's defence obligations should be limited to territorial defence, concluding that “in future wars, the tie which unites Canada to Great Britain presents as many dangers and inconveniences as it offers advantages.”¹

The naval issue was not only about the navy *per se* – it was about the much broader and extremely sensitive question of the relationship between Canada and Britain. Laurier could live with the status quo of a well-armed Fisheries Service. He probably was not attracted to the idea of a Canadian Navy enough to risk jeopardizing his government and electoral fortunes. Two events would make him take that risk – the Foster motion and the Dreadnought Crisis.

Shortly after the opening of the 11th Parliament in January 1909, George Foster, a prominent Conservative MP from North Toronto, advised that he would table a resolution in the House of Commons calling for Canada to assume “her proper share of the responsibility and financial burden incident to the suitable protection of her exposed coast line and great seaports.”² The resolution was tabled and debated on 29 March 1909.

In parallel with the debate about to begin in the Canadian Parliament, an issue of naval policy in Britain was about to have a significant impact on the project to create a Canadian navy. On 16 March 1909, the British Prime



Crew, with rifles at the 'port arms' position, onboard the Fisheries Protection Service Cruiser CGS *Canada* in Bermuda circa 1900-1910.

Photo: Public Archives of Canada PA-123950

Minister and the First Lord of the Admiralty made the unusual gesture of commenting on the critical delay in production of the *Dreadnought*-type battleships for the RN. Their statement had a tremendous impact on the population who saw German battleships as a formidable threat. The British fear that the Germans were catching up to the capacities of the once-powerful RN led to what has been referred to as the Dreadnought Crisis.

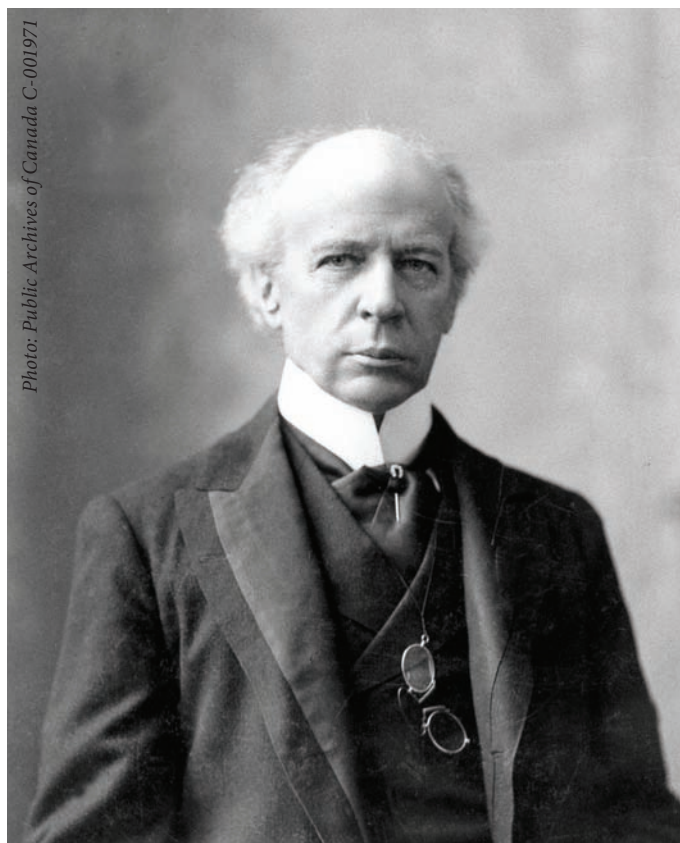


Photo: Public Archives of Canada C-001971
 Right Honourable Sir Wilfrid Laurier, Prime Minister of Canada from 1896-1911, circa 1906, in Ottawa.

The debate on the Foster motion focused on the idea of a navy rather than on the pragmatic details of its composition or operation. This motion would not have claimed our attention, however, without the Dreadnought Crisis. The sense of urgency created by the crisis permeated the debate and influenced the outcome, as opposition to the motion could have been interpreted as a lack of support for Britain in a time of need. Laurier used the support obtained from the House of Commons as a mandate to move ahead with a bill establishing a naval militia.

The Dreadnought Crisis was the reason for convening an Imperial Conference in July 1909 where Britain outlined the specific forces that would constitute a desirable contribution by the colonies. In addition to contributions to the RN, the Admiralty wanted Canada to be equipped with fleet units composed of cruisers, destroyers and submarines.

This was a shift which challenged Canada's naval policy. Equipping any naval service with large, offensive vessels meant that the naval defence of Canada had to have a significant permanent component. This meant not just a naval militia but rather a full-fledged force whose sailors would be liable to full-time, active service. Before this, the government had been able to state that any naval service would be responsible for defence of Canada's coasts, not involved in British-defined engagements around the world.

One of Canada's most respected contemporary naval historians has argued that linking the debate on the Foster motion with the Dreadnought Crisis was an error which has overshadowed the Canadian rationale for initiating a Dominion naval force.³ Strictly speaking, this is true – Foster had given notice of his motion well before the Dreadnought Crisis broke out. That said, the fact that the motion was ultimately approved – with some amendments suggested by both sides – was a result of the urge to propose a response to the insecurity that the Dreadnought Crisis generated among many Canadians.

The same British rationale conditioned the call for a fleet unit. Indirectly, therefore, the main factor in the creation of a Canadian *navy* instead of a naval militia or an improved fisheries protection agency was the heightened expectations resulting from the Dreadnought Crisis. Nothing less than a navy would allow Laurier to respond to the pressing calls for Canada's participation in the naval defence of the Empire. If a Canadian rationale had prevailed, the Canadian Navy would have been created in 1904 in the form of a naval militia in accordance with the bill then prepared.

Reaction to the Naval Service Act

The Naval Bill was tabled for first reading in the House of Commons on 12 January 1910 by Laurier himself. It was quite short and badly written, especially if compared with the Australian legislation tabled the same year. The only portion which reflected the debate that had occurred up to that point was the "Active Service" clauses which provided that the Naval Service or any part thereof, ships, officers and seamen, could be placed at the disposal of the RN in case of emergency, subject to the obligation to debate the matter in Parliament within 15 days.

The only logical explanation for these clauses is an attempt to please everyone. Thus the bill was to please the imperialists by expressly providing for support to the RN. And it was to please the autonomists by limiting the placement of the Canadian Navy at the disposal of Britain to cases of emergency, defined as war, invasion or insurrection subject to Parliament's scrutiny. The Active



Canadian politicians of the day: left to right Honourable Martine Burrel, Sir Thomas White, Sir Robert Borden, Sir Wilfrid Laurier and Sir George Foster.

Service clauses, however, were unclear and consequently attracted criticism from all sides.

The bill is also notable for what it did not provide: a Canadian disciplinary system; and provisions relating to aid to the civil powers. Overall, the bill was not innovative and certainly not uniquely Canadian. The wording of the Active Service clauses failed to demonstrate any creative functionality in the command and control arrangements needed between the Canadian and Royal Navies. Reliance on the British disciplinary system certainly represented an occasion lost for the affirmation of Canadian identity insofar as it resulted in Canadian sailors being tried under a British act by a British tribunal even for offences committed in Canada or onboard a Canadian ship.

The idea of a navy may have been an act of national affirmation. However, in and of itself, the Naval Bill spoke of servility rather than affirmation and was not at all reflective of a Canadian identity.

Like Laurier, Sir Robert Borden, the leader of the opposition Conservative Party, had to contend with strong sentiment in his caucus and the English-speaking electorate about the apparent crisis in British sea power. He also had to contend with a Quebec caucus which did not want the creation of an adjunct to the RN and doubted that the 'péril Allemand' was worth the significant expenditure of public funds for the creation of a Canadian navy. Despite the diverging reasons, one thing united the groups within the Conservative Party – opposition to the navy. Borden decided to oppose the Naval Bill, even though his party had previously seemed to favour it. Borden justified his

position by arguing that creating a navy would take time and in the interim the RN was not receiving urgently needed assistance from Canada.

While the Conservative Party opposition was awkward for Laurier, it was the opposition that came from Quebec that was most difficult to address. The first edition of Henri Bourassa's *Le Devoir* newspaper was published two days before the Naval Bill was tabled. The editorial – titled "Avant le Combat" – makes a direct reference to the naval issue and opposes the idea of navy. One has to wonder if the 'combat' in the title referred to Laurier's naval policy, given the significant number of editorials on the naval question over the next 18 months.

In a speech delivered at the Monument National on 20 January 1910, Bourassa explained the rationale for his opposition. He criticized the costs of warship construction and maintenance and deplored the fact that the Canadian Navy could be placed at the disposal of the Admiralty for service unrelated to the defence of Canada. He saw the wish of the Admiralty for fleet units as a mean for the RN to obtain, at Canadian expense, squadrons on both coasts to be used by the RN at will. These Canadian squadrons would replace the RN squadrons disbanded a few years previously as the RN sought to reduce costs and international obligations. Bourassa agreed with Laurier on one point, that "[q]uand la Grande Bretagne est en guerre, le Canada est en guerre." To him this meant that the conflicts which involved Britain would henceforth automatically involve Canadian lives and money without meaningful input from elected representatives. The role of Parliament was limited to approving or condemning a government

decision within 15 days of the placing of the Canadian Navy at the disposal of the Admiralty – “enough time for the ships to be either victorious or sunk!”

Replying to the advocates of providing financial contributions to the RN, Bourassa argued that Britain would find the money itself if Canada did not contribute, given the need for it to maintain control of the sea lanes of communication in support of trade with its colonies. The only potential enemy for Canada was the United States but in Bourassa’s view, the Monroe Doctrine, which stated that the United States would not interfere with existing European colonies, constituted sufficient protection. Bourassa also argued that operating a navy would place Canadian lives at risk as Canadian ships would be targeted on the high seas as if they belonged to Britain. He called for a plebiscite on the issue before the bill was adopted.

An Impossible Situation

The fight with Bourassa was becoming personal. But beyond the personal elements, Laurier had an impossible task in trying to address the arguments of his opponents. On the one hand, he had to try to appease French-Canadian nationalists by emphasizing that the bill kept the Canadian Navy under Canadian control at all times. On the other hand, and at the same time, he had to re-assure English-speaking Canadians by emphasizing that Canada would always be at war alongside Britain, providing support as

an inherent part of the British fleet. In this climate, the autonomist argument about Canada’s needs never got the credibility and attention it deserved.

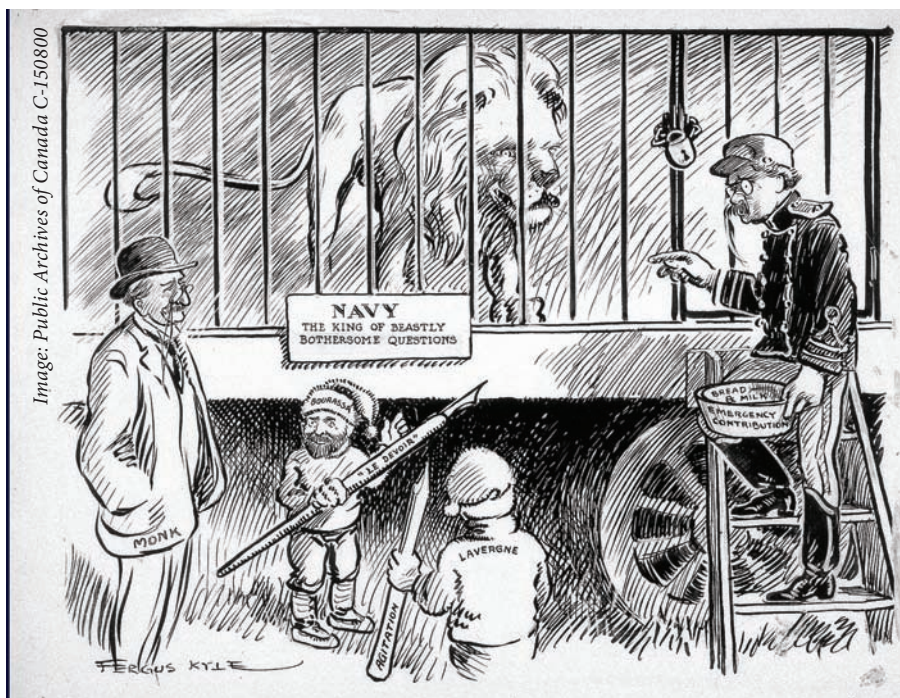
The weakness of the government arguments did not matter as far as the passing of the legislation was concerned. Unlike the Boer War debate, Laurier was able to keep his party united, both in the House of Commons and in the Senate, and the bill passed easily to receive Royal Assent on 4 May 1910.

The entry into force of the *Naval Service Act* did not signal the end of the naval debate however. Indeed, it was only the end of the beginning. The opposition was still very strong in Quebec. A by-election in Laurier’s former riding in November 1910 was fought by proxy between Laurier and Bourassa, who supported an unknown Conservative candidate. The Liberal candidate lost, based in part on the naval policy issue. In the general election held in September 1911, it was the issue of free trade with the United States and the Canadian Navy that caused Laurier’s Liberals to lose to Borden’s Conservatives.

Once in power, Borden promoted his naval policy of direct subsidies for the Royal Navy and introduced a Naval Aid Bill to Parliament in December 1912, seeking \$35 million to help Britain to build three of the latest battleships. He insisted on repealing the *Naval Service Act* and scaling down the Canadian Navy to a militarized Fisheries Protection Service. Controversy once again erupted and Borden lost his Quebec lieutenant who resigned as Minister and member of the Conservative caucus. The Liberals undertook a filibuster in the House of Commons but the Naval Aid Bill eventually passed. However, it was defeated in the Liberal-controlled Senate in 1913, Laurier having been able to convince even the most imperialist of Liberal Senators to block it.

The events of 1910-1913 illustrate that the creation and continued existence of the Canadian Navy was a result of politics and foreign imperatives rather than a popular expression of Canadian identity. In 1911 the Canadian people elected representatives who made no secret of their intention to repeal the *Naval Service Act*. The non-elected Senate saved the navy. It is no surprise, therefore, that the navy subsequently went through very difficult years in terms of resources.

Three issues in the first months of existence of the Canadian Navy indicate that in addition to being the result of British considerations, the navy was being run in isolation from Canadian concerns.



“Navy - The King of Beastly Bothersome Questions.” An original cartoon depicting Mr. F.D. Monk, Borden’s Quebec lieutenant, looking at a lion in a cage being prodded by Henri Bourassa and MP Armand Lavergne holding sticks marked “Le Devoir” and “Agitation.” Inscribed “Lion tamer Borden: You want to keep nice kids away from here. He’ll be mad enough when he sees what I got for him.”

First, the Admiralty denied Canada's request to fly a distinct flag on Canadian warships, even if the proposal simply involved adding a green Maple Leaf on the White Ensign. The flag, embodiment of the nationality of a warship and the state it represents, would remain British on Canadian warships for almost 55 years, until replaced by the Canadian flag in 1965 – and even then this move was opposed by many. This attachment to British symbols was deeply entrenched with senior Canadian naval officers who long resisted adoption of Canadian symbols such as 'Canada' shoulder flashes, as discussed in the Mainguy Report in 1949.

