CANADIAN NAVAL REVIEW

VOLUME 1, NUMBER 4 (WINTER 2006)

Northern Deployments: Naval Operations in the Canadian North

Arctic Insights: Changing Our Notions of Canada's North

The Long Reach: The RCN and the Korean War

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Photo: MCpl Barber, DND Formation Imaging Atlantic.

*HMCS **Toronto** at speed during MARSIE operations in October 2005.*

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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, historical perspectives, procurement programs and operations of the Canadian Navy, and national security in general. This initiative brings together members of the Canadian defence and academic communities and is a component of the CFPS's Maritime Security Program.

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- provide a respected, arm's-length focal point for discussing a broad range of issues relating to navy professional development; and
- provide a forum for naval, academic and public discussion of all aspects of naval and maritime policy.

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HMCS ***Fredericton*** *westbound in the Northwest Passage on 30 August 2005. Photo: HMCS* ***Fredericton****.*

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Comments

Good Work with CNR

After my recent retirement, I have a little more time to read and was therefore delighted to receive the third issue of *Canadian Naval Review*. I have to say how pleased I am that the *Review* has turned out to be such a professional magazine. The articles are right on the money. I am like a kid in a candy store and have hopped all around the magazine after reading the editorial. I enjoyed the "Making Waves" article about OPVs, and totally agree we need OPVs for the "home game." But the author should stand by for heavy rolling as you can be sure some bureaucratic aardvark will take him to task for alleging that talk of an OPV will dilute the effort to get JSS or some activity the over-worked and under-loved warriors are pushing in the "bureaucratic feedlot."

I was most impressed with Sharon Hobson's article "Plain Talk." She's a keeper. We need more plain talking people, particularly professionals from the outside, telling us how absolutely stupid we look to the public when we engage them with bureaucratic, acronym-rich mumbo jumbo.

Keep up the good work and merci.

Yours aye.
Dave Sweeney

Photo: Centre for Foreign Policy Studies, Dalhousie University.

CNR Editor-in-Chief Peter Haydon (r) shown here presenting Captain (N) Dave Sweeney with a mounted copy of the cover of the first edition of CNR to mark his retirement from the Canadian Navy. Dave Sweeney played a vital role in developing CNR as the primary point of contact with the navy.

Bad Work with a Photo Caption

I am writing to comment on the photo caption included with Sharon Hobson's article "Plain Talk" (in Vol. 1, No. 3). The photo is captioned "General Hillier (left), Vice-Admiral MacLean (right) and a Canadian submariner." What the photo really depicts is the well-deserved award of the Second Clasp to the Canadian Forces Decoration to Chief Petty Officer Louis Gagnon who is currently the Technical CPO on the Commander Canadian Fleet Atlantic staff. His award justly recognizes 32 years of dedicated service to Canada. To depict CPO Gagnon as an anonymous submariner is an injustice, while the article is about the CDS's naval vision, the photo is not. It is about recognizing selfless service and dedication to Canada. The image is all about the man in the middle; as such he deserves at least equal billing to the others in the picture. I am convinced that the Canadian infantry officer and the Canadian naval officer also in the photo would want it that way too.

Major Mark E. Chapman, CD
423 (MH) Sqn / CANFLTLANT Air O

EDITOR'S REPLY

Major Chapman is quite right – we should have included the names of everyone in the photo. I apologise to Chief Petty Officer Gagnon for everyone at *CNR*. He deserves better treatment.

Dr. Ann Griffiths
Managing Editor
Canadian Naval Review

Upcoming Events

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2006 Maritime Security Conference, "Transformation and Technology: A Canadian Maritime Perspective," Halifax, 15-17 June 2006

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Editorial: Arctic Security

Are we really serious about Arctic security? Perhaps not to the extent now warranted.

One of the problems is that too few Canadians understand the Arctic or the issues that bear on Arctic security. In fact, most Canadians simply take it for granted as either "the land God gave to Cain" or as an area of no immediate concern to their daily lives. This ambivalence is understandable given that the Arctic only makes it into the news when something terrible goes wrong or when Canadian sovereignty is thought to be under threat.

The Arctic is a wonderful place; it is a storehouse of mineral wealth and of enormous oil and gas reserves. It is an environmental masterpiece of astonishing beauty, and it is home to many unique species of wildlife. It is virtually unpopulated. It is also a huge scientific research laboratory. That is the good news. The bad news is that the sparse population is migrating to quasi-urban centres, some of which are little better than slums. And, despite its limited population we are polluting the once pristine environment at a frightening rate.

Photo: DND Formation Imaging Atlantic, 2005.

*An Inukshuk outside Iqaluit with HMCS **Fredericton** in the background. These waters may well see greater use in the future, including a new port.*

Although the scientific data on global warming and assessments of the long-term implications on the Arctic are open to debate, it is clear that climatic changes are taking place and that the Arctic itself is changing. Predictions that the Northwest Passage will soon become a major transit route between the Pacific and Atlantic Oceans may be premature, but it is certain that the Arctic shipping season – normally about six weeks – is becoming longer. It is also clear that much of the Arctic coastline is becoming accessible for longer periods.

The Canadian government seems to pay little attention to the development of the North and the private sector has been left alone to exploit it for many years. Initiatives such as the mine at Nanasivik and extensive oil and gas operations tend to function outside the immediate government purview. The same is largely true for much of the small volume of Arctic shipping, particularly cruise ships engaged in adventure tourism. Northern waters are also becoming more frequent haunts for a range of Canadian and foreign fishing vessels in their quest for new catches. It is doubtful whether the government has any idea of who is using Arctic waters on any given day. The stance of the federal government has generally been that as long as sovereignty isn't being threatened and the provisions of the *Arctic Waters Pollution Prevention Act* are observed there is no reason to be concerned about who uses the waters. Such a policy is no longer realistic.

The Arctic only makes it onto the Canadian political agenda every 15 or so years when some perceived sovereignty crisis arises. First, it was the Alaska Highway, then North American air defence requirements of the early 1950s. These were followed by the 1969-70 voyages of the *Manhattan*, the 1985 transit of the Northwest Passage by the US Coast Guard ship *Polar Sea*, and more recently by the Hans Island incident. In each of these last three challenges the media, with the help of interest groups, built up the incident to a level beyond its true significance and essentially forced the government to respond with new policies.

The Arctic only makes it onto the Canadian political agenda every 15 or so years when some perceived sovereignty crisis arises.

It is hardly surprising that Canada's Arctic foreign and security policies have been primarily reactive, consisting of a token Arctic military command, a few extra military deployments, and the inevitable affirmations of sovereign rights, sprinkled with occasional initiatives to improve relationships with the circumpolar community outside Canada. In many ways this is an understandable approach. After all, it is easy for the region to be ignored – it tends to fall into the category of "out of sight, out of mind" – and thus not in need of continuous policy action. But such *laissez faire* policy-making cannot continue in the era of climate change, increasing use and greater communications access. The once-traditional isolation of the Arctic no longer exists and thus the region needs to be brought into the new security equation.

A number of major issues are coming together to demand that the Arctic be given a higher security priority. This edition of the *Canadian Naval Review* looks at the North from maritime and naval perspectives, and future editions will continue to examine the issues. To help understand the new imperatives, we need to ask ourselves a number of important questions.

First, "What are the new challenges to the Arctic; are they primarily security-based or are they broader, encompassing environmental and humanitarian issues?" The changes already taking place in the climate should make it clear that the region will see an increase in use for a range of reasons. The new accessibility will bring new environmental and social problems. The Arctic is sparsely populated now, and northern communities are not immune to security problems in a broad sense. Will greater resource exploitation create additional challenges to the already fragile Arctic society?

Second, "What are the implications of a bigger window for shipping in the Arctic?" Basic economic demand for resources and climate change will inevitably lead to greater requirements for shipping in those waters. New exploration and resource exploitation will demand higher delivery and re-supply operations that cannot be met by aircraft alone. Will this lead to requirements for new ports? Almost certainly, because the existing re-supply structure is barely able to meet present requirements. And if there is a new wave of economic development in the Arctic, the regional governments will almost certainly want to use it as an opportunity for social development. With more active shipping patterns come requirements for such necessary adjuncts as search and rescue, safe navigation, inspection, emergency repair, and so on. When should we start thinking about such things?

Third, we also need to ask whether Canada knows exactly who is using Arctic and northern waters and for

Photo: DND Formation Imaging Atlantic.

HMCS ***Fredericton*** *at the entrance to the Northwest Passage August 2005.*

Photo: Amanda Slaunwhite.

The entrance to the Northwest Passage.

what purpose. Shipping patterns have started to change already, and all the evidence points to further changes. A basic requirement of marine security is the development of a "recognized maritime picture" of what is happening in waters under national jurisdiction and in adjacent ocean areas. This is the first stage of the process by which sovereignty is upheld, security maintained, and real and potential challenges managed. In Canada, the information management structure is in place but the process for gathering reliable raw data on Arctic waters may not yet be equal to the task.

Fourth, do we have to know everything or is random sampling enough? This is a tough question because it requires that the politically acceptable level of risk to Arctic security be established. Is it acceptable, for instance, to have foreign ships landing people on remote Arctic shores without government permission? As remote as the area is, it is not inconceivable that a determined individual or group could travel through the region toward population centres in the south. If the Germans could put a remotely operated weather station on the Labrador coast in 1943, it would not be very difficult to do something like that again today. The problem is that despite any future population increase, Canadian Arctic and northern coastlines will remain largely uninhabited and thus unwatched.

This leads to the last question, "What is the best way of providing and managing an appropriate patrol, presence and response capability for the Arctic and other northern waters? This is a question far too large to be addressed in a single editorial. As readers of the *Canadian Naval Review* know, we have already joined the debate on the "home" versus "away" dichotomy now implicit in Canadian national security, and we suggest that this debate needs to be extended to draw in Arctic security.

Peter T. Haydon

The demands of sovereignty and security for the Government could become even more pressing as activity in the North continues to rise. The mining of diamonds, for example, is expanding the region's economy and spurring population growth. Air traffic over the high Arctic is increasing, and climate change could lead to more commercial vessel traffic in our northern waters. These developments will not result in the type of military threat to the North that we saw during the Cold War, but they could have long-term security implications. Although the primary responsibility for dealing with issues such as sovereignty and environmental protection, organized crime, and people and drug smuggling rests with other departments, the Canadian Forces will be affected in a number of ways. There will, for example, be a greater requirement for surveillance and control, as well as for search and rescue. Adversaries could be tempted to take advantage of new opportunities unless we are prepared to deal with asymmetric threats that are staged through the North.

From the April 2005 International Policy Statement, Defence Section, "A Role of Pride and Influence in the World," p. 17.

Northern Deployments: Naval Operations in the Canadian North

Lieutenant-Commander Ian Anderson

Photo: DND Formation Imaging Atlantic.