Second, the Admiralty did not allow Canadian warships to leave the three miles territorial sea until the spring of 1911. This meant that Canadian warships had less freedom of manoeuvre than Fisheries Protection cruisers had enjoyed in previous years.

Finally, direction by the Minister and Deputy Minister of the Naval Service to allow francophones to take the Naval College of Canada entrance examination in French was ignored by the two RN officers in charge of the college. Unilingual French-Canadians were encouraged to obtain English training before attempting the examination. This lack of sensitivity to the linguistic reality of the Canadian population may partly explain why French-Canadian participation in the navy has not reached a critical mass at all levels, especially the senior leadership. No French-Canadian naval officer has risen to the head of Canada's navy in its 100 years history, an unusual situation for a national institution.

Conclusion

The events related to the passing of the *Naval Service Act* reveal that the evolution of the concept of a Canadian navy from idea to legislation was governed by politics and external events, rather than a domestic push for an institution that expressed Canadian identity. Laurier's vision for an autonomous Canada did not receive wide acceptance at home. The success of his naval policy is a testament to his qualities as statesman and political leader, not his success at convincing Canadians that the time had come to carry the responsibility for their own defence, through the very strong symbols of warships across the seas.

Some of the arguments made by Bourassa in 1910 are still relevant today. Funding has always been an issue. As well, the dilemma about whether to emphasize territorial defence or expeditionary undertakings is still real, as evidenced by the recent controversy concerning the reduction of operations of the Maritime Coastal Defence Vessels and the slow start of the Arctic/Offshore Patrol Ship project. More significantly, it is worth reflecting



HMS Dreadnought in 1906 – the ship that caused a revolution. Although several navies were considering constructing big gun warships at the time, the Royal Navy got there first, building the ship in great secrecy in a year and a day.

on whether the Canadian Navy has truly been a tool of Canadian affirmation. The attraction to British symbols is still very strong, as evidenced by the recent return of the Executive Curl. More importantly, the ability or willingness to equip the Canadian Navy for the conduct of independent operations is still being reflected upon.

For Bourassa, today's full integration of Canadian naval ships into US Navy carrier task groups would be interpreted as service to a new imperial master. Should Canada's naval pride reside in its role in supporting the power projection of today's superpower? Military alliances require contribution to the team but should there be room for a purely national agenda with naval platforms specifically designed to project military effects and Canadian influence ashore, where and when needed? States and navies of similar size and means are building these kinds of ships around the world – is it time for a new breed of Canadian autonomists? 🇨🇦

Notes

- * The views expressed in this article are those of the author and do not necessarily represent the views of the Department of National Defence or the Canadian Forces.
- 1. J. Castell Hopkins, *The Canadian Annual Review of Public Affairs 1903* (Toronto: The Annual Review Publishing Company, 1904), p. 272.
- 2. George Foster, House of Commons Debates, Session 1909, 29 March 1909, p. 3484.
- 3. Richard H. Gimblett, "Reassessing the Dreadnought Crisis of 1909 and the Origins of the Royal Canadian Navy," *The Northern Mariner*, Vol. IV, No. 1 (January 1994), p. 48.

Commander Martin Pelletier is serving with the Office of the Judge-Advocate General in Ottawa.

National Security and Canada's Shipping Policy: We Can Do Better

Dick Hodgson



Fairview Terminal Halifax.

The *Canadian Naval Review* is focused principally upon “strategic concepts, policies, operations, history and procurement of the Canadian Navy, plus national security in general and marine/oceans affairs.” The title of this article might therefore be viewed by some readers to be at best peripheral to this central CNR thrust. Certainly it is legitimate to question whether and if so where marine transportation policy fits into any consideration of Canada’s security. The purpose of this article is to respond to this question. More particularly it is to argue that Canadian shipping policy is, and should be recognized as, a fundamental element of Canada’s maritime security, and that Canada should be paying significantly more attention to this important dimension of national maritime policy if it is to ensure that the full range of available opportunities to protect its maritime interests is being exercised.

The premise offered here is that, while the provision of naval security is unquestionably of vital importance, it is only one dimension of a broader range of ‘tools’ available to Canada to protect its ocean interests and that there are

other dimensions that merit serious examination. More specifically, changes have been occurring in world shipping and maritime commerce, driven by globalization trends including: rapid advances in technology; significant increases in transportation security concerns such as terrorism, smuggling and piracy; and new threats to the environment, particularly global warming. Each of these considerations triggers important policy issues and security threats that cannot simply be addressed by naval resources alone. Thus the objective of this article is to shed some light on the nature and extent of these considerations, and to argue that there is a need for a broader, more appropriate, Canadian shipping policy.

Some Background

In order to appreciate where we need to go in relation to shipping policy, it is necessary to have a broad awareness of the brief but turbulent history of Canada’s merchant marine and the various decisions that have affected it. While Canada’s participation in deep-sea shipping can be traced back to the early 1800s, the first apparent effort



The restored World War II Liberty Ship *Jeremiah O'Brien*. The Park Steamship fleet began with Liberty Ships.

to stimulate the formal existence of a Canadian fleet did not occur until the early 1920s when, following the First World War, the Canadian Government Merchant Marine Limited was established, with a mandate to operate some 60 ships on a worldwide basis. This early initiative folded in 1936, only to re-appear towards the end of the Second World War, in the form of the Park Steamship Company Limited, which, at the time of its formation, was mandated to operate some 150 Canadian-built, owned and registered ships – the fourth largest merchant fleet in the world. Such was the renewed optimism among Canadian ship operators that they could compete in international trade that the government of the day arranged for Park Steamship to divest itself of most of its ships to private operators, and for it to be replaced with a new government entity, the Canadian Maritime Commission, tasked with overseeing the economic health and prosperity of the fleet.

It became rapidly clear that this optimism was misplaced, and considerable difficulties were encountered by Canadian deep-sea ship operators in competing for international trade. This may be attributed to the rapid evolution of technology, growing gaps in wage levels between developed and developing countries, and the evolution of new approaches to ship registry that resulted in the emergence of low cost, open registry (pejoratively termed 'flag of convenience') shipping, most notably under the Liberian flag. These trends resulted in the Canadian fleet coming under significant pressure, and despite a Canadian Maritime Commission report recommending the provision of support to establish a nucleus of Canadian flag ships (as well as a Canadian shipbuilding capacity), the bulk of the remaining ships were transferred to British registry, and by 1969 the Canadian deep-sea fleet had effectively ceased to exist.

Not surprisingly, this situation raised some serious policy issues and concerns. Over the next two decades, the federal government undertook a number of studies of Canada's international marine transportation policy to establish whether Canada's best interests were being served by the near total absence of a deep-sea fleet.¹ Efforts were focused particularly on examining whether, and if so in what manner and to what degree, Canada should make it its goal to re-activate involvement in deep-sea shipping. While a principal objective was to examine the merit of encouraging some form of Canadian flag deep-sea fleet, attention was also focused on the benefits of less ambitious alternatives such as the operation of a largely Canadian-owned but foreign-registered fleet.

The main recommendation of what was essentially the last major examination of this matter, the 1985 Report by the Task Force on Deep-Sea Shipping, was that the federal government not take steps towards the establishment of a core deep-sea fleet under the Canadian flag. There were, however, two further recommendations: (1) that Canada encourage and strengthen its expertise and interests in international shipping; and (2) that the government create a fiscal environment conducive to the establishment and maintenance of international ship management activities in Canada.² The task force report stated: "[t]he presence of a strong basis of shipping expertise within Canada is essential in order that Canada may respond more effectively and forcefully to the complex and changing international shipping environment and protect its exports and imports."³

It is important to appreciate that a dominant consideration guiding these various studies was the economic performance of marine transportation and whether adoption of some alternative to the status quo would yield economic



OOCL *Vancouver* passing the Deltaport Terminal, Port of Vancouver.



CSCL *Vancouver* at the Deltaport Terminal, Port of Vancouver – an indication of the growing influence of foreign shipping on the Canadian economy.

benefits. Left largely unaddressed were other dimensions of Canada's marine interests including safety and security benefits and protection of the environment. Again while the need for 'shipping expertise' was recognized, it was viewed more in the context of business and corporate management skills, as opposed to ship operating and technological expertise. With the focus almost exclusively on commercial and business expertise, it is not surprising that the modest product of these studies was a complex and, one might say in retrospect ineffective, adjustment to the *Income Tax Act* intended to facilitate the establishment of international shipping corporations (ISCs). Under the adjustment, so long as certain conditions were met, ISCs could be exempted from the payment of Canadian taxes. These conditions required that the company be incorporated outside of Canada, and that it operate ships exclusively in international trade. If a corporation met such conditions, then it could locate its 'mind and management' in Canada without paying corporate taxes.

It is fair to say that, while modest interest was shown in this concept in the early going, such interest appears to have waned rapidly and there is now little evidence of any extensive activity under this complex and confusing fiscal option, probably due to the availability of more attractive models elsewhere internationally. Certainly there has been no turn around in the continuing contraction in the numbers of Canadians with sea-going knowledge and experience. This trend is serious because the concerns that drive the rationale for an increased Canadian involvement in the operation of international shipping have become more pressing, with expanded economic, safety and environmental security risks. As well, ever-growing shortages of sea-going expertise are evident in virtually every dimension of shipping and ancillary services in both the public and private sectors.

What Have Other Maritime States Done About This?

In contrast to Canada's lack of action, numerous developed maritime countries, led primarily by the European Union (EU) and its members, have taken substantive steps to respond to the same concerns. These steps have now reached a point where it is probably fair to say that Canada is effectively steering a unique and independent course in international shipping policy. In so doing, it is running a substantial and increasing risk of arriving at a point where its policy objectives are significantly at odds with the thinking of its developed country colleagues, and particularly their perspective that important state security objectives are achieved by the nurturing of a national flag deep-sea fleet.

It is interesting to note that Canada's policy studies, and its chosen course of rectification action took place in the 1980s and early 1990s, before the European examination of these issues had really got underway. Had this situation been reversed, it is not unreasonable to conclude that Canada would have had available to it a considerably broader appreciation of available options, as well as enhanced leverage to follow in the wake of the course of action selected by European countries.

What was it that occurred elsewhere that should have merited Canada's consideration? Principally it was the recognition by the EU and most of the leading member states (and certain interests in the United States), that the ever-expanding dominance of foreign flag (usually 'open registry') vessels in international trade, was leading to a significant erosion of national knowledge and expertise in marine transportation in their respective countries. In addition, the contraction in national presence on the world's oceans was also viewed as giving rise to increasing threats to national safety, security and environmental interests. It was concluded by a number of European countries in the late 1990s that this was sufficiently serious to justify substantive action to rectify the problem.

This action has taken a number of forms, including a more radical and ambitious type of fiscal relief than that adopted by Canada. More particularly it has included the introduction of an optional and quite nominal 'tonnage tax,' based on the tonnage of each (qualifying) vessel irrespective of profit or loss. Initiatives have also included making the national flag registration process simpler, more appealing and user-friendly, while not sacrificing safety standards. It has also included the imposition of certain personnel training obligations, as well as income tax relief for national seafarers serving on national flag 'qualifying ships,' by treating wages earned in international trades

as foreign earnings. In short, this rectification action is based on the recognition that the world of international shipping is unique and demands a unique national policy approach.

By adopting these features and thus making national registration, as well as crewing by nationals, attractive, it has been possible to make such vessels increasingly competitive with low-cost open registry vessels. It has therefore become much more attractive commercially to place ships under a national flag and to crew them with national seafarers. For example, in the UK, one year after the introduction of the new tax option, nearly 50 companies had opted for the new regime representing some 600 ships and 450 billets for new officer trainees. The contraction in the number of national flag ships had been transformed into an annual growth of about 5%. Not surprisingly, the UK government was extremely pleased with the success of the initiatives, and a new sense of confidence has become evident in the British shipping industry.

In the Canadian examination of international shipping policy, national security (with a focus more on military mobility than terrorism at that time) was frequently addressed in the various analyses undertaken. However, little policy consideration was given to the potential safety and environmental threats presented by the ever-expanding use of open or high-risk registry vessels. This may perhaps be attributed to the fact that North America did not become fully focused upon the risks of environmental, particularly pollution, disasters until the *Exxon Valdez* incident off Alaska in 1989. On the other hand, Europe had become much more concerned with environmental hazards as a result of the *Torrey Canyon* (1967), *Amoco Cadiz* (1979) and *Braer* (1993) oil spill incidents.

More recently Europe has become even more preoccupied with reducing its exposure to the risks inherent in the operation of poor quality ships around its shores. The sinking of *Erica* (1999) and *Prestige* (2001) and the extensive damage that their cargoes caused to the coastlines of France and Spain have served to provide additional strong impetus to policy initiatives that have lessened the impact of poor quality shipping. With the heightened concern over terrorism, illegal immigration, piracy and drugs, the EU has viewed increased involvement in the national registration and management of ships by member states as serving to reduce potential risks arising across the full range of maritime security considerations.

Such concerns had already provided the impetus for Europe to pursue enhancements to such regulatory tools as port state control (including the Paris Memorandum and the French-led 'Equasis' ship-quality tracking initiative) as well as for other initiatives such as the International Safety Management (ISM) Code and the Standards of Training, Certification and Watchkeeping (STCW) Convention with its associated 'white list' of approved states. Of course, Canada has also strongly supported these initiatives, but Europe chose to go further and made safety, security and environmental protection important goals in its initiatives designed to make EC-registered ships competitive with open registry (flag of convenience) shipping. In contrast, Canada has shown little interest in seeking cost parity with open registry shipping as a means of enhancing national security or protecting the environment.

Another aspect that perhaps received less attention than it should have through this period of Canadian policy review related to the importance to be attached to seafaring experience and competencies, and the means by which



Exxon Valdez in Alaskan waters.



MV Hyundai Fortune on fire in the Persian Gulf in March 2006. Her crew was rescued by Dutch and French warships taking part in *Operation Enduring Freedom*.



CCGS *Terry Fox* alongside the wharf at Nanisivik in August 2007.

this shipping expertise might be made available to fill key marine shore-based positions in both the public and private sectors. The Canadian policy studies recognized the value of establishing and maintaining shore-based institutions in such private sector fields as ship acquisition and financing, ship management, ship chartering and brokerage, shipping agencies, ship chandlery, freight forwarding, marine insurance, etc. However, not highlighted to nearly the same degree was the need for public sector expertise in shipping policy, marine safety, ship inspection, coast guard fleet operations, accident investigation, pilotage, and so on. Despite the stress placed on these considerations, Canada appears to have paid little attention to the requirement for persons employed in those institutions to have had substantive sea-going experience. As a result, such experience is now very limited and continues to contract. This situation is in contrast to the situation in many European maritime states, where expanded opportunities to gain sea training and experience have received priority attention.

The Special Case of the Canadian Arctic

The Canadian Arctic and its security issues can be used to illustrate the essential thrust of this article. There have recently been studies focused on the risks associated with future shipping activities in the Arctic. Clearly for consideration in any such examination is the degree to which these risks might be mitigated by enhancing the nature and degree of Canadian content in the activities taking place. Various programs in the north already exert a modest degree of influence and control over Canada's Arctic marine interests. These include the application and enforcement of regulatory authority through, for example, the *Arctic Waters Pollution Prevention Act*, the provision of (albeit sparse) port and terminal services, modest ice-

breaking support, quite rudimentary navigational guidance and ice pilotage, limited search and rescue services and inadequate oil spill response capabilities. It also includes the still largely undefined 'constabulary' functions envisaged for the Canadian Navy's Arctic Offshore Patrol Vessels.

All these programs and activities involve oversight of, or support to, Arctic shipping activity with the quality of such programs and activities made more assured by the fact that it is Canada that is providing these services. However, left virtually unaddressed to date is whether the threats to Arctic security arising from the operation of foreign flag, particularly flag of convenience, shipping in the Canadian Arctic might be further mitigated by adopting measures that stimulate ownership and operation of Canadian flag shipping (above and beyond the protected cabotage activity associated with community resupply⁴). Not only would this contribute to enhanced security in all its forms, but it would stimulate expanded Canadian Arctic marine leadership and expertise.



Photo: Woodward Group

MV *Nanny*, a coastal tanker owned and operated by the Woodward Group of Goose Bay, grounded in the Simpson Strait, south of Gjoa Haven, Nunavut, in September 2010.

This is not a new idea. Ever since there has been some expectation of enhanced development activity in the Arctic, the value has been recognized of developing and implementing regional shipping policy initiatives tailored to the special challenges and opportunities offered by the Arctic.⁵ The advantages of such an approach include assurance of availability for Canadian use of specialized classes of shipping, and the nurturing of Canadian expertise in the design, operation and navigation of ice-capable vessels. Also among the benefits of involvement in commercial shipping operations would be the strengthening of Arctic sovereignty and security, as well as opportunities for

enhanced technological research, likely leading to reductions in the need for ice-breaking support due to enhanced ice-breaking self-sufficiency. Clearly this innovation and leadership would enhance Canada's stature as an expert in northern marine management – a stature sadly lacking at the moment. Unfortunately, despite recognition of the benefits of this policy shift, no substantive steps have been taken to implement it.

In the meantime, and in the absence of adjustment to Canada's deep-sea shipping policy or, indeed, its cabotage policy, all proposals currently under consideration for the transportation of resources out of the Arctic involve transportation to foreign destinations by foreign flag (likely flag of convenience) vessels. This almost complete dominance of commercial shipping in the Canadian Arctic by foreign flag vessels (apart from modest cabotage activities associated with community resupply) clearly heightens the threats to Canada's Arctic security in all its forms.

So What Should be Done?

As mentioned earlier, there are sufficient international examples and experience to argue that things do not need to be this way. 'Ring-fenced' tax incentives (the 'tonnage tax' concept), coupled with tax and other relief for national crews engaged in international trade, have narrowed the gap between the costs associated with flagging under traditional developed maritime administrations compared with 'open registry' options, to a point where numerous developed states are successfully operating shipping under their national flags.

One of the conclusions in a study undertaken in 2008 by Oxford Economics, an institute connected to Oxford University, was that, as a result of the introduction of a tonnage tax system in 2002, the British shipping industry was three to five times larger than it would have been without this tax reform. Such an option is open to Canada should it choose to go that route, and could be viewed as particularly appropriate for the Arctic, where, with quite modest investments, there would likely be opportunities for Canadian flag shipping to operate competitively with open registry options. And where shipping operations are limited to certain seasons of the year, such vessels would be well positioned to take up alternative opportunities in other international trades.

It would therefore seem reasonable that, from several perspectives including enhancement of Arctic security and sustainability, Canada should wish to be a leader in Arctic marine transportation operations. However, it will not achieve that wish under its current shipping policy framework. There is a real opportunity to alter this



Photo: DND

CCGS Henry Larsen in Arctic waters in the summer of 2006.

situation by a fundamental re-examination and adoption of a more advantageous Arctic shipping policy approach – the sort of approach that is stimulating European shipping, both conventionally and in specialized Arctic applications.

In conclusion, it is worth reiterating that the primary objective here has been to offer insights into the shipping policies that are being pursued by many, if not most, of Canada's developed maritime partners, and to provide a broad illustration of what Canada's deep-sea shipping policy regime might look like, were it to adopt similar measures. There have been persuasive observations made on several occasions over recent years by representatives of government, industry and academe that the marine transportation sector has not been receiving its fair share of policy attention. This needs to change. The objective here has been to highlight the fact that, consciously or not, Canada has chosen to pursue a virtually unique policy direction that has no parallel in the policies and practices adopted by its international partners. In so doing, this article stresses the urgent need for a much broader examination of Canadian shipping policy. We can and must do better. 🍷

Notes

1. For example, Hedlin Menzies, "Canadian Merchant Marine: Analysis of Economic Potential" (December 1970); Howard Darling, "Elements of an International Shipping Policy for Canada" (August 1974); Alcan Shipping Services Ltd., "Shipping Options for Canadian International Trade" (July 1977); Department of Finance, "An Economic Analysis of Canadian Deep-Sea Shipping Options" (September 1978); Transport Canada, "A Shipping Policy for Canada," TP-1676 (1979); Transport Canada, "Examination of the Defensive Deep Sea Shipping Strategy," TP 4918E (1983); Transport Canada, "Task Force on Deep Sea Shipping: The Sletmo Report," TP 6347E (1985).
2. Transport Canada, "Task Force on Deep Sea Shipping," pp. 54, 55, Recommendations 2, 3.
3. *Ibid.*, p. 54.
4. The scope of this article does not permit inclusion of the complex and in many ways unsatisfactory situation with regard to Canada's cabotage (coastal trade) policy, particularly as it affects the Arctic.
5. The development construction and operation of MV *Arctic* is a good example.

Dick Hodgson has spent his career in the marine field, first as an officer in the Royal Navy and subsequently for many years as a federal senior executive and academic.

Laying the Groundwork for Success: Forward Logistics and *Operation Altair*

Lieutenant-Commander Dave Colbourne

To the casual onlooker it may seem that participating in a naval mission means simply loading the ships and sailing off into the sunset. But there are many things that must be done to support and sustain the ships after they leave harbour in Canada. Who arranges for parts and supplies to be sent to the ships, including navigating Customs regulations in various countries? How are port visits arranged? Who arranges for any maintenance contracts? Who arranges for rest and relaxation opportunities for the crews? How can a crew member get home expeditiously if there is an emergency? All this and more is the work of the forward logistics people in the Canadian Forces. Without their work to prepare and supply the forces, Canadian missions would not be as successful. The value added by the forward logistics team to a task group is immeasurable. In this article I will discuss the role the forward logistics site (FLS) personnel played in *Operation Altair* Rotation 4 and the vital logistical support they provided to this successful operation. This particular example involved coordinating logistics support for four ships, over 1,000 sailors, four major maintenance periods, unforecasted port visits, and ports not visited in over 40 years, if at all.

Forward logistics planning and organization is not something new for the Canadian Navy; it has been applied since the Korean War and has undergone modifications throughout operations outside Canada since 1950. Most recently, FLS operational support has been maintained in the Arabian Sea area since 2001 with *Operation Apollo* and *Operation Altair* demonstrating Canada's presence in the region and commitment to the war on terrorism. Throughout this period, the work undertaken by forward logistics organizers has continued to support operations by making logistical arrangements for units at sea.

Combined Task Force 150 (CTF 150), operates in the Gulf of Aden, the Gulf of Oman, the Arabian Sea, the Red Sea and the northwest part of the Indian Ocean. Its primary activity is the conduct of maritime security operations, and in particular protection of shipping from piracy. CTF 150 is one of three multinational coalition fleets coordinated with the US Navy's 5th Fleet. Canada's contribution to this effort is known as *Operation Altair* which supports *Operation Enduring Freedom*. The operation began in July

2004. For Rotation 4 of this operation, which commenced in April 2008, Canada was given the responsibility of leading CTF 150. The Canadian contribution to Rotation 4 began with a three ship task group that included two ships from Esquimalt (HMC Ships *Protecteur* and *Calgary*) and another from Halifax (the command ship HMCS *Iroquois*) before being joined by another Halifax-based vessel (HMCS *Ville de Quebec*).



HMC Ships *Calgary* and *Protecteur* in the Strait of Juan de Fuca on 13 April 2008 as they leave Esquimalt, British Columbia, for *Operation Altair*.

The deployment took the forward logistics team to ports such as Split (Croatia), Aqaba (Jordan), Djibouti, Jebel Ali (United Arab Emirates), Muscat (Oman), Karachi (Pakistan), Mombasa, (Kenya), Dar Es Salaam (Tanzania), Chennai (India), Port Klang (Malaysia), Tokyo (Japan), Pusan (South Korea), Manama (Bahrain), Piraeus (Greece) and Civitavecchia (Italy) between the months of May and October 2008.

The size of the FLS team ranged from six people during the initial transit into theatre to its peak of 21 people after HMCS *Ville de Quebec* joined the task group in August 2008 to conduct escort duties for United Nations World Food Program vessels carrying humanitarian goods to Somalia from Mombasa. The team was led by a Lieutenant-Commander Sea Logistics Officer and also included logistics officers, supply technicians, traffic technicians, military police, naval communicators, resource

management support clerks, engineering technicians and a medical technician.

For *Operation Altair*, as for every mission, the forward logistics team was responsible for a number of tasks. First, it arranged port visits. Second, it arranged storage and transfer of parts and material. Third, it expedited transfer of material and people through Customs when necessary. Fourth, it helped arrange repair and maintenance visits. Fifth, it helped arrange and organized show tours to entertain CF personnel and/or local guests. Sixth, the forward logistics team was important in coordinating replenishment at sea for the task group. And finally, the team was responsible for making arrangements for sailors who were joining a ship mid-deployment or being repatriated for some compelling reason. Let us discuss each of these.

In almost all cases the FLS team visits ports ahead of the ships to meet with local port authorities, ship chandlers and security personnel. Following the reconnaissance visit, a detailed report is submitted to the visiting ships providing information such as port authority contact information, security requirements and emergency contact information. Additionally, the forward logistics team works with port authorities to negotiate the best possible berth in the ports in order for the task group to achieve its goals during the port visit, whether the goals are maintenance, public relations, or facilitating rest and recreation opportunities for the ships' crew. This preliminary work is most valuable as in some cases, the port authorities have erroneous ship dimension information. In this case local authorities were planning to assign berths to *Protecteur* and *Calgary* that could not accommodate them in terms of the depth required. Even though the East Coast Navy has Standing Offer Agreements (SOA) in place with ship chandlers, a naval presence on the ground is of huge importance to ensure the requirements of a warship are understood and therefore satisfied.

In making preparations for port visits in Jebel Ali (UAE), the forward logistics team faced numerous challenges in securing a berth for ships. Commercial shipping traffic is much more lucrative for port authorities and container ships have the priority, not only for the most functional berths, but for any berth for a period greater than 24 hours. Ships, especially military ships, often spend hours or even days at anchor outside the port awaiting jetty assignment from the port authority. Only through working closely with the ship's agent, the FLS leadership was able to secure jetty assignment a day before the scheduled port visit. To accomplish this, the team emphasized the importance of securing a berth early so that security arrangements could begin. This could only be accomplished through

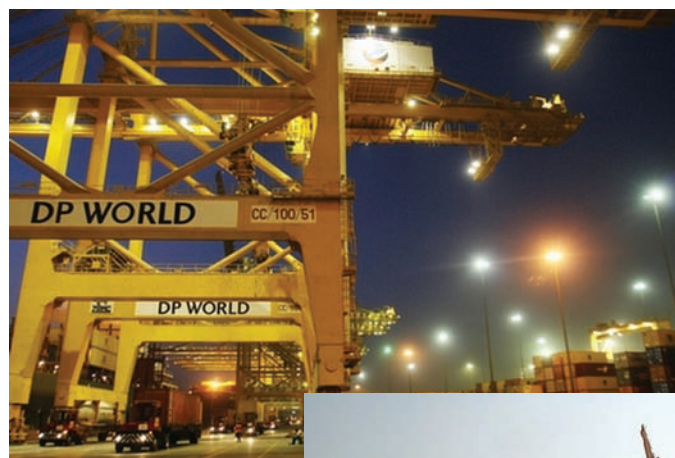


Photo: Jebel Ali Port Authority

Part of the huge Jebel Ali port complex.



face-to-face interaction. Without logistics personnel there in person ahead of time, the ship(s) would have been left in the harbour for an extended period awaiting a jetty assignment which could have negatively affected the ship's company morale (through a shorter port visit) or the operational effectiveness of the mission, or both.

A three-ship task group sailing with three classes of ships, two of which are over 35 years old, creates challenges in maintenance and delivery of essential parts. In the case of *Operation Altair*, operational deficiencies became routine and parts were entering theatre regularly via military aircraft and commercial means. There were at least three shipments weekly being flown into theatre either via commercial carrier that would arrive in Dubai and require a complex Customs clearance procedure, or via Canadian Forces service flight directly into Camp Mirage in the UAE. Shipments ranged in size from a few boxes to several pallets.



Photo: Internet

The old castle at the port of Fujairah in the United Arab Emirates.

FLS headquarters was in Camp Mirage. The camp was 45 minutes to Jebel Ali, 30 minutes to the Dubai airport, 30 minutes to Dubai and 1 hour and 45 minutes to the port of Fujairah (UAE). It was a small camp, but it was able to accommodate the influx of 20 personnel for the 3½ months that the team was in the region. The camp's infrastructure was satisfactory to accommodate and feed personnel as well as provide technology support. It also had excess capacity to accommodate transients entering and leaving theatre from the task group. The camp was also ideal for the morale and welfare of CF personnel as it housed a small gym, welfare phones, commercial internet, as well as a mini theatre and access to Canadian Forces Radio and Television (CFRT).

It was not practical to store spare parts in the open air at Camp Mirage, where they would be exposed to high heat, high humidity and constant blowing sand. This meant that a warehouse had to be leased in Jebel Ali, the port where the task group ships would visit in order to conduct their rest and maintenance periods (RAMPs). Access to the warehouse was restricted to forward logistics team members, and port access was restricted to people with authority to enter. Not only was the warehouse used to store goods shipped from Canada, it was also used to store locally procured items that the logistics personnel purchased on behalf of the units. It also served as a holding location for the Canadian Forces Personnel Support Agency (CFPSA) Show Tour sound equipment and return stores. Stores were generally held in the warehouse for up to 10 days while awaiting the opportunity to deliver them to vessels either at the next port of call or via a launch. A launch meant a delivery at sea, in which a small vessel was used to carry rations and spare parts (up to 25 pallets) from the launch point (normally Fujairah (UAE)) to a pre-determined rendezvous point at sea.