*HMCS **Goose Bay** at sea during Exercise Narwhal 04 in the summer of 2004.*

After a decade's hiatus, the Canadian Navy has increased its presence in the Canadian Arctic re-initiating activities that had been commonplace throughout the 1970s and 1980s. This re-engagement has coincided with recent national attention on a variety of northern matters ranging from the environment to the issue of sovereignty as seen in the dispute over Hans Island. The purpose of this article is not to delve into these larger issues; they are far better covered by others. Rather, my intent is to provide some context to our northern activities in the past, present and future. As the Senior Staff Officer for Domestic Operations for Maritime Forces Atlantic, I have been involved in the planning for our Northern Deployments (NORPLOYs) over the past several years and offer my comments and observations from this vantage point.

The Recent Past

In the 1970s and 1980s numerous Canadian ships conducted northern deployments. These include, for example, HMCS *Preserver* visiting Chesterfield Inlet in 1974, HMCS *Ottawa* visiting Coral Harbour in 1977, and HMCS *Cormorant* visiting Arctic Bay and Nanisivik in 1989. During its deployment, *Cormorant* undertook a variety of activities – from a visit to Grise Fiord, Canada's most northern Inuit community on the southern tip of Ellesmere Island, to dives in the company of Canadian Forces Auxiliary Vessel *Quest*, to HMS *Breadalbane*, the world's most northern known shipwreck at Beechy Island.

Cormorant's deployment in 1989 marked the end of routine trips to the north and the beginning of a period during which ships did not venture north of 60 degrees. While there continued to be occasions when ships and submarines were close to the ice edge, none of these were to the extreme latitudes of the NORPLOYS such as the final one conducted by *Cormorant*. What caused the reduction of northern operations? In large part, the lack of focus on northern activities during the period 1991 to 2001 was a result of events happening elsewhere in the world and the navy's attention being drawn in other directions.

*Villagers from Ivujuvik, Quebec, and sailors from HMCS **Goose Bay** on the beach in the summer of 2004 during Exercise Narwhal 04.*

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The first event was the Gulf War in 1991, which marked a significant change for deployments. Another reason was the end of the Cold War and the increase of more regional conflicts, such as Somalia and the former Yugoslavia. In both these examples, ships of the Canadian Navy were deployed in support of international objectives. In addition to this were other deployments away from our coastal waters, such as embargo operations off Haiti in 1993-1994, ongoing contributions to NATO's Standing Naval Force Atlantic and the transformation of the Canadian Navy from the old "Steamers" to the new *Halifax*-class frigates. Thus, northern patrols now had to compete with other requirements. In 1991, HMCS *Preserver*, following her deployment to the Persian Gulf, was tasked to undertake a NORPLOY. However, concerns about her single hull and adherence to Canadian environmental legislation such as the *Arctic Waters Pollution Prevention Act* and the *Arctic Shipping Pollution Prevention Regulations* led to the cancellation of this deployment. In addition to the various deployments detailed above, the navy, and the Canadian Forces (CF) in general, were also facing fiscal constraints.

As the new millennium commenced, however, there was increasing discussion about new factors that were expected to have an impact on the Canadian north and Canadian sovereignty, the foremost being climate change. The general opinion was that with warmer water temperatures, the northern passages would remain either ice free, or at least passable, for longer periods of time. This meant a greater likelihood of increased commercial traffic in the north with the potential use of the Northwest Passage. The navy, and the CF in general, were not blind to these developments and there were efforts commencing in 2000 to re-engage in the Arctic. Within MARLANT there were various proposals for a NORPLOY and at the CF strategic level the Director General of Strategic Planning produced an Arctic Capabilities Study in 2000 which reviewed current capabilities and limitations and looked at options to improve our footprint in the north.

While interest was growing within some circles for renewed northern activity, there remained numerous roadblocks. The first of these was the severe financial constraints faced by the CF which had a cascading effect on operations. More dramatic was the high operational tempo caused by the events of 11 September 2001 and the subsequent naval deployments which saw 14 of 17 warships and 96 per cent of naval personnel in seagoing billets deploy on *Operation Apollo*, Canada's contribution to the war on terrorism. Simply put, it was hard to

*HMCS **Glace Bay** and HMCS **Shawinigan** at anchor off Kanguqsujuaq, Nunavut, during Exercise Hudson Sentinel in the Summer 2005.*

Photo DND, Formation Imaging Atlantic, (August 2005)

*Iqaluit, with HMCS **Fredericton** at anchor in the background; this was as close to the town as she could get because the coastal waters are too shallow.*

find ships that could go north without having an impact on other operations. Nonetheless, during this period there were staff talks held between the surface operations planners from MARLANT and staff at Canadian Forces Northern Area (CFNA) to determine what might be accomplished in a joint exercise between these two operational commands in support of Arctic sovereignty operations.

It should be noted that while naval planners were overcoming a collective lack of knowledge on northern issues, the maritime air community was facing many of the same challenges.

The result of the staff talks was the development of a concept of operations to have two Maritime Coastal Defence Vessels (MCDVs) deploy on a short NORPLOY in the summer of 2002. There was some resistance to this plan because the MCDVs were scheduled to have Naval Officer trainees embarked and some were concerned the deployment would not deliver the specific training objectives. Additionally, since the navy had not operated in the north in over a decade, corporate knowledge had faded and a trip north really was a trip into the unknown. Planning began in earnest in January 2002 and, with a great deal of determination, a number of hurdles were overcome. It should be noted that while naval planners were overcoming a collective lack of knowledge on northern issues, the maritime air community was facing many of the same challenges. Like the navy, the air force had conducted limited flights to the north in the 1990s.