Customs clearance procedures produced some of the biggest challenges in the host state for the task group. UAE government offices close for the weekend on Thursday early afternoon and re-open on Sunday. In order to get goods to clear Customs and be available for delivery to ships or to be stored in the FLS warehouse, paperwork had to be submitted to Customs by Tuesday afternoon or Wednesday morning at the latest. Otherwise, it would be after the weekend before the goods would be released to the navy. A complex process was put in place to expedite clearances to a 24-36 hour period. The Canadian Defence Attaché (CDA) office in Abu Dhabi provided support to the FLS efforts to clear shipments as expeditiously as possible. The challenge with the CDA office was that it had very limited resources available to assist, so could only help by faxing clearance forms and shipment



Photo: Cpl Robert LeBlanc, Formation Imaging Services, Halifax, NS

Alexis MacIsaac performs as part of the CF Show Tour which performed for the crew members of HMCS *Charlottetown* in Abu Dhabi in March 2008.

details to the Customs Officers of the host state. This was a critical step in the process as the host state would only communicate with the Canadian Embassy or CDA personnel. Fortunately, a Canadian Operations Support Command (CANOSCOM) intermediate staging team (IST) was located in Fujairah concurrently with *Operation Altair* and was forwarding equipment and vehicles from Canada to Afghanistan and vice versa. The IST placed a clerk at the Canadian Embassy in Abu Dhabi who had expertise in processing Customs clearance requests and this streamlined the process, ensuring goods arriving from Canada cleared Customs quickly and the equipment could continue its route to Afghanistan. This clerk was employed in Abu Dhabi until early July 2008 and was able to assist the forward logistics team with shipments for the task group as well. After the clerk had been transferred, the team occasionally deployed personnel to Abu Dhabi to continue the smooth clearance process.

Each of the three ships participating in this rotation of *Operation Altair* conducted a 10-day rest and maintenance period in Jebel Ali. This was quickly established as the ideal port for rest and especially maintenance because of the access to trades people and their ability to perform many maintenance and repairs so that the task group could carry on with the mission. The forward logistics team had two engineering experts, a marine systems engineer and a combat systems engineer. They were instrumental in successful maintenance periods as they provided an expert review of the Statements of Work. Further, they had established a working relationship with many of the contractors carrying out the work. This relationship enabled the FLS engineers to clarify the requirements of the vessel before arrival so that there would be no confusion and the work could be performed to specifications. Additionally, they conducted quality control inspections and ensured the work was in accordance with the contract.

During the rest and maintenance periods, CFPSA had arranged for show tours to entertain the sailors. Because of a heightened threat level in the region at the time, safety was a greater concern than usual. Neither ships' organiz-

ers nor CFPSA were in a position where they could locate and coordinate a venue for the show. This meant that forward logistics staff conducted reconnaissance visits in the vicinity and secured a venue that was not only an ideal location for a small concert, but also a locale with sufficient security. By the end of the deployment, three shows had been conducted for nearly 1,000 Canadian sailors in the UAE desert. FLS staff carried out all logistical support for the show tour including securing accommodations for the performers, performer ground transportation, ship personnel transportation, and storage, delivery, set up, tear down and return transportation to Canada of sound equipment.

Although the task group units were operating under the command of CTF 150, they were normally operating independent of each other – that is, they were patrolling different areas of the region as directed by the Commander of CTF 150. They infrequently came alongside ports in the Gulf region and therefore required re-provisioning at sea. The forward logistics personnel were essential in coordinating these replenishments at sea, liaising directly with the ships, ration chandlers and the company providing the transportation of launches to the rendezvous point. Because timing was critical to the CTF 150 units, the FLS team made sure that rations arrived on time and launches would be loaded in time to meet the ships, often early in the morning because of the extreme heat in the region and the adverse effect the sun had on fresh rations. Rendezvous timings were regularly before 0900, approximately 15 miles offshore, meaning launches had to leave Fujairah by 0630. Launches were loaded at 0400 in 30 degree temperatures by contracted agents and FLS staff. FLS personnel always accompanied a launch to act as a sentry for the rations and supplies and met with ships' Logistics Officers to review any additional logistical issues.

One other key function performed by the FLS was transient personnel management. Transients are defined as any sailors either joining a ship mid-deployment or being repatriated for compassionate, administrative, or disciplinary reasons. Transients also include personnel arriving from Canada to conduct technical assistance visits. In every instance, the forward logistics team coordinated pick up or drop off at the airport, commercial accommodations (if required), transportation to the ship, and passage through Customs/Immigration. Technical assistance visits involved large groups during the maintenance periods as teams from the Fleet Maintenance Facilities (Cape Breton/Cape Scott) flew into theatre to perform specialized essential maintenance. Throughout the deployment, over 450 personnel were moved from one

place to another – and the FLS team was there for every one.

This capability was an indispensable one. It is very helpful – particularly for young sailors joining their unit for the first time – to have a Canadian naval representative at the airport to ensure they reach their final destination on time. In one instance, a Petty Officer had to be repatriated to Victoria for compassionate reasons while operating off the southern coast of Oman. Fortunately, a UK ship within the task group was able to transport him by helicopter to Salalah, Oman. The forward logistics team sent two members to Salalah within eight hours of being notified of the situation. The two FLS members arrived about two hours before the distraught sailor, and



An aircraft technician from 8 Air Maintenance Squadron in Trenton marshals a CC-150 Polaris at Camp Mirage.



HMCS *Iroquois* passes a mosque just after entering the Suez Canal in the early morning of 26 September 2008. The ship is on its way back home after being deployed on *Operation Altair* in the Arabian Sea.

met him as he disembarked the helicopter. They then took control of him, facilitated a phone call to his family, and escorted him back to the Dubai airport, from where they had arranged a flight for his trip home.

The addition of the fourth ship to the task group was particularly challenging for the FLS team. The team was tasked to support yet another unit with only one additional person. HMCS *Ville de Quebec* joined the task group in early August 2008 and was to conduct escort duties in support of the World Food Program. The challenge for the logistics team to support this vessel was that she would not be operating in the same region. The other three vessels were, for the most part, conducting operations in the seas near Oman, UAE and Djibouti. *Ville de Quebec* was to conduct escort duties much further south, off the coast of Kenya and Somalia. This meant re-provisioning and refueling from the port of Mombasa in Kenya. The FLS team organized a small detachment to support *Ville de Quebec*. A reconnaissance mission 10 days prior to the first expected port visit revealed that Mombasa could quite capably host the ship and provide the essentials, including fresh produce, bread and dairy products. Security was adequate and most typical port services, while costly, were available. Mombasa was a suitable port to aid in a vessel sustaining operations in that region.

Conclusions

The inclusion of a forward logistics team to any major deployment will remain critical to the successful accomplishment of the mission. Working with governments, agencies and contractors outside of North America is far more effective when done in person. This allows the Canadian Navy to communicate personally with relevant people in order to stress the importance of requirements and to foster a better appreciation for logistical support. Engagement of the forward logistics team to act on behalf of ships expedites jetty assignment, improves port services and increases the likelihood of successful port visits. Without logistics experts there ahead of time arranging matters, accomplishing the goals of replenishing fuel, rations and spares as well as recharging the crew's batteries by facilitating a well-deserved rest period is far more difficult. 🍷

Lieutenant-Commander Dave Colbourne is a Logistics Officer currently working as Staff Officer Naval Supply Operations at Allied Maritime Command Headquarters Northwood in the United Kingdom. He has completed tours as Supply Officer in HMCS Preserver and Charlottetown.

Searching the Future: New Technologies on the Screen

Janet Thorsteinson

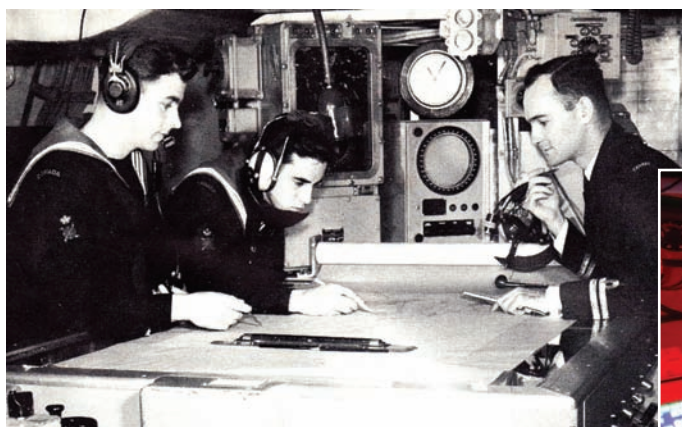
Throughout the spring and summer of 1798, Admiral Horatio Nelson searched desperately for the French fleet he knew was in the Mediterranean. The French revolution's rising man, General Napoleon Bonaparte and his army were somewhere between France and Africa, and threatened England's supremacy in the east. Human intelligence had failed Nelson. As he wrote at the time, he relied solely on his Royal Navy frigates to locate the enemy and communicate that intelligence to his flagship.¹ According to Robert Gardiner, "[i]n one of his most famous outbursts, Nelson claimed that if he were to die at that moment 'want of frigates' would be found stamped on his heart and the sentiment might have applied at any time during the campaign."²

Nelson eventually found and defeated the French at the Battle of the Nile, but the example is illustrative. Until about a century ago, patrol vessels were both radar and radio for naval commanders, locating and identifying the enemy, and relaying messages by flag signal across vast stretches of ocean. In today's terms, they were Nelson's C4ISR – command, control, communications, computers, intelligence, surveillance and reconnaissance. Today, naval commanders rely on digitized information from an array of platforms to gather and process information, coordinate action across formations and direct weapons and counter-measures. In a recent presentation George Galdorisi at the US Navy's SPAWAR Systems Center Pacific and his team emphasized the growing importance of C4ISR. He argued that:

Of all the technological advances nations and navies have embraced, compelling evidence suggests that command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) technologies have advanced more rapidly than other technologies. Once generally categorized as 'enablers' of other technologies, sensors, systems and weapons, C4ISR technologies themselves are now viewed as weapons – often as the weapon of choice.³

With the announcement in June 2010 of the National Shipbuilding Procurement Strategy, Canada is moving closer to a 21st century fleet – new support vessels, Arctic patrol ships and as many as 15 Canadian Surface Combatants to replace destroyers and frigates.⁴ Attention is now focused on the selection of the shipyards where they will be built, but significant lasting value for the Canadian economy resides with the electronic systems that will equip the new ships. This is an opportunity for Canada to consolidate its past achievements and build a marine electronics industry for the future.

A 2006 Defence Research and Development Canada (DRDC) working paper noted that Canadian Forces are already using networks for operations and information sharing but that "serious shortfalls remain, with different operational concepts, information exchange requirements and levels of technical sophistication resulting in diverse approaches to command, operational doctrine and use of networks in the various operational environments." The result, according to DRDC, limits the ability to exchange digital information. As well, there is "no coherent and coordinated approach for information management, exploitation and sharing within the department to link



The Operations Rooms of HMCS Kootenay in the 1960s (top) and HMCS Athabaskan (right) in February 2009.



Photos: DND

operational commanders and staffs with required enterprise administrative support.”⁵

If network-enabled operations are the challenge, construction of a new Canadian fleet is the navy’s opportunity. Some of Canada’s recent successes in naval operations owe a great deal to a previous investment in earlier C4ISR technologies. As Richard Gimblett points out in his study of *Operation Apollo*, the Canadian Navy’s networked operations’ capability allowed Canada to play a leading role in the Persian Gulf between 2001 and 2003. Gimblett notes that the Canadian Navy was a ‘force multiplier’ and acted as a liaison in C4ISR between the US Navy and other coalition navies. He also notes, however, that it will be a challenge to keep up with the pace set by the US Navy.⁶

Canada has traditionally acted with other states and the Canadian Military Doctrine, issued by the Chief of Defence Staff in 2009, notes that working with other states to achieve common interests “has increasingly become the modus operandi of the international community in the 21st century,”⁷ and that Canada will continue to work with other states. Canadian doctrine states that coalition partners should be brought in during the planning process in order to solve interoperability problems, particularly as related to C4ISR systems.

It is clear that if Canada is to carry its weight in coalition operations, interoperability is key. Canadian military doctrine sets out four elements of interoperability – technical, training, doctrinal and procedural. In a naval formation, without the first, the others are either ineffective or irrelevant. Up until now, Canada’s navy has set a high standard for interoperability. But if we don’t invest, we won’t be able to keep up. According to J.L. Granatstein,

The new navy ... must maintain its ability to send task groups abroad to serve independently or jointly with our friends. Presently, the Navy can lead allied task groups because of its high-level of training and command and control skills and because our destroyers have command and control suites. Taking ships out of service in the next few years will make this role all but impossible; the new fleet, the new expanded fleet, will let us do this once more.⁸

In its Reports on Plans and Priorities for 2009-2010, the Department of National Defence stated that the Canada First Defence Strategy provided the department with “an unprecedented opportunity” to help government capture the economic benefits of military spending and deliver economic rewards. The report says that “[t]his will benefit the Canadian economy through the development of world class Canadian technology and will also provide



HMCS *Ottawa* in company with USS *Boxer*, flagship of the 5th Expeditionary Strike Group in the Persian Gulf during *Operation Altair* in November 2006.

Photo: Combat Camera

the Canadian military with state-of-the-art, sustainable capabilities.”⁹

Many of the technical advances which are necessary for network-enabled operations could come from Canadian industry. DND and the Canadian Forces should encourage, develop and exploit these. But we must also recognize that as a small country Canada may not be able to excel in every sector. In its December 2009 report on military procurement, the Canadian Association of Defence and Security Industries wrote that “Canada should identify key industrial capabilities (those with strategic interest or a clear, sustainable technological or equivalent business advantage), and support them in acquisition and life-cycle support programs.”¹⁰

C4ISR technology will be a key component of Canada’s new naval vessels. With foresight, it could constitute an important part of a defence industrial strategy as well. 🍷

Notes

1. John Keegan, *Intelligence in War: Knowledge of the Enemy from Napoleon to Al-Qaeda* (New York: Knopf, 2003), p. 59.
2. Robert Gardiner, *Frigates of the Napoleonic Wars* (Annapolis: Naval Institute Press, 2006), p. 158.
3. Captain (N) George Galdorisi (USN, retired) et al., “Using C4ISR Technologies to ‘Network’ the Global Maritime Partnership,” paper presented at the Maritime Forces Pacific, Maritime Security Challenges Conference 2010, available at http://www.navy.forces.gc.ca/navy_images/public_media/george_galdorisi_paper.pdf.
4. “Government of Canada announces National Shipbuilding Procurement Strategy,” 3 June 2010, available at <http://news.gc.ca/web/article-eng.do?crtr.sjlD=&mthd=advSrch&crtr.mnthndV1=12&nid=537299>.
5. Sandy Babcock, Directorate Science and Technology (Policy), “Network Enabled Operations,” Working Paper, A DND/CF Concept Paper and Roadmap for Network Enabled Operations, Defence R&D Canada, Technical Report, DRDC TR 2006-001.
6. Richard H. Gimblett, “Command of Coalition Operations in a Multi-cultural Environment: A Canadian Naval Niche? The Case Study of Operation Apollo,” 2006, Canadian Forces Leadership Institute.
7. DND, “Canadian Military Doctrine,” Joint Doctrine Branch, Canadian Forces Experimentation Centre, CFJP 01, available at <http://www.cfd-cdf.forces.gc.ca/sites/page-eng.asp?page=3391>.
8. “Full Comment,” *National Post* online, 20 July 2010, available at <http://network.nationalpost.com/np/blogs/fullcomment/archive/2008/06/20/j-l-granatstein-canada-needs-a-navy-that-can-do-the-job.aspx>.
9. Treasury Board of Canada, “Reports on Plans and Priorities for 2009-2010, National Defence,” available at <http://www.tbs-sct.gc.ca/rpp/2009-2010/inst/dnd/dnd02-eng.asp>.
10. Canadian Association of Defence and Security Industries, “Canada’s Defence Industry: A Vital Partner Supporting Canada’s Economic and National Interests,” December 2009, available at https://www.defence-andsecurity.ca/UserFiles/File/IE/Military_Procurement_Main_Report_March_09_2010.pdf.

After over 30 years in the public service, Janet Thorsteinson became Vice-President Government Relations at the Canadian Association of Defence and Security Industries (CADSI).



Making Waves

Balance is a Matter of Perspective

Luciano

Following his stint as commander of NATO forces in Afghanistan, and prior to his retirement from the British Army, General Sir Richard Dannat levelled a number of broadsides at his political masters. He argued – publicly, no less – that the UK defence budget was “unbalanced” and that too many programs did not have a khaki hue. This short-changing of the army, he said, was inhibiting the conduct of operations in Afghanistan and unduly endangering the lives of British squaddies.

To read Commodore (ret’d) Eric Lerhe’s article, “Future Canadian Security Challenges and Some Responses” (CNR, Vol. 5, No. 4 (Winter 2010)) is to see Dannat’s complaint turned on its head. According to Lerhe, it is the Canadian Army that has sucked up the lion’s share of resources, threatening the “balanced, multi-role, and combat-capable” force that is apparently crucial to Canada’s security. He quotes the Chief of the Land Staff, Lieutenant-General Andrew Leslie, as saying that the Afghan mission is the template for the future, and makes the spurious conclusion that a significant land contribution to a complex operation will have a deleterious effect on the Canadian Forces (CF).

One wonders if the article was intended in part to convey an underlying frustration that our proud navy has been under-capitalized in recent years. If so, I share those sentiments. How nice it would have been to mark the navy’s centennial with a new class of (joint support) ships entering service. But the good commodore goes too far in his denigration of the status quo. Leaving aside whether the article is little more than cap-badge trade unionism, there are at least four fallacies in his arguments.

First, there seems to be no consensus on what a ‘balanced’ force looks like, or whether significant internal re-allocation of the defence budget would result in a mix of capabilities that is any more in tune with demand than today. Just as ‘balance’ is difficult to quantify, ‘imbalance’ is very much in the eye of the beholder, and is not necessarily the result of one service’s success in getting the politicians to re-capitalize it. If it is, perhaps Lerhe should train his rhetorical guns on the air force too, as it has been the recipient of several new (and expensive) aircraft fleets in recent years.

Second, given that the future is distinctly indistinct, perhaps General Leslie has it right. Perhaps ‘hybrid’ warfare is indeed the way of the future. But even if he is

correct in his prognostications, was he speaking for the CF as a whole? His statement might have been intended to convey an opinion on where the army should position itself on the conflict spectrum in order to address tomorrow’s (terrestrial) threats. I am sure that he would have no objections to his naval counterparts positioning themselves where they thought best, and seeking the resources to bring it about.



Checking for improvised explosive devices in the village of Haji Baba, Afghanistan.

Third, even if we accept that the land force – by virtue of being so heavily and visibly engaged internationally – has captured political and financial attention, this is not as insidious as Lerhe suggests. Faced with a crisis, a government will inevitably call upon those parts of the CF that it feels are of greatest utility at a given time. For the last several years that happens to have been the land force (although all services have been operational to varying degrees). We could well see a day in which another crisis compels the navy to assume a more prominent role than at present. (Haiti, anyone?) Should this come to pass, will retired army officers be justified in their perceptions that the maritime element has been promoted at everyone else’s expense? Surely not.

Finally, it is unreasonable for Lerhe to suggest placing an arbitrary limit on the CF’s manpower contribution to ISAF for the conflict in Afghanistan (1,000). The driving factor should be what effect the government of Canada wishes to have. To assign a number without reference to the task(s) at hand is to put the cart before the horse. Afghanistan is a national and international priority. It calls for a CF-wide, whole-of-government effort and should not be viewed in service-centric terms, let alone as a threat to the well-being of the navy. If the deployed battle group is to be repatriated, let it happen because the army is tired or because the mission objectives have changed – not because another service feels unloved. 🍷

Will the Canadian Navy Respond in the Gulf of Guinea?

Dave Mugridge

While NATO pursues a less than successful conventional naval campaign to counter Somali piracy, many maritime security experts are suggesting conditions in the Gulf of Guinea have reached a crisis point. Here the mix of failing states, organized crime and a lack of maritime enforcement has produced a cocktail of piracy, narco-terrorism, violent insurgencies and trafficking of weapons and people. West African regional security is fragile at best and is arguably getting worse. If last year's coup in Guinea Bissau made the level of volatility too high even for Colombian drug barons, isn't it time we did something about it?



The Canadian task group with HMNZS Te Mana attached: a 'multi-mission' capability with inherent and proven flexibility that some now believe redundant.

Many governments in West Africa fail to offer a counterweight to those who spread crime and disorder on the oceans. Foreign governments do little and local constabulary forces lack the operational capability to patrol effectively. Does this mean that the case for capacity-building (development) and military influence (diplomacy) has been proved? Sadly no, once again our fixation with expensive multi-mission platforms and lack of appropriate constabulary platforms precludes effective support beyond a brief ship or task group visit. Surely the stage is now set for the Canadian Navy to undertake a mission which develops the capacity of these fledgling navies in a manner similar to the work undertaken by the Canadian Army in Afghanistan?

West Africa matters to Canada. It possesses large, exploitable, strategically important natural resources which are not dependent upon choke-point transits for delivery to North America. The region produces 5.4 million barrels

of oil per day, and it contains 50.4 billion barrels of proven reserves. Nigeria now supplies 10% of US imported oil, and is the world's eighth largest oil exporter. Without some attention to the area, the unholy alliance between narco-terrorists and corrupt governments will further develop smuggling networks, and the region's rampant political instability could lead to vicious local insurgencies. Even Nigeria, the region's powerhouse economy and most populous state, is but a stone's throw away from collapse as it faces insurgency in the Niger Delta and sectarian violence between Christians and Muslims. Add to this widespread disease, corruption and extreme poverty and we have a powder keg of global proportions.

Unfortunately, the situation in the Gulf of Guinea receives far less media attention than the situation off Somalia. Lack of media attention does not, however, mean lack of maritime problems. Maritime disorder affects all areas in West Africa. For example, some international companies are reconsidering their oil operations in Nigerian waters which means that this maritime disorder is reducing the potential of one Africa's most promising countries. This year alone the Nigerian Navy has received over 100 reports of pirate attacks on ships in its waters.

Maritime criminal activity in the Gulf of Guinea is diverse and pervasive. Piracy and robbery are now so well established as to represent a considerable issue for Nigeria, Cameroon and Angola. West African pirate methods are different from their Somali brethren – they are not usually well coordinated, the acts are committed in 'a window of opportunity' manner and the attacks are focused upon robbery of the crew and cargo, as opposed to ransom of the ship and crew. The attacks may be fewer than occurring on the other side of the continent, but they are significant, and they are increasing.

Other equally damaging forms of organized crime fuel maritime insecurity in the region. For instance, illegal fishing by Asian and European vessels in the Gulf of Guinea has cost these poor countries more than USD \$350 million in lost annual revenue. This mirrors the situation off Somalia in the 1990s, and this industrial poaching diminishes fish stocks, denies the local population a stable food source and destroys the local economy.

Another form of organized crime in West Africa is the drug trade. There is now a criminal super-highway ('Highway 10') that unites Colombian cocaine with African illegal immigrants, weapons and diamonds smuggling. This super-highway is useful for terrorists and criminals



alike. The majority of Europe's cocaine is transported from Latin America by sea to West Africa, where it is then shipped north to Europe along the coastline. European authorities claim that 60% of the cocaine in European markets (estimated at \$1.8 billion in 2007) passed through the Gulf of Guinea. As well, these routes undoubtedly are attractive to terrorists wishing to travel from North Africa to European targets.

The mass theft of oil is another particularly lucrative activity for organized criminal gangs. Oil theft is now a common practice and is believed to cost the region some \$3 billion each year. Nigeria is the hardest hit by illegal bunkering which, according to some experts, costs the country as much as 100,000 barrels daily.

Given the regional maritime insecurity, it is disappointing that local navies exist in a general state of decline and operational ineffectiveness. In this region national armies hold much greater political sway than navies. None of the region's many conflicts had a maritime dimension and there is a land-based focus on defence spending, training and equipment procurement. Table 1 illustrates the difference between African navies and their army counterparts, Canada is shown for illustrative purposes.

Table 1. West African Armies versus Navies

Country	Army	Navy
Nigeria	62,000	8,000
Cote d'Ivoire	6,500	900
Equatorial Guinea	1,100	120
Gambia	800	70
Canada	34,775	11,025

Source: IISS, *the Military Balance*, 2010.

Here is a clear example of a problem that affects the international community and demands a coherent, coordinated and comprehensive response. Unfortunately, Western states face scant resources and unwillingness to commit to this type of long-term capacity-building project. Some Western navies patrol the region and deliver training – the US Navy for example, conducts relatively small-scale efforts to train personnel and deliver improved maritime domain awareness. But these efforts are not enough. The Royal Navy's presence is sporadic at best and the French Navy's posture smacks of neo-colonialism. The level of


capacity-building required to reduce the activities of terrorists and criminals is not great and certainly does not require the latest in naval technology. In the long term these efforts should be seen as a 'spend to save' measure because they will address crime and terrorism before they have a chance to grow any further.

The issue of maritime security was discussed at the 2009 Chiefs of European Navies (CHENS) meeting where the strategic importance of the Gulf of Guinea was re-emphasized. At this meeting a Maritime Cooperation with Africa Working Group under French leadership was established to explore capacity-building possibilities and to make suggestions on how to increase regional stability and maritime security. But while West Africa burns (literally), no action is taken. Perhaps Canada could demonstrate forward thinking to Europeans and adopt a stance which is not just chit chat?

Despite the paucity of available platforms Canada leads the world in a comprehensive approach to security issues and could teach what it practices. Lest we forget, the Canadian Navy is a small under-funded navy, constructed around a conventional task group force generation and employment model which has to look to the Canada First Defence Strategy for its mission sets. So West Africa does not exactly leap off the page as a mission, but neither did Somalia. Currently there are 30 states participating in the maritime fox hunt in the Gulf of Aden and Indian Ocean. Instead of policing Somalia, why couldn't Canada lead a small-scale constabulary task force and training team made up of



A less than successful NATO naval campaign? HMCS Winnipeg on anti-piracy operations in the Gulf of Aden in April 2009 escorting the Swedish ship Hoburgen.



representatives from the 17 government agencies that play a role in maritime security in Canada? With its bilingual staff, integrated approach to maritime security, absence of colonial baggage, and excellent reputation for peacekeeping, Canada is uniquely placed among the G8 states to deliver the spirit of the navy's strategic concept.

Instability and maritime disorder in West Africa will continue unless there is focused investment in both manpower and resources by outside states or organizations. Events in Afghanistan and Somalia illustrate the dangers that come from failed states. While an African solution is preferable, this can't be achieved without Western assistance. If we were to learn something from Somalia and Afghanistan, we would help guide the people of the Gulf of Guinea towards a more secure and stable future. Unless someone helps, organized crime and corruption will sow the seeds of the next regional disaster, and today's bargain-price capacity-building will be replaced by tomorrow's expensive, long-term humanitarian assistance or disaster relief.

The choice seems simple – small-scale constabulary training teams today or wholesale disaster relief tomorrow. 🇨🇦

Safe Navigation in the Arctic

Hermes

When the cruise ship *Clipper Adventurer* and the tanker *MV Nanny* grounded in Arctic waters about a week apart this summer, attention was drawn, again, to the stark fact that the Arctic can be a hostile maritime frontier. The incidents also served to remind those who venture into Canada's northern waters that if something goes wrong, help is usually several days away. Based on media commentaries, the incidents also made it clear that public knowledge of Arctic issues generally is very poor. Not only did the incidents highlight the difficulties faced by mariners in using those waters but also raised some tough questions about their future safe use.

It is quite obvious that the Arctic ice is receding and that Arctic waters are going to be used to a far greater extent than at any time in recent history. Providing for safe navigation in a way that also protects the fragile Arctic environment will be an expensive undertaking. The work has started but only progresses at a snail's pace. One of the reasons for the apparent lack of urgency is that far too many people do not understand the complexity of the task of making the Arctic waters safe for general navigation or the consequences of not doing so.

Why is the knowledge level so low? First, few Canadians have sailed Arctic waters or have any intention of doing so.

Second, all too often the Arctic is 'out of sight, out of mind' and only draws attention when something happens. And third, most people see Arctic issues as primarily political, usually having something to do with sovereignty, and thus of little direct concern to them. This point is tempered somewhat by concerns over the impact of climate change on the Arctic environment and on native wildlife.

Public knowledge is only as good as the information made available, which today is scant. But what else should we expect from a politically-charged issue – for that is what the Arctic has become – covered by a poorly-informed media relying on a small group of experts many of whom have their own agendas. Because of this, Arctic issues tend to be victims of two opposing forces: lack of consistent political priority; and the media headline syndrome.

If we are to take Arctic issues seriously, and there are many issues besides those of safe navigation, then we need a new public education initiative. Such an initiative, I suggest, has to be launched by non-political organizations without ties to special interest groups. Only in this way can there be education without bias. Perhaps this is a role for the *Canadian Naval Review*.

From the maritime perspective, the way to start is by addressing a series of key questions, all of which are based on the assumption that the Arctic ice is receding thereby opening up a large part of Canada's northern waters to navigation and exploitation (mainly fishing and the search for new sources of oil and gas). Another assumption is that Arctic waters are not yet safe for the anticipated increase in use.