In January 2002, there were indications that the Danes planned a northern trip to the vicinity of Hans Island which provided some impetus for the planning that had begun. In addition to the planned deployment by the MCDVs, the maritime air community also commenced planning for northern air patrols which would extend further north than Davis Strait where the CP-140 Aurora long-range patrol aircraft routinely flew in support of the Department of Fisheries and Oceans for fisheries surveillance. As a sign that we were collectively beginning to pay serious attention to the northern portion of the MARLANT area of responsibility (AOR), *Trinity*, the East Coast's intelligence organization, was directed to forecast Arctic activity in order to better focus our planning and set priorities. This has since become part of the annual planning cycle.

HMCS *Goose Bay* and HMCS *Summerside* conducted a NORPLOY in August 2002. They visited Killinik and Iqaluit and supported rangers from the First Canadian Ranger Patrol Group (1 CRPG) with a patrol to Resolution Island at the southern approach to Frobisher Bay, Baffin Island. An important facet of the deployment was the cooperation with other federal government partners, most notably the Canadian Coast Guard which provided logistical support for fuelling. This foray into the Arctic was deemed a success and was the starting point for future deployments.

The next deployment came two years later in the summer of 2004 when HMCS *Montreal* deployed to Cumberland Sound and the Pangnirtung area for NARWHAL 04. NARWHAL 04 was a joint exercise commanded by

Photo: DND Formation Imaging Atlantic.

*CCGS **Henry Larson** and HMCS **Fredericton** at anchor off Clyde River, Nunavut in August 2005. Kangiqtugaapik (meaning "nice little inlet" to the Inuit) is on the eastern shore of Baffin Island in the shelter of Patricia Bay and by spectacular fiords that stretch all the way into the Barnes Icecap.*

Commander CFNA and saw Canadian air, land and maritime forces work together to respond to a fictitious event in which a satellite from a country not friendly to Canada fell out of orbit and landed on our territory. As was widely reported in the media, NARWHAL 04 was an eye-opening experience which clearly demonstrated how difficult it is to operate in northern climates. Concurrent with *Montreal*'s deployment, HMCS *Goose Bay* was conducting a patrol along the Labrador coast supporting 5 CRPG with community visits and its summer inspections of the early warning radar sites. Having completed its inspections ahead of schedule, *Goose Bay* proceeded northward to rendezvous with *Montreal* and together they crossed the Arctic Circle – the first time that a MCDV had ever crossed the Arctic Circle, and the first time in 15 years that a major warship had crossed the line in Canadian waters. (Other Canadian ships had crossed the Arctic Circle on NATO exercises, but off the coast of Norway, not Canada.)

The Present

As a result of the successes of 2002 and 2004, MARLANT's surface operations section, which has scheduling responsibility for the fleet, developed the FY 05/06 Operations Schedule with the assumption that a surface ship, or ships, would proceed northward in the summer of 2005. One plan was that a central part of the deployment would involve working with one of the Canadian Ranger Patrol Groups (CRPG). Initial contact with 1 CRPG (within the CFNA area of responsibility) and 2 CRPG (within the Land Forces Quebec area of responsibility) was made in late fall 2004 and received immediate interest.

Over the course of the next several months, MARLANT and the staffs of 1 and 2 CRPG began to consider both the patrol area and the activities that would occur throughout the deployment. As the Ranger patrol groups began to develop their plans and the communities that

they wanted to visit, it became clear that what was being considered was a NORPLOY into the heart of Hudson Bay, something that had not occurred in decades. The southernmost community on 2 CRPG's initial "wish list" was near the Belcher Islands, just north of the entrance to James Bay. The list for 1 CRPG included stops in communities along the south coast of Baffin Island, the most southern of which, Arviat, was only 200 nm from Churchill. Late in the summer of 2004, MARLANT received a letter from the Town of Churchill asking for a Canadian warship to visit in support of a visit in late October by the US Ambassador to Canada. On paper, then, the deployment involved a circumnavigation of Hudson Bay with a port visit of several days' duration in Churchill.

While it all sounded straightforward, there were several major planning hurdles that had to be overcome before a deployment could succeed. Of these, the central issue was that of fuel. As one can imagine, there are not a lot of gas stations for ships between St. John's and Churchill so logistical arrangements were more complicated than those associated with other ship deployments. Fuelling concerns were eventually set to rest when arrangements were made to take on fuel in Churchill.

As one can imagine, there are not a lot of gas stations for ships between St. John's and Churchill so logistical arrangements were complicated.

In the initial schedule for FY 05/06, one MCDV was identified for NORPLOY 05 (now called Hudson Sentinel). One MCDV travelling to such a remote area was not seen as desirable and subsequently an additional MCDV, no longer required for other naval training activities, was also assigned to the deployment. Two MCDVs allowed for mutual support and, depending upon circumstances once in Hudson Bay, allowed for the potential to cover a greater area. By the spring 2005, MARLANT operations and intelligence staffs, the two ships (HMCS *Glace Bay* and HMCS *Shawinigan*), the parent organization to the ships, the Fifth Maritime Operation Group (MOG5), and 1 and 2 CRPG staffs were conducting detailed planning and preparations. In addition, the Canadian Forces Recruiting Centre in Halifax worked with its First Nations Recruiter to identify a Halifax-based First Nations sailor to accompany the ships to talk to northern residents about potential careers in the Canadian Forces. Finally, the planners with the 1 Canadian Air Division Detachment in Halifax were working closely with MARLANT to coordinate northern summer patrols by CP-140 aircraft. At the beginning of June 2005, the Commander MARLANT, Rear-Admiral Dan McNeil, was given a final brief on Hudson Sentinel and authorized its execution.