So, what are the questions? Not in any order of priority because they are all interrelated, they are:

1. Is a vessel traffic management system needed now and in the future?
2. How long will it take to chart Arctic waters to the level necessary to permit safe navigation with or without a pilot?
3. Are the provisions of the *Arctic Waters Pollution Prevention Act* adequate for the projected increase in Arctic shipping?
4. Can uncharted and environmentally sensitive waters be closed to shipping?
5. If so, how should this be enforced?
6. What organizations and resources need to be readily available to respond to marine disasters and other incidents in Arctic waters?
7. How long will it take to put them in place?



8. How can the inevitable quest for ocean resources (oil, gas, minerals and fish) in Arctic waters be best controlled?

These are not simple questions. Flippant answers such as “a long time!” or “with great difficulty!” are not acceptable, not only because of the linkage between the various activities but also because of the need to move ahead quickly in making Arctic waters safe for navigation.

Although the government has made a start in addressing some of the Arctic navigation and safety issues, there is concern that the rate at which it is dealing with the issues is not compatible with the rate of change in the use of the Arctic waters. This is a scenario for a real disaster.

In many ways, the government dodged a bullet when *Clipper Adventurer* and *MV Nanny* grounded because no harm occurred as a result of either incident. It was indeed lucky that *Clipper Adventurer* did not suffer the same fate as *MV Explorer* which was holed and then sank in Antarctic waters in November 2007. It was also fortunate that *MV Nanny* did not cause a major oil spill.

Will we be so lucky next time? There will be a next time. Perhaps we should look at the two recent groundings as a wake-up call. 🇨🇦

A Few Comments on CNR

Stephen Knowles

As a regular and avid reader of the *Canadian Naval Review* since the beginning I would like to congratulate you for the excellence and timeliness of your publication. It should be a ‘must read’ not only in defence and security circles in this country but by decision-makers generally, most of whom reside and work in centres far from any coast. More than the Australians, to whom we are frequently compared, we are a ‘continental’ country in that most of our large cities and centres of decision are inland or at least *upriver* whereas major urban centres in Australia – with the exception of the capital, Canberra – are ports and even Canberra is an easy drive to Sydney. For reasons far more subtle than this the challenge facing those seeking to focus Canadians on the maritime component of their identity is correspondingly greater. In summary the *Canadian Naval Review* is a key instrument for presenting the maritime dimension of our national

interest and security both along our littoral regions and around the world to Canadian policy-makers.

Drawing its contributors from beyond the strictly naval community is appropriate and adds to the credibility of the publication, even if occasionally there are instances of a lack of familiarity with some of the subtleties of naval linguistic usage on the part of some writers. For example in the Winter 2010 issue we find in the article “The Naval Centennial and Canada’s Shipbuilders” that the first ship in the *St. Laurent*-class was “launched” in 1955. In fact of course *St. Laurent* was *commissioned* in 1955, having been laid down in 1950 and launched in 1951. Later in the same issue Colonel John Boileau mentions that the seven-ship *St. Laurent*-class “entered service” between 1955 and 1957. He could have written “were commissioned” but perhaps for the layman such as myself the concept of “entering service” may be easier to grasp.

Turning to the centennial issue and the article “Milestones in Canadian Naval History,” I won’t quibble about the typo of leaving out the word ‘Treaty’ in reference to the founding North Atlantic Treaty Organization (NATO) in 1949. However I would draw your attention to the entry for the year 1962. In fact, *Assiniboine* was not in ‘commission’ during the Cuban Missile Crisis but was undergoing conversion to the DDH configuration in Montreal. She was recommissioned in late July 1963 and arrived in Halifax in September of that year. I know this because shortly after her arrival, with considerable fanfare and interest from our very impressive fleet of those days, your assistant editor Doug Thomas and yours truly, then students in Truro, Nova Scotia, and officers in the local sea cadet corps, spent a Saturday afternoon aboard.

Finally, let me add my support to Doug Thomas’ call to save HMCS *Fraser*. Those who served postwar and won the Cold War deserve this memorial. The DDHs became the only expression of naval aviation after the demise of *Bonaventure*. As unification transferred the navy’s air assets to the air force, I would suggest that those who have worn air force blue at sea or in support of the helicopter air detachments are now tasked with maintaining our naval aviation heritage and therefore have a stake in preserving *Fraser*. As well, the country needs to be able to see this brilliant example of Canadian design, innovation and technological prowess in the postwar years.

Keep up the good work. 🇨🇦



Comment on “Tradition, ‘Branding’ and the Future of the Canadian Navy”

Captain (N) Hugues Létourneau

When I was President of HMCS *Donnacona*’s Wardroom in the late 1980s, I quietly changed the name of our ‘Trafalgar Mess Dinner’ to ‘Annual Mess Dinner.’ When a member asked me why, I replied somewhat flippantly that as a francophone, it wasn’t exactly clear to me why I should be celebrating a defeat. Now I know full well that in 1805, residents in this neck of the woods – including francophones – were part of the British Empire, but what I really meant was that there was no Royal Canadian Navy (RCN) in 1805; in fact, there wasn’t even a Canada as we know it, so why rush to emulate the British?

For this reason, I don’t agree with everything Dr. Hollo-way proposes in his entertaining and readable article (“Tradition, ‘Branding’ and the Future of the Canadian Navy,” Vol. 6, No. 2 (Summer 2010)). A Canadian naval ensign? Sure, why not? Doesn’t bother me. But on his other points, well, I just don’t see the point. Yes, the RCN proudly sailed in World War Two and in Korea under the White Ensign. But these were largely *Canadian* initiatives, and we quite fittingly celebrate them. But Trafalgar? And let’s not forget how Canadian sailors had to fight to get something as simple as a maple leaf on our funnels. Let’s not forget that our Royal Navy-inspired attitudes led to all those ‘incidents’ (none dared call them mutinies) that led to the Mainguy Report and better conditions that reflected Canadian rather than British realities.

My point is that people, things and institutions change. Today, when we talk about ‘complementarity’ with our NATO allies, we mean the Americans much more than the British. Most Canadians today are not of British origin, and appearing to rush headlong backwards into executive curls and the name ‘Royal’ leaves many people indifferent, which is why, I believe, reactions to this in senior naval circles are lukewarm at best.

Like almost everyone in the navy, I was glad to chuck the green uniform in 1986-87 and finally wear a naval one. But in my opinion, unification and green uniforms had one good, lasting effect: they probably ended for all time those phoney, plummy British accents. 🍷

Wearing Naval Swords

Lieutenant-Commander Gene C. Fedderly

According to the Canadian Forces Manual of Drill and Ceremonial, the sword is one of the traditional badges of rank for those who hold Her Majesty’s commission and is worn as a ceremonial weapon by officers. In former years,

it was common practice for senior naval officers to wear a sword for almost all ceremonial occasions and this continued well into the 1980s. Unfortunately in recent years, a trend has developed whereby the wearing of swords has generally been eschewed other than for officers in guards of honour. It is understandable that in these times when officers are not required to possess their own swords, many think it an unreasonable expense for a ceremonial item that may be worn infrequently, and this may be a contributing factor to why their wear has tended to be actively avoided. That being said, considerable numbers of the Commonwealth 1827 naval officer pattern swords are kept in small arms stowage for loan.

I have seen an encouraging reversal of this lamentable trend in recent months. Flag and other senior officers have worn swords for the ceremony greeting HRH The Prince of Wales in Esquimalt last fall, the Navy Day parades on either coast and most recently for the Halifax Fleet Review in the presence of Her Majesty the Queen. Hopefully, this is not just special treatment for royalty and the centennial year, and we are returning to a time when officers will more frequently wear this traditional ceremonial weapon on the numerous occasions when they are appropriate. The fact that many officers have purchased the fine naval centennial sword may provide further impetus.

With that in mind, it is important to note that there are some definite differences in the naval custom of wearing swords than in the other services. Detailed instructions can be found in the Manual of Ceremony for HMC Ships.

Regrettably, one cannot always rely upon parade staffs to have this necessary knowledge since many of our drill instructors who are trained in sword drill have learned the army fashion and are unfamiliar with naval practice. I have observed this leading to many unfortunate situations such as seeing naval officers wearing their belts over their jackets or holding their scabbards while marching with sword drawn, etc. It behooves all naval officers to be familiar with the guidelines so that they are ready to conduct themselves in a manner in keeping with naval custom when called upon to carry this traditional symbol of an officer’s authority. 🍷

Note from the Editor

Thank you to readers who have pointed out an embarrassing mistake in the Summer issue of *CNR*. In the caption for the cover photo, the Queen was referred to as Her Royal Highness. This is incorrect. It should be Her Majesty. I hope we will be forgiven for this error.

Plain Talk: JSS Adrift in a Strategic Black Hole

Sharon Hobson

Is the announcement of a new \$2.6 billion project to acquire two Joint Support Ships good news or bad news for the navy?

The plan is to replace the navy's two auxiliary-oiler-replenishment (AOR) ships with two Joint Support Ships (JSS) – and possibly a third – the primary role of which will be to support the navy's task groups. The government announcement said the new ships will “also provide a home base for the maintenance and operation of helicopters, a limited sealift capability, and logistics support to forces deployed ashore.” This is not what was in the original plan.

In the 1990s, with the end of the Cold War and the change to a multi-polar world with more regional conflicts, the government of Prime Minister Jean Chretien laid out a plan for multi-purpose combat-capable forces. For the navy planners, this directed them to look closely at a future in which joint and combined operations would play a key role.

In the late 1990s, the navy was working on a project for an afloat logistics and sealift capability. This project called for three or four 35,000 tonne ships, each able to carry 8,000 to 10,000 tonnes of fuel, 500 tonnes of JP 5 aviation fuel, 300 tonnes of ammunition and 230 tonnes of potable water. It was to have 2,500 lane metres of deck space and a container system, and be able to carry four maritime helicopters, with an elevator system to move the helicopters between the hangar deck and the cargo deck. It was to be able to support a joint force headquarters of 75 people, and it needed to be able to operate independent of a jetty, using either a lighterage system or a well deck.

This amalgamation of capabilities was supported by the short-lived government of Paul Martin which, in its April 2005 “International Policy Statement,” charged the army, navy and air force with becoming better integrated, interoperable with other government departments as well as allies, and more “responsive by enhancing their ability to act quickly in the event of crises,” arriving on scene faster whether at home or abroad.¹ A month later the navy published a follow-on to its 2001 *Leadmark* policy paper which fleshed out the government's strategic direction.



Artist's impressions of the new and very versatile Dutch 28,000 tonne Joint Support Ship.

This is what *Securing Canada's Ocean Frontiers* had to say about support ships:

Canada needs support ships because our ocean areas are vast and the Navy must be able to operate in remote ocean areas that are located far away from Canadian port facilities. Support vessels let us make the most out of our fleet, enabling the Navy to keep its ships at sea and on patrol, instead of in port and re-supplying. Internationally, the distances involved in transoceanic passages, combined with the difficulties and risks inherent in relying upon foreign nations to re-supply a nation's warships overseas, make seagoing support ships essential to any internationally deployable joint CF force. Support ships give Canada independence....



HMCS *Preserver* in the Halifax Shipyard dry dock in July 2010. She will not last forever and needs to be replaced soon.

Additionally, the Navy must look to expand this capacity. As an enabler of Joint CF operations abroad, the Navy must also develop capabilities to support CF joint operations by: expanding its capacity to host a deployable joint forces headquarters, and expanding its medical and materiel support capacities to provide logistics and personnel support to forces operating ashore.²

But by 2006, when the JSS project was announced, the original plan had shrunk. The ships would now be 28,000 tonnes, the number of lane metres of deck space had been reduced to 1,500, and the need to operate independently of a jetty was eliminated. However, most of the other capabilities remained. The ships were scheduled for delivery between 2012 and 2016.

In May 2008, the Stephen Harper government produced a new defence White Paper, the “Canada First Defence Strategy.” It provides a general outline for “a modern, well-trained and well-equipped military with the core capabilities and flexibility to successfully address both conventional and asymmetric threats,”³ but it does not define the navy’s specific role or its priorities.

The government cancelled the JSS project in August 2008, ruling that the proposals by the two teams selected to compete for the contract did not meet the criteria of three ships for \$2.1 billion. Now, two years later, the government has approved a project for just two ships at a cost of \$2.6 billion with first delivery not due until 2017. Moreover, there is no high-level requirement for any sealift (previously viewed as essential), there are no longer any stern or side ramps, and the number of personnel to be accommodated has been reduced from 320 to 250. With a crew size of 165, not including the helicopter detachment (probably about 50), there will not be many bunks available to provide rest and recuperation facilities, to augment medical personnel or to accommodate a joint task force headquarters. (However, the role appears to have become a low priority, as the Statement of Requirements (SoR) calls for the provision of ‘space and weight only’ for a JTFHQ, no fitted equipment or wiring.) In addition, despite the threat assessment which includes expected speed and range improvements in anti-ship weapons, an

electronic support measures (ESM) system is not required, and the electronic countermeasures (ECM) system will be a stand-alone system, not integrated into the command and control system.

Not only will each ship have less capability than previously envisioned, there will likely only be two of them. The 2006 SoR argued that three was the minimum necessary to meet the requirements, but now the navy is saying it can get by with two.

Reducing the number of ships from three to two will mean the government has to accept a high level of risk that a capable ship will only be available for operations 65-70% of the time. So for one-third of the times when the navy needs to support a task group being sent to far-flung regions of the globe or to provide aid in the event of a disaster, there will be no support ship available. The navy, the allies, the destitute, will have to do without.

The big question is why this has been the chosen course. Was it because the government no longer sees the need for anything more than an AOR+? And if that is the case, what is it that has changed in the strategic environment over the last four years that has caused this revision in thinking? Or was the JSS decision made solely on the basis of cost? And if that is so, what was the trade-off in terms of security and influence that made such a decision acceptable?

So there are several questions that the JSS decision raises. What naval capabilities does the government want and why? Where does the JSS fit into this vision? The ships that are now being acquired are significantly different from the previous plans, and there is no government documentation to account for this change. (The navy is preparing its own strategy document, “Horizon 2050,” but given the government’s lack of direction, it will be interesting to read the navy’s rationale for whatever plans it describes.)

The good news is that the project is finally moving. The bad news is that the ships are not as capable as previously planned. The worse news is that the navy appears to have lost the strategic argument for three support ships. But that’s not surprising given that it’s hard to argue for capabilities if the navy doesn’t know what the government wants. 🍷

Notes

1. Department of Foreign Affairs and International Trade, *A Role of Pride and Influence in the World: Defence*, International Policy Statement, 2005, p. 11.
2. Department of National Defence, Canadian Navy, *Securing Canada’s Ocean Frontiers: Charting the Course from Leadmark*, May 2005, p. 27.
3. Department of National Defence, “Canada First Defence Strategy”, May 2008, p. 7.

Sharon Hobson is an Ottawa-based defence analyst and Canadian correspondent for *Jane’s Defence Weekly*.