I do not want to leave the impression that all this activity was taking place in a vacuum in Halifax and that the deployment was simply the result of a "good ideas club." Hudson Sentinel was planned and executed within a broad domestic and security context. In April 2004, the government of Canada released the National Security Plan (NSP) in which it outlined its security objectives and priorities. The navy was identified in the NSP as one of the key players in the marine security domain and has subsequently facilitated the implementation of the Marine Security Operations Centres (MSOC) in Halifax and Esquimalt and is in a support role for the Great Lakes MSOC. These centres, manned by several federal departments, are the eyes and ears of the government for our extended coastlines.

In April 2005, the Canadian government released its International Policy Statement which contained a specific section on defence. While the focus of the statement was on the international arena, there was also a clear recognition that what happened abroad could affect Canadians at home. Not long after the Defence Policy Statement the Chief of Maritime Staff, Vice-Admiral Bruce MacLean, released *Securing Canada's Ocean Frontiers, Charting the Course from Leadmark* which provided a naval focus to the themes contained in the early policy statements.[1] In the document, Admiral MacLean is clear that the defence of Canada is first among our priorities. He also says that we need to consider ourselves a three ocean navy which includes the Arctic, and must improve CF surveillance and presence in the north. Conducting that surveillance and presence was one of the primary objectives of Hudson Sentinel.

Hudson Sentinel could easily be the subject of a separate article but I will briefly outline the navy's accomplishments here. The deployment was five-and-a-half weeks long commencing at the beginning of August and concluding with the ships' return in mid-September. There were a number of successes. First, we showed a naval presence in an area that had not seen a grey hull in a considerable time. This point was brought home by elders in the northern Quebec community of Quaqtaq who commented that while foreign flagged cruise ships had

Photo: DND Formation Imaging Atlantic.

HMCS ***Fredericton*** *in the Northwest Passage, August 2005.*

visited their communities, they last recalled a Canadian warship visiting 30 years ago. Second, Hudson Sentinel was a joint operation in the sense that all three elements of the CF participated – the MCDVs, Aurora and Twin Otter aircraft and Rangers. Additionally, the deployment was a joint effort by three Operational Commands – MARLANT, Land Forces Quebec and Canadian Forces Northern Area. Finally, the deployment allowed for interagency operations with other federal partners. For the second part of the deployment, following the port visit to Churchill, Manitoba, the MCDVs embarked a RCMP NCO who conducted visits to Nunavut Division RCMP Detachments along western Hudson Bay and southern Baffin Island. And, while in the vicinity of Cape Dorset, the MCDVs participated in a search-and-rescue exercise with the Coast Guard ship *Radisson*.

Despite being the main focus of northern planning, Hudson Sentinel was not the only naval excursion to the Canadian north in 2005. Somewhat unexpectedly at the end of May during a meeting of the Eastern Canada Interdepartmental Marine Operations Committee (ECIMOC),[2] MARLANT was approached by a representative from the Department of Fisheries and Oceans (DFO) and asked if the navy would consider conducting a fisheries patrol in the vicinity of Davis Strait in August.[3] This request was welcome as the subject had been raised over the previous several years. While Aurora patrol aircraft routinely flew over the area with DFO officers onboard to observe activity, there had not been any actual inspections by DFO officers in a long time. Typically the sea time provided by the navy was used to conduct patrols on the Grand Banks in DFO's capacity as Northwest Atlantic Fisheries Organization (NAFO) inspectors. HMCS *Fredericton* was the ship scheduled for the August patrol and, as the details were being finalized for Hudson Sentinel, new planning commenced for this second northern patrol.

Like Hudson Sentinel the plan for the northern fisheries patrol was largely contingent upon the availability of fuel. Frigates consume significantly more fuel than MCDVs, even when they are in their most economical propulsion mode, and therefore the patrol area was either going to be limited by the amount of fuel embarked in St. John's or was contingent upon finding additional fuel in the north. There were two possible sources of fuel after leaving St. John's – one was taking fuel from the Coast Guard and then purchasing fuel from a commercial supplier to replace the fuel passed from the Coast Guard, and the other was embarking fuel at Nuuk, Greenland, through NATO refuelling agreements.

The inflammatory reporting on the patrol was particularly frustrating to MARLANT planners because it simply was not true.

In the end, both options were utilized because we had more in mind than simply staying in the area of the Davis Strait. DFO had determined in the weeks leading up to the deployment that some of the fishing vessels that they wanted to inspect were located further north along the Baffin coast. This meant that *Fredericton* needed to spend time first in the southern portion of the strait and then go north to locate these vessels. Also, for purposes of surveillance and presence, we did not want to pass up the opportunity to get as far north as we could and set as our goal reaching Pond Inlet. *Fredericton* did indeed

proceed twice to Nuuk and we were fortunate that the Canadian Coast Guard went to great lengths to adjust its programs to allow one of its ships, *Henry Larsen*, to meet *Fredericton* to transfer fuel.

I would like to point out one important fact about *Fredericton*'s deployment. As noted, we were approached by DFO to conduct this fisheries patrol two months prior to its execution. Unfortunately, there seems to have been an assumption that *Fredericton*'s patrol was tied to other northern issues.[4] The inflammatory reporting on the patrol was particularly frustrating to MARLANT planners because it simply was not true.

Fredericton's fisheries patrol also had its successes. First among these was patrolling waters off northern Baffin Island with a major warship after a considerable absence. *Fredericton* also ventured into the waters of Lancaster Sound after a short visit to Pond Inlet (the first since 1987) and made her presence known in a hail to a Russian-flagged Arctic cruise ship, *Akademik Ioffe*. In fact, the news of *Fredericton*'s presence was quickly passed among the fishing fleets in the Davis Strait area and the ship received the distinct sense that it was a welcome addition to the area. Second, DFO conducted its first fisheries patrol in the area with a frigate under the 1994 MOU and immediately discovered the utility of the patrol. One Canadian had never seen an inspector in over 10 years of fishing in the Arctic! DFO is now considering more frequent patrols to the Arctic.

The Future

One of the themes raised in this article is that infrastructure in the north capable of supporting naval operations is lacking. Specifically, easy access to fuel is especially problematic. The Coast Guard has been accommodating but has its own programs to achieve. Fuel is available in Nuuk, Greenland, but not easily in Iqaluit, at least not yet. This may change in the future as there are plans for a deepwater port project which could address some of these operating concerns.

Iqaluit is not the only northern community seeking to increase its maritime activity. Churchill is also looking to attract new business. In May 2005, the Churchill Gateway Development Corporation, a non-profit corporation, received $2 million in funding from the governments of Canada and Manitoba for marketing initiatives. Churchill offers an alternative route to ship products into the centre of the continent and with the potentially warmer waters as a result of global warming, vessels may enjoy ice-free access for longer periods of the summer season. As well, with increased marine activity, there could be an impetus for further economic development in the area.

What does this mean for future naval operations? In the short term, planning is currently underway for a deployment of ships to the north in the summer of 2006. Building on the lessons learned from the 2005 deployments, and in the context of the transformation currently taking place within the CF, the planning is a joint effort between the newly formed Joint Task Force Atlantic and Joint Task Force North.[5] In addition to a deployment of ships, aircraft and Rangers will once again work together to meet the surveillance and presence requirements for the north. The naval contribution to this effort is also mandated by the CMS capability plan for 2006.[6]

In the long term, there are a variety of ways that the CMS envisages naval activity in the north. This would include, for example, "incorporating improvements such as first-year ice capability in new warship designs; the smart use of new technologies, such as uninhabited aerial vehicles, satellites and radars in order to improve surveillance of our vast Arctic maritime region."[7] Notwithstanding the benefits that technology adds in terms of monitoring activity, the presence of a grey hull makes a difference. Getting ships into the Canadian north on a routine basis has taken on a renewed importance.

I would like to gratefully acknowledge the assistance of Captain (N) Larry Hickey, Commander Fifth Maritime Operations Group; Captain (N) Bruce Belliveau, Assistant Chief of Staff, Plans and Operations, Maritime Forces Atlantic; Commander Tom Aquanno, Deputy Chief of Staff, Surface Operations, Maritime Forces Atlantic; Commander John Newton, Commanding Officer, HMCS ***Fredericton****.*

Lieutenant-Commander Ian Anderson is a member of the MARLANT Headquarters Operations Staff.

Notes

1. Directorate of Maritime Strategy, *Securing Canada's Ocean Frontiers, Charting a Course from Leadmark*, Directorate of Maritime Strategy, NDHQ, Ottawa, May 2005.
2. ECIMOC membership is comprised of federal government departments who either operated federal fleets (navy and the Department of Fisheries and Oceans) or whose jurisdictions for the enforcement of various pieces of Canadian legislation extend to sea.
3. Under a 1994 Memorandum of Understanding between the Department of National Defence/Canadian Forces and the Department of Fisheries and Oceans, CF ships and aircraft provide assistance to DFO with its various programs.
4. *Ottawa Citizen*, "Frigate Sent to Bolster Sovereignty in the Arctic," 17 August 2005.
5. Joint Task Force Atlantic, the first of six new Canadian operational areas under the command of Canada Command, was stood up on 1 July 2005. It brings together MARLANT, LFAA and 1 Canadian Air Division Detachment Halifax under a new command and control structure. The remaining five areas will shortly undergo similar transformations. Joint Task Force North replaces CFNA.
6. MARCOM Capability Planning Guidance 2006 directs MARLANT and MARPAC to conduct, where possible, Arctic deployments in support of national sovereignty objectives.
7. Securing Canada's Ocean Frontiers, Charting a Course from Leadmark, Directorate of Maritime Strategy, NDHQ, Ottawa, May 2005, page 22.

Arctic Insights: Changing our Notions of Canada's North

Amanda Slaunwhite

When I was asked in August 2005 if I wanted to sail aboard HMCS *Fredericton* during its northern deployment to the Baffin region of the North Atlantic, my mind starting racing. As I packed my winter clothes in 35 degree weather, I began thinking of what I knew about the Arctic. Through my research on Canada's northern sovereignty and defence policy I had learned a lot about government policies, state positions and international law, but I had never really gained an understanding of what the Canadian north was. And, while I could engage in a lively discussion on Canada's claim to Arctic sovereignty, I did not have a comprehensive understanding of what, beyond natural resources, we were protecting in the north. I started wondering what is actually up there. I would begin to have answers to my questions when I left from Halifax on 18 August 2005. My trip with HMCS *Fredericton* would show me not only Canada's northern military operations, but also the lively culture and people of the Arctic that are a sharp contrast to the desolate backdrop of the barren northern landscape.