The View from the West: The Interoperable Navy: Networking at Sea

Christian Bedford
Captain George Galdorisi (Retired)
Dr. Stephanie Hsieh

Perhaps the most significant feature of the post-Cold War world has been its interconnectedness. Globalization, the catch-all phrase for this phenomenon, has reduced the virtual distance between borders through a range of evolving technologies. Despite these achievements, the fact remains that geographically we remain thousands of miles apart. Although this distance may not affect a video-conference between New York and Shanghai, for navies this distance matters.

The world's oceans have always posed challenges to policy-makers and naval planners alike. Gone are the days when navies had fleets of hundreds of vessels: at the end of the Second World War, Canada had 434 ships,¹ making it one of the largest navies in the world. Today, reduced fleet sizes, new threats and the volume of ocean-borne trade have increased the importance of partnerships in the naval realm. Acknowledging this in 2005, then-Chief of Naval Operations Admiral Mike Mullen spoke of his vision for a "1,000-Ship Navy," saying:

As we combine our advantages, I envision a thousand-ship navy ... made up of the best capabilities of all freedom-loving navies of the world.... This thousand-ship navy would integrate the capabilities of the maritime services to create a fully interoperable force, an international city at sea.²

Since Admiral Mullen's speech, the 1,000-Ship Navy concept has evolved into the Global Maritime Partnership (GMP) that has grown into a new norm of international cooperation among navies. This concept is particularly valuable as a maritime security practice in the Asia-Pacific region, where the complex geography, overlapping maritime claims and heavily armed states provide for a multitude of security concerns.

Ensuring that partnerships at sea are effective depends on navies training together, proper doctrine and policies, as well as on the technologies that make effective communications possible. Navies of today, especially the navies of the Commonwealth and the United States, rely on a suite of technologies that support command, control, communications, computers, intelligence, surveillance and reconnaissance



Photo: U.S. Navy, Mass Communication Specialist 3rd Class Kyle D. Gahlau

Navy ships from the United States, Australia, Canada and South Korea steam in formation during a Rim of the Pacific 2008 exercise off the coast of the Hawaiian Islands.

(C4ISR). C4ISR technologies provide navies with the capability to conduct what military scholar Dr. Norman Friedman calls "picture based warfare" which is "based on using a more-or-less real-time picture of what is happening."³

The earliest use of existing communications technologies to build a picture of the battlespace was in 1904 when First Sea Lord Admiral John Fisher used radio communications to learn of movements of enemy fleets. Navies now rely on communications and information technologies to build their common operating picture and share it within their fleets.

While the 'sharing' would appear one of the simplest steps in crafting the GMP, it is in fact increasingly challenging for many navies who wish to be 'plugged in' to such partnerships. One of the most obvious impediments to deepening cooperation among navies is the technological barriers that exist among would-be partners. Many Commonwealth countries have worked together in the naval realm for decades, and have acquired technologies and practices which allow them to communicate seamlessly with each other and the US Navy. Often these navies choose what kit they will buy based on shared requirements, paying special attention to interoperability and on staying at the cutting-edge of new naval technologies. For

other navies, however, which may be focused on regional issues and green-water operations, fielding the latest C4ISR technologies comes at a cost that is simply too high to bear.

Priorities are rightly set at maintaining existing hulls and incorporating newer vessels when possible. To acquire and deploy the newest communications technology is likely a bridge too far when fuel, provisions and ammunition costs are at the forefront. This reality creates a technology gap, where some countries field C4ISR technologies that are commercial-off-the-shelf, and others use gear that is custom-designed and highly secure.

The issue of 'co-evolution' is an important one because for Commonwealth navies determined to work together with other navies as global maritime partners, a cooperative arrangement regarding technology development is crucial.⁴ This implies early and frequent cooperation and collaboration at the grassroots level by scientists and engineers of Commonwealth navies as well as other prospective global maritime partners to come up with technical solutions for networking problems.

Government defence laboratories in the Commonwealth states and in the United States are ideally positioned to lead the effort to co-evolve C4ISR capabilities to enable their navies to network effectively at sea. There are many reasons why these defence laboratories should lead this effort, and collectively they strongly argue for increased reliance on Defence Research and Development Canada (DRDC) laboratories and their Commonwealth and American sister laboratories to lead this important effort.

First and foremost is the wealth of talent in these laboratories. Government defence professionals have been at the forefront of developing today's C4ISR systems and thus have the talent and the pedigree to lead this effort in the future. Second, these government defence laboratories are not motivated by profit margins or meeting stockholder expectations, so they serve as 'honest brokers' in tailoring solutions to the navies they support.

The mandate for government defence laboratories to lead the development of C4ISR capabilities for their respective navies and help co-evolve these systems for the AUSCANZUKUS states is strong. Canada and its allies face common challenges and threats, and have a history of working together to solve them. It is obviously beneficial to develop technology together – for purposes of cost burden-sharing and interoperability to address these challenges and threats. It is important to examine just how these government defence laboratories spread across five states and three continents can work together effectively to ensure that their navies can network seamlessly.

The Way Ahead

Cooperative efforts such as The Technical Cooperation Program (TTCP)⁵ at the laboratory level and coalition exercises such as Trident Warrior support the mandate to develop common solutions to increase coalition interoperability. For instance, Trident Warrior 2010 brought together civilian C4ISR engineers and fleets from the United States, Australia, Canada, New Zealand, United Kingdom, Republic of Korea, France and Chile to conduct sea trials of developing technologies. Many technologies tested in Trident Warrior 2010 supported networks, coalition interoperability, cross-domain solutions and maritime domain awareness.

TTCP provides a forum for scientists and engineers at the laboratory level in Australia, Canada, New Zealand, United Kingdom and the United States to work together to address networking issues and find new ways to build robust and effective C4ISR technologies. TTCP has fielded two action groups over the past decade that have demonstrated how weaving C4ISR systems into a net ('netting') leads to better coalition interoperability. While a discussion of their findings is beyond the scope of this article, their work has produced quantitative data that supports the efforts of the participating states in building interoperable C4ISR technologies.

Building interoperable C4ISR systems is an important part of ensuring that Canada's navy and the navies of the international community are able to work together to secure the global commons. 🇨🇦

Notes

1. Canadian Navy Centennial "List of Facts," 2010, available at www.navy.forces.gc.ca/centennial/0/0-c_eng.asp?category=67.
2. "A Global Network of Nations for a Free and Secure Maritime Commons," *Report of the Proceedings of the 17th International Seapower Symposium*, 19-23 September 2005, available at www.nwc.navy.mil/cnws/marstrat/docs/library/ISS17web.pdf. See also George Galdorisi and Stephanie Hsieh, "Speaking the Same Language," *US Naval Institute Proceedings*, March 2008, pp. 56-60; and George Galdorisi, Stephanie Hsieh, Darren Sutton, "Naval Cooperation for the Future Force," *Headmark: Journal of the Australian Naval Institute*, No. 134 (December 2009), pp. 45-53, for a discussion of the origins of the GMP concept.
3. Norman Friedman, *Network-Centric Warfare: How Navies Learned to Fight Smarter through Three World Wars* (Annapolis, MD: Naval Institute Press, 2009), p. ix.
4. Gordan Van Hook, "How to Kill a Good Idea," *US Naval Institute Proceedings*, October 2007, p. 33. Captain Van Hook, drawing on his experience as a destroyer squadron commander, working with coalition partners, emphasized the importance of a cooperative approach to instantiating the global maritime partnership.
5. The Technical Cooperation Program, TTCP document DOC-SEC-3-2005, *A Beginner's Guide to the Technical Cooperation Program*, 1 September 2005, available at www.dtic.mil/ttcp. This document, published on TTCP's public website, is a concise explanation of TTCP's structure and purpose, as well as a useful capture of the purpose of other 'five-eyes' organizations.

Christian Bedford is a senior analyst in the Office of the Asia-Pacific Policy Advisor Maritime Forces Pacific Headquarters. Captain George Galdorisi (Retired) and Dr. Stephanie Hsieh are with the United States Navy at the Space and Naval Warfare Systems Center, Pacific.

Warship Developments: To Buy New or Used?

Doug Thomas

In the Summer 2008 (Vol. 4, No. 2) issue of *Canadian Naval Review*, this column discussed innovative ship acquisition concepts under the title “To Buy or Lease?” This article looks at the practice of buying naval vessels built in other countries, some with many years of use before changing hands and some brand new but built inexpensively in such countries as China or South Korea. This reminds me of an automotive article I read decades ago that debated whether it was better to buy a new economy car built in Eastern Europe or South Korea, or a used Honda Civic or Toyota Corolla for the same price.

There are many examples of ships being transferred with much service life left in the hulls. Opportunities for bargains have turned up after wars – most recently the Cold War – and after economic crises when armed forces are downsized. A navy that has benefited greatly from some wise and cost-effective purchases, in my opinion, is that of Chile. The entire frigate force of Chile is now composed of four ex-Dutch and four ex-British frigates, the newest of which was first commissioned in 1997. The Chilean fleet also includes a secondhand American Landing Ship Tank and replenishment vessel, an ex-Swedish minelayer now employed as a submarine depot ship, and a 50-year old Canadian Coast Guard icebreaker in use as an Arctic patrol and survey ship. All of these countries of origin build sound, sea-worthy vessels with long service lives.

Chile benefited from good timing, as the Dutch and British downsized their surface combatant forces at a time when the Chilean Navy needed to replace its fleet, and these relatively modern ships became available at a very reasonable cost. Among other advantages was that these ships were powered by gas turbines rather than steam turbines, and their ships’ companies were much smaller than those they replaced: a saving of over 1,400 officers and sailors compared with manning the previous eight ships. (Two ex-Chilean *Leander*-class frigates have been refurbished and sold to Ecuador, to replace its two older *Leanders*.)

Chile, one of the most effective of the South American navies, is not the only example of a country buying used ships. In Eastern Europe the Polish, Romanian and Bulgarian Navies have acquired ex-US, UK and Belgian frigates built to NATO specifications to replace ex-Soviet vessels. In the Far East, Indonesia and the Philippines have

been frequent purchasers of second-hand warships. In the past, and certainly after World War II, many countries purchased war-construction from allied states, including Canada, and indeed war reparations levied upon the Axis powers included surviving naval vessels.

During the Cold War, many non-aligned states were equipped with Soviet ships – Indonesia even acquired a *Sverdlov*-class cruiser – and India remains a principal client into the current era, with many of its most capable ships and submarines built and modernized in Russia. In the past several years, India has not been happy with the cost and quality being provided by Russia, and has looked elsewhere, particularly to France, for a new class



Photo: navaltechnology.com

The former HMS *Marlborough*, transferred to the Chilean Navy in 2008 with two other Type-23 frigates and now serving as *Almirante Condell*.



Photo: US Department of Defense

Knox-class frigate USS Kirk, sister ship to two frigates transferred to the Egyptian Navy.

of air-independent propulsion submarines. China is now becoming a supplier of warships to many states. At one time, pariah states such as North Korea and Albania were the only recipients of the products of Chinese shipyards, then seen as technologically rather 'agricultural' vessels. Now more wealthy states such as Egypt, Bangladesh and Thailand have become clients of China, sometimes specifying Western propulsion, electronic and weapons systems.

Egypt is an interesting example of a navy primarily composed of foreign-built and second-hand ships. Its 10 frigates come from the United States, China and Spain. Its *Romeo*-class submarines are Chinese-built but were updated with American electronic systems, torpedoes and Harpoon missiles. And its patrol forces are again a hodgepodge of American, British, Chinese and Russian origin. As many of these ships are somewhat elderly, I suspect cannibalization of some units of each class is likely in order to provide the parts necessary to keep the others running. Indeed, Egypt may present an example of what not to do when buying a second-hand fleet: an axiom may be 'try not to have too many countries of origin – if you do, buy a large supply of spare parts.'



Photo: DND

Two of the four Upholder-class submarines, renamed the Victoria-class, acquired by Canada from Britain to replace the Oberon-class submarines that the Canadian Navy used for some 30 years.

Although not a normal practice in Canada since World War II, as we have a policy of building warships domestically, we have procured second-hand ships on a few occasions in recent years. The first example that comes to mind is the procurement of two offshore supply vessels in 1988, and modifying them as auxiliary minesweepers for the Naval Reserve's then-new mine counter-measure (MCM) role. The intention was to provide capable interim vessels, pending the completion of the Maritime Coastal Defence Vessels.

The second example was the relatively cost-effective acquisition of the diesel-electric *Upholder*-class (now *Victoria*-class) submarines from the UK, complete with spares and a trainer, to replace our worn-out *Oberons*. The *Upholders* became available when the British government decided to sell them and concentrate on nuclear-powered submarines. In my opinion this was a good decision.



Photo: Royal Australian Navy

HMAS Sirius (formerly MT Delos) converted 2004-06 from a commercial product tanker to a fleet support ship to meet immediate operational requirements as quickly as possible.

The Chrétien government was unwilling to expend the billions of dollars necessary to build new submarines in Canada, and our submarine capability would have been lost if this initiative had not been taken. However, it took four years for the government to give the go-ahead and the submarines deteriorated during that time. This indecision from 1994 to 1998 led to subsequent delays and needless expense in bringing the *Victoria*-class back to full operational capability. My second axiom is: 'When presented with such a great opportunity to acquire an essential capability at a bargain price, don't dither!'

In conclusion, certainly there are risks in buying used naval vessels. However *if* the vessels are relatively new, well-built and well-maintained, *if* they can be readily integrated into the existing fleet, and *if* they have at least two decades of service life remaining, this may be a very cost-effective means to retain, or even acquire for the first time, needed national defence capabilities. 🇨🇦

Book Reviews

The Politics of Procurement: Military Acquisition in Canada and the Sea King Helicopter, by Aaron Plamondon, Vancouver: UBC Press, 2010, 205 pages (plus notes bibliography and index), ISBN 978-0-7748-1714-1

Reviewed by Gary Garnett and Dave Neil

Major Canadian defence programs have become increasingly complex. The cumbersome procurement process takes years, even decades. *The Politics of Procurement* is a groundbreaking case study of an acquisition process still underway. Author Aaron Plamondon's focus is political influence on defence procurement. He chose the replacement of the Sea King helicopter as his case study. The politically opportunistic and impetuous decision to turn a Canadian defence procurement into an election issue, the subsequent cancellation of this weapon system already in contract and the process to put the replacement back on track provides plenty of scope to speculate on intrigue, impropriety and flawed decision-making in government.

The initial chapter contains some historical examples of defence procurement that illustrate that such acquisitions have always had a political dimension. The book then delves into an account of the development of shipborne operations that will fascinate anyone with an interest in Canada's maritime aviation history. Plamondon then provides an insightful examination of how the Chretien Liberals misrepresented the facts of the New Shipborne Aircraft (NSA) project during the 1993 federal election campaign, and sacrificed the project for political gain. The consequences of the cancellation of the NSA contract following the election and the true costs to taxpayers, the aerospace industry and the Canadian economy are well explained.