After a brief stop in St John's, Newfoundland, on 19 August for refuelling, HMCS *Fredericton* headed into the

Photo: HMCS **Fredericton.**

The author and Sub-Lieutenant Meghan Cleghorn of HMCS ***Fredericton*** *on the ship's bridge near the Greenland coast. This was the first of many icebergs encountered on the trip to the Northwest Passage.*

One of the more impressive icebergs ***Fredericton*** *encountered. This photo was taken in the Davis Strait.* *Photo: DND Formation Imaging Atlantic.*

Photo: DND Formation Imaging Atlantic.

HMCS ***Fredericton*** *off Nuuk, Greenland, in August 2005.*

North Atlantic to conduct the two goals of the trip – sovereignty protection and fisheries surveillance. Primarily at the mercy of the Department of Fisheries and Oceans officers, *Fredericton* sailed in Canadian and international fishing areas to monitor quotas, ensure regulation compliance, and observe fishers. We spent several days at sea monitoring and observing fishing activity, and this illustrated the complex nature of operations on the high seas. Frequent hailings of vessels from Newfoundland and Nova Scotia provided much humour and casual radio conversation. Many of these fishers were surprised to see a Canadian warship conducting fisheries operations. They livened up the bridge that had become too quiet after days of having no contact with land or vessels.

After conducting these fisheries operations, *Fredericton* visited several ports. Our first port of call, and only foreign port visit, was Nuuk, the capital of Greenland. Sailing into Nuuk harbour on 25 August, we were greeted with cold, damp and windy weather. They were not the most favourable conditions for a port visit and this may have influenced the Greenlanders' lack of interest in *Fredericton*'s arrival. Almost dying to feel land under my feet, I was more than willing to withstand any weather to experience Greenland. My knowledge of Greenland came from my geography classes in junior high school, although what I remember from those years was that my teachers had no idea whether people actually inhabited Greenland, and if so, how they lived. It struck me as odd that Canadians are taught a lot about our southern neighbour, the United States, but little, if anything, about our northern neighbours like Greenland.

Once in Nuuk, I was surprised that the infrastructure and housing were quite modern, and that the city was highly influenced by European culture and society. The style of their license plates, the model of cars, the structure of houses and businesses, as well as the use of the Danish Krones for currency, all clearly illustrate European ties. It was also awkward for us that the cafes and shops did not accept Canadian or American currency. Many, including myself, were also surprised that most of the Greenlanders we encountered spoke little English, creating a communication barrier that was partially rectified with the use of hand gestures.

Photo credit HMCS **Fredericton.**

HMCS ***Fredericton*** *at the entrance to the Northwest Passage on 30 August, 2005, taken from a RHIB.*

Fredericton's visit did not receive much attention from the public, although it was clear from my visits to shops, that we did indeed stick out amongst the local population. I experienced a less than warm reception from more than one shopkeeper, and got the impression that Nuuk has a tight, close-knit community that makes it easy to identify someone like myself in a crowd. Shuffled out of one store after purchasing mementos, I was given the impression that the people I encountered had little regard for English-speaking visitors. In much the same way that I lacked knowledge of them, Greenlanders had little knowledge of southern Canada and only a minor interest in the Canadian north. In discussions of Canada-Greenland relations, the Greenlanders with whom I spoke referred to the current dispute over Hans Island. It was a touchy subject, but it provided many laughs and

Photo: DND Formation Imaging Atlantic.

Nuuk, Greenland, from seaward. Nuuk is the administrative capital of Greenland, and far more developed than nearly all Canadian Arctic towns.

we did not allow the dispute to impede our conversations.

Our stop in Nuuk provided a reference point for our port visits in the Canadian north, and upon leaving Greenland I was anxious to see if northerners in Nunavut would react in a similar fashion.

Upon departing from Nuuk, *Fredericton* headed north to the small and very isolated community of Pond Inlet, Nunavut. Our visit received a very different reception in Nunavut – *Fredericton* was given a gracious welcome from residents and officials. Of the communities we visited on the deployment, the reception to *Fredericton*'s arrival would be the greatest in Pond Inlet as citizens toured the ship en masse to explore.

Before allowing crew to travel ashore, *Fredericton* formally asked community elders for their permission, which was willingly granted. The weather was again windy, wet and cold but this did little to prevent the crew and myself from exploring the tiny community, and Pond Inlet citizens from visiting the ship. My first impression was shaped by the rock sign at the top of the hill that bears the community's name. The sign reflects the impression I was given by citizens who express strong ties to and pride in their community. Primarily aboriginal, community members still adhere to traditional ways of life and many still dress in traditional style.

Once in the community, the crew and myself were treated to a presentation on traditional games and activities of the Inuit in the Pond Inlet Cultural Centre. The people of Pond Inlet are clearly enthusiastic about their community, despite the lack of community infrastructure. There are no paved roads and the primary mode of transportation is all-terrain vehicles. The most striking indicator of inadequate infrastructure is the state of homes and businesses that are, predominately, in poor condition, and there is an abundance of garbage on roads and property. The most modern and well-kept buildings are the government-established health centre, school and cultural centre. There are many homes that have been abandoned, most of which have explicit graffiti decorating them.

Despite the poor condition of the homes and community infrastructure, we were made very welcome as people waved and approached us to speak about the ship. Those most excited were the children who frequently asked crew members to autograph their brochures. Also creating a stir was the ship's canteen, which sold snacks at prices that were much below those in Pond Inlet. Com-

Photo: Amanda Slaunwhite.

The Canadian fishing vessel ***Mersey Phoenix*** *off the east coast of Baffin Island in August 2005. This and other ships are evidence of the increasing use of Northern and Arctic waters for commercial fishing.*

Photo: Amanda Slaunwhite.