The final chapters, which deal with the aftermath of the cancellation and the process that led to the procurement of the Sikorsky Cyclone, are far less satisfying. This part of the book fails to acknowledge the evolution of the post-Cold War force development environment in DND and the financial climate as the government moved to eliminate the deficit. The result is an incomplete assessment that lacks balance and unfairly implicates those involved in the requirements process of complicity in a government conspiracy engineered to avoid re-selection of the EH-101. Both of the reviewers were intimately involved in the requirements process and are named in the book.

Adapting to the new realities after the Cold War did not happen overnight. It took most of the 1990s to develop a process for defining requirements for new acquisitions. The capability-planning process was in use in 1997 and formally adopted in DND in 1999. At the same time, the Auditor-General directed the development of a set of scenarios describing the breadth of CF operations as a tool to push DND into the new paradigm. New acquisitions needed to be placed into these scenarios to determine what capabilities they needed to perform satisfactorily in each. The scenarios reflected post-Cold War operations from search and rescue to medium-intensity combat operations (the Gulf War) and peace support operations (the former Yugoslavia).

The Maritime Helicopter Project (MHP) was the first to be put through this new force development process. An examination of the Statement of Operational Requirement (SOR) for the cancelled EH-101 acquisition and the follow-on SOR approved in 1995 shows that they were developed in the earlier force development threat-based planning process. The critical requirement that led to the selection of the EH-101 was the need to counter Soviet cruise missile submarines in blue water. By the later 1990s, this threat had vanished, and trying to determine essential maritime helicopter attributes using a Cold War paradigm was totally irrelevant.

The process of developing an SOR that accurately reflected the needs of the maritime helicopter force in the post-Cold War era began in 1996. The MHP SOR was developed from a clean sheet of paper by applying the new force development approach rather than through a process of watering down or downgrading as Plamondon suggests. The commanders of both the air force and the navy endorsed the process and the product. The final document articulated a set of requirements that were very challenging for any helicopter, including the EH-101, to meet.

The timing of the helicopter project coincided with a huge funding reduction to DND in the mid- to late 1990s. The baseline reduction of 25% (33% adjusted for inflation) demanded that every program be subjected to intense scrutiny. Cabinet Ministers and Treasury Board officials needed to be convinced that the project was a priority and consumed minimal resources, or the project would never proceed. Ministers also needed clear explanations of capability requirements, as requirements drove costs. The judgement of Service Chiefs was no longer enough.

The book spends some time articulating the shortcomings of the weapon system ultimately chosen – the CH-148 Cyclone – and the challenges associated with bringing

it into service, but a similar treatment of the EH-101 is missing. While it is a fine helicopter, no mention is made of the EH-101 crashes experienced by the Royal Navy or the problems experienced by the CF with the CH-149 Cormorant, the search and rescue version of the EH-101. It seems easy to criticize the Cyclone as it is undergoing the integration and certification process, because problems inevitably arise in this phase of a project. The EH-101 would have needed to undergo a similar process. This process would also not have been without its challenges.

The Politics of Procurement is based on open-source documentation and interviews of individuals with an interest in the project but not those intimately involved in the requirements process. The book offers an interesting historical treatment of the development of shipborne helicopter operations in Canada and a valuable perspective on how the replacement of the Sea King helicopter became a casualty during the 1993 election campaign. Plamondon does an excellent job of illuminating the high costs of the Chretien government's cancellation of the project. However, his treatment of the follow-on project that resulted in the selection of the Sikorsky Cyclone contains gaps and lacks balance. It also fails to appreciate the impacts of a more sophisticated, post-Cold War force development process and deficit reduction measures on overall military acquisitions. Government procurements will always be influenced by politics, but this book fails to substantiate the author's contention that the MHP SOR was deliberately shaped to facilitate the government's preferred outcome rather than to reflect the needs of the CF. 🍷

Black Flag: The Surrender of Germany's U-Boat Forces, by Lawrence Paterson, Minneapolis: Zenith Press, 2009, 196 pages, \$37.50 (hardcover), ISBN 978-0-7603-3754-7

Reviewed Colonel P.J. Williams

There is a photo found in many books about the Battle of the Atlantic. It depicts a U-boat pulling up alongside a jetty in Wilhelmshaven, Germany, at war's end in 1945. A young boy watches from dockside. The crew members are deliberately avoiding the camera, and are all staring down at the deck, and in the various captions accompanying this photo are "crestfallen"¹ or are "in sullen grief."² *Black Flag: The Surrender of Germany's U-Boat Forces* tells the story of the events leading up to the scene depicted in this iconic photo (which, ironically, was not reproduced in this book) and what happened to the men and their boats afterward.

Lawrence Paterson is a well-established writer on the Battle of the Atlantic, and focuses mainly on the German perspective in what was the longest campaign of the war. As with his previous works, he has made extensive use of oral history provided by participants in the events described in this book. Appendices at the end of the book list the U-boats at sea (some 59 of them) when Admiral Karl Dönitz issued the order to cease fire. The appendices also include the surrender instructions, which among other things directed U-boats to surface and to fly a large black or blue flag by day, and to burn navigation lights at night.

The book is divided into several sections. These sections cover the actual surrender at sea, the surrender on land (in which some U-boat bases on the French Atlantic coast held out until the very end), the subsequent imprisonment of the crews by the Allies and the destruction of the U-boats in what became known as *Operation Deadlight*, the terms of which had been agreed upon by the Allies at war's end. The fate of each boat is briefly described.

Not all U-boats fell into Allied hands however. On 2 May 1945 within days of the German surrender, Admiral Dönitz issued the codeword for *Operation Regenbogen* (Rainbow), the scuttling of the German fleet, an order followed by some 217 U-boats.

Paterson has introduced new material into the book. He describes in some detail a German plan to mount missiles on U-boats, as there were lingering rumours at war's end of German plans to launch ballistic missiles from sea at Allied cities. In addition, he covers events surrounding a massacre of six Norwegian civilians by German sailors on 6 May 1945.

Given the key role the Royal Canadian Navy (RCN) played in the Atlantic campaign, I was rather hoping for a detailed account of the part the RCN played in these events, but given the author's British heritage, it is perhaps understandable that he did not include such an account. That said, Paterson does describe the surrender of U-889 to the Canadian escort group W6 off Flemish Cap on 10 May, as well as that of U-190, the working periscope of which can be viewed at the Crow's Nest in St. John's, Newfoundland. Canada also provided one of the escorts along with one each from the Royal Navy and US Navy, to the formal surrender ceremony of the U-boat to Admiral Sir Max Horton, Commander in Chief Western Approaches, at Loch Foyle, Scotland, on 14 May, 1945. As part of the division of the spoils, so to speak, at war's end, Canada did receive U-889, which was commissioned into the RCN for experimental purposes, before being transferred to the United States. U-190, which had sunk HMCS

Esquimalt, the last Canadian warship to be lost in the war, was taken to the same spot where she had sunk her quarry and was dispatched by rockets.

Paterson is a very good storyteller. He takes what could have been a very dull and technical event and makes it something more than a mere footnote to the Atlantic campaign. He tells the often very human story of what happened after the shooting stopped. One gets the impression that the author has somewhat of a soft spot for the U-boat crews, who in his words were “never fully defeated in battle until ordered to lay down their arms by their Commander in Chief.” One also wonders whether our veterans of the Battle of the Atlantic would hold the same view. Strongly recommended. 🍷

Notes

1. John Costello and Terry Hughes, *The Battle of the Atlantic* (London: Collins, 1977), p. 302.
2. Douglas Botting, *The U-Boats* (Amsterdam: Time-Life Books, 1979), p. 167.

Struggle for the Middle Sea: The Great Navies at War in the Mediterranean Theatre, 1940-1945, by Vincent P. O'Hara, Annapolis: Naval Institute Press, 2009, 324 pages, ISBN 978-1-59114-648-3

Reviewed by Dave Mugridge

Vincent O'Hara's timely addition to the accumulated works on the naval campaign in the Mediterranean and Red Sea during WWII tackles the subject with a fresh and controversial perspective. It is well researched and examines the conflict from the collective history of the main combatants: Royal Navy, Regia Marina, Marine Nationale, Kriegsmarine and United States Navy. For the student of wartime grand strategy it provides an excellent digest of why this theatre became vital ground for each of these naval powers. This book analyses the entire five-year campaign with an exhaustive coverage of the main engagements, taking the reader on an historical journey before reaching its unconventional but welcome re-analysis of the overall campaign.

The naval campaign in the Mediterranean was the most keenly fought of any in WWII and this book allows the reader to review the conflict as a whole rather examining it in its two dominant phases (1940-43) Anglo-Italian 'guerre de course' and (1943-44) Allied amphibious operations. The author covers the whole campaign and for the first time introduces the reader to French regional interests and the Kriegsmarine's successful asymmetric campaign in the face of overwhelming Allied strength. (Perhaps those who champion conventional fleet structures rather than balanced capability and employability should take note!)

This author is to be congratulated for overturning myths which emanate from wartime propaganda. We see new evidence of the Regia Marina's determined opposition to the Royal Navy and arguments that support the notion of the latter being bled white by a campaign which refused to follow a predictable path. If history is written by the victor it is certainly re-evaluated by historians like O'Hara, who can banish stereotypical conclusions with the stroke of a pen.

This readable tale is all the more compelling because of the value of its source material. The author has spared little effort to ensure his conclusions are based upon a solid and wide foundation of credible evidence. Just as he overturns wartime propaganda successfully so he also manages to shed new light on the flawed or human characters of the main protagonists – men like Admiral Andrew Cunningham, Admiral James Somerville and Admiral Angelo Iachino. Perhaps it is this re-evaluation that has proved so controversial in a Europe which is now depressingly familiar with its wartime history being rewritten by US historians and film-makers.

In short, I can recommend this book to CNR's readership. I feel that O'Hara's enduring contribution to naval history may well be to show future generations the value of re-engaging with the past and learning the valuable lessons of objectivity. Now we just need to convince today's strategists of this lesson. 🍷

Editor's Note

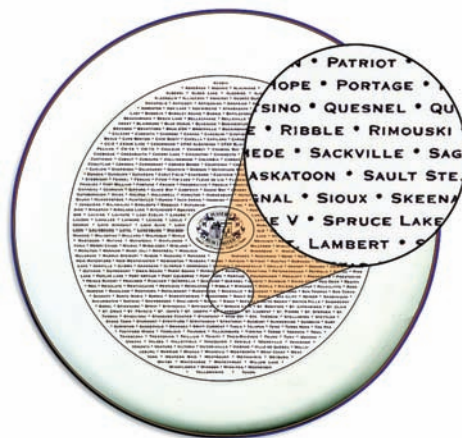
We would like to make a correction to the review of Brian Lavery's *The Royal Navy Officer's Pocket Book 1944* by Colonel P.J. Williams published in the Summer 2010 issue (Vol. 6, No. 2). In the review it was stated that “some 204,562 officers” passed through the gates of HMS King Alfred during the war. This figure is incorrect and actually represents the size of the Royal Navy at the outbreak of war in 1939. Thank you to a sharp-eyed reader for pointing out this incorrect statement. 🍷



HMCS *Huron* in the Persian Gulf in 1991 in pre-TRUMP configuration with additional self-protection systems needed for Operation Friction.

It's a Rum Business

Jacqui Good



Rum? In the middle of the day? Every day? This seems hard to believe. But for over 300 years, a daily 'tot' of rum was the lubricant that kept the Royal Navy running. Until 1740, sailors were awarded an astounding *pint* of rum a day, without water. Before and after battle, there would be a double tot. The rum was served out by the ship's Purser, corrupted to 'Pusser.' By 1824, sailors had to make do with a mere 2.5 ounces of rum served at high noon with great ceremony. They cried "Up Spirits!" as they downed their reward.

When the Royal Canadian Navy was formed in 1910, the rum tradition continued, even during wartime. The ceremony of the tot on a tiny corvette, careening over Atlantic waves, was obviously simplified. I'm told rum could become a medium of barter, a way to buy favours or pay back debts. You could offer a 'sipper,' a 'gulper' or 'sandy bottoms' (the dregs). I'm also informed that three sippers equal a gulper and three gulpers equal a tot.

Patrick Onions recalls his life onboard HMCS *Sackville* in his diary (entitled "My Life Aboard HMCS *Sackville*") posted on the Veterans Affairs Canada website. He remembers the tot of rum. He writes "while we were supposed to drink it in front of the officer, we got very adept at palming a shot glass of coke which we drank in place of the tot of rum." The sailor would then slink off to pour the rum into a bottle, accumulating enough for an upcoming party.

As the navy became more dependent on sophisticated equipment and alert technicians, the rum break became less feasible. In 1970 the British Admiralty abolished it. The Canadian Navy's own *Black Tot Day* came two years later.

There is a display case explaining the rum ritual aboard HMCS *Sackville*, Canada's Naval Memorial. And, for the 100th anniversary of the Canadian Navy, Pusser's Navy Rum has created a rum decanter featuring *Sackville* in the design. A portion of the purchase price benefits the trust which maintains Canada's last remaining corvette.

Charles Tobias, the man responsible for the revival of Pusser's Rum says,

Although I've lived in the British Virgin Islands for the past 30 years, I'm proud to say that I'm a Canadian by birth. Although I was only seven in 1940, I can still recall those early, grim days of World War II, and the major role that Canada and the RCN and the Merchant Navy played in the winning of the critical Battle of the North Atlantic on which the outcome of the war in Europe so much depended. And win it the RCN did! Remembering all these events as I do, we designed this decanter to try to capture some of that spirit. It's a tribute to all those who stood tall, and had the guts to go out in that big, cold, North Atlantic and the other oceans of the world, day after day, month after month, voyage after voyage, until the battle was won.

You can order the decanter and find out more about navy rum at www.pussers.com/decanter. There will also be some decanters for sale at the HMCS *Sackville* gift shop ((902) 427-2837). 🍹

Jacqui Good likes her rum mixed with ginger beer.



Announcing the Winners of the 2010 Essay Competitions

First Prize Bruce S. Oland Essay Competition

“Operating Within Limits: Canadian Maritime Forces and the Challenges of the Terrorist Era”

Julian Brown

Second Prize Bruce S. Oland Essay Competition

“Karma Chameleons? Re-evaluating the Legality of Deceptive Lighting under International Humanitarian Law”

Lieutenant (N) Mike Madden

Winner of the Canadian Naval Memorial Trust Essay Competition

“Bourassa, Laurier and the 1910 *Naval Service Act*: Canadian Identity and the Birth of a Navy”

Commander Martin Pelletier

Congratulations to the winners. And thank you to everyone who submitted essays to the competition. The essays were all interesting and judging was very difficult.

Stay tuned for details of the 2011 Essay Competitions. Details will be posted on the CNR website (www.naval.review.cfps.dal.ca) and will appear in the winter issue of CNR. Start writing!



If you want to maintain your connections with the naval community or make a difference for the Canadian Navy of the future, join the Naval Officers Association of Canada.

See www.noac-national.ca for more information.

Reflections on the Cold War Navy