Nuuk, Greenland, showing one of the main streets.

munity members came in droves to buy treats until the canteen was basically empty.

Fredericton's visit to Pond Inlet fostered ties between the crew and the community. It was also our first contact with the Canadian Rangers, who assisted in transporting crew and community members from the ship to shore. During our visit we gained a greater understanding of the people of Pond Inlet, their culture and traditions, as well as the challenges facing the community. The port visit would stick in everyone's mind as a visit well worth its cost as it benefited the community and the crew by encouraging cooperation between the military and the Inuit peoples of the north.

We had a unique northern experience when the time of our departure from Pond Inlet had to be rescheduled. We had planned to leave early in the morning of 30 August but we were informed at approximately 10 pm on the 29th that *Fredericton* would be leaving early because two icebergs were closing in on the ship's position. Only in a place like Pond Inlet, where the environment dictates everything from transportation to livelihoods, would a rogue iceberg be a threat to a warship. Such anomalies are indicative of the beautiful yet very harsh climate of the Arctic.

Our final stop in Nunavut was at Iqaluit, the capital of Nunavut, on 5 September. Because Iqaluit is in an area that has one of the highest tides in the world, *Fredericton*

A Canadian Ranger from Pond Inlet, Nunavut, 29 August, 2005.

Photos: Amanda Slaunwhite

Children of Pond Inlet, 29 August, 2005.

was again at anchor and once more we had to rely on the Canadian Rangers to transport crew and citizens from the ship to the shore. Our trip from *Fredericton* to the community was an interesting one. First we had a long and cold boat ride from the ship and then we had a steep climb up giant rocks, that I barely managed with the help of a *Fredericton* officer.

We were greeted by local officials, but there were no traditional customs to which we had to adhere. It was obvious then, that Iqaluit was more modern than other communities in Nunavut, like Pond Inlet. This could be seen in terms of infrastructure and the quality of housing and services. The city was much cleaner and sported multiple banks and fast food restaurants. As well, many on the ship were excited to learn that Iqaluit had a Canadian Legion. The establishment of a Legion was a sign that Iqaluit was less isolated than Pond Inlet.

The modern and well-kept appearance of Iqaluit was in stark contrast to what we saw in Pond Inlet, where derelict homes cluttered the town perimeters. In many ways Iqaluit is comparable to Nuuk, specifically with regard to its potential. But, in other ways Iqaluit is still far behind Nuuk, as it does not have a sea port and it lacks the businesses and population that only time and growth permit.

Like Pond Inlet, people in Iqaluit were welcoming and excited about the ship, but there was certainly not the mad rush that had occurred in Pond Inlet. Maybe it was due to the fact that we arrived on a holiday, or that the ship was anchored so far away, but few Iqaluit residents visited the ship, other than several local reporters.

Mr. Simon Awa, the Deputy Minister of the Environment for the Nunavut government, accompanied us on *Fredericton*. A kind, well-spirited and great ambassador of the north, he was my companion during our brief stop in Nuuk. Mr. Awa, who speaks Inuktitut, English and Greenlandic, was a great resource during the trip, offering much insight into the growth of Iqaluit, as well as providing occasional translation in Nuuk. Through my conversations with Mr. Awa, as well as from my general observations, it became clear that Iqaluit has experienced substantial growth since the signing of the Nunavut Land Claims Agreement in 1993. The community is booming and this can be seen in the current housing shortage, the growth of government services and agencies, and the construction of innovative modern buildings like the Iqaluit elementary school. The community has the potential to become as, if not more, prosperous than Nuuk. There are, however, many challenges facing this community, like most of the north, as the government and citizens struggle with increased modernization, but Iqaluit could become a prosperous northern port city given the opportunity.

During my visit to the north aboard HMCS *Fredericton* I gained an understanding of what the Arctic actually is. The Arctic is about more than resource exploitation, stereotypical notions of Aboriginal people or military strategy. What makes the Arctic so intriguing and unique are the people that inhabit it. They reside in a land and a climate that are extremely harsh. As such, their traditions, customs and everyday lives are shaped by their

Sunset off Baffin Island in August 2005. *Photo: HMCS **Fredericton**.*

surroundings – the people in the north know and understand the Arctic environment. This adaptation to the land has shaped their identity and lives.

When I began this adventure, I wondered what we are defending in Canada's north. After travelling with *Fredericton*, I know that we are defending not only natural resources that provide substantive economic rewards, but also the people, their culture and the sensitive Arctic environment. When Canada proclaims that it will defend its Arctic sovereignty, in the legal definition of the word, it must be remembered that 'Canada' includes the Inuit of the north who stand to benefit the most from absolute Canadian control. Protecting sovereignty can then be equated to protecting the Inuit, their livelihoods and culture, and of course the environment on which their lives are based. If we recognize the human elements of the north, and why they are worth protecting, it makes the claim that much stronger, and shows that there are multiple stakeholders – including those representing Aboriginal, military, cultural and economic viewpoints – that stand to lose from a poorly defended Arctic.

I cannot conclude this brief article without noting that my experience aboard HMCS *Fredericton* was made memorable with the support of the crew who offered me their advice, assistance and insight into naval operations and northern Canada. Through their encouragement I was allowed to experience what it is to be in service to our country. Of remarkable professionalism and dedication, their acceptance of my stay, and continuous questions, made my voyage that much better. To them I say thank you.

The Long Reach: The RCN and the Korean War

Michael Whitby

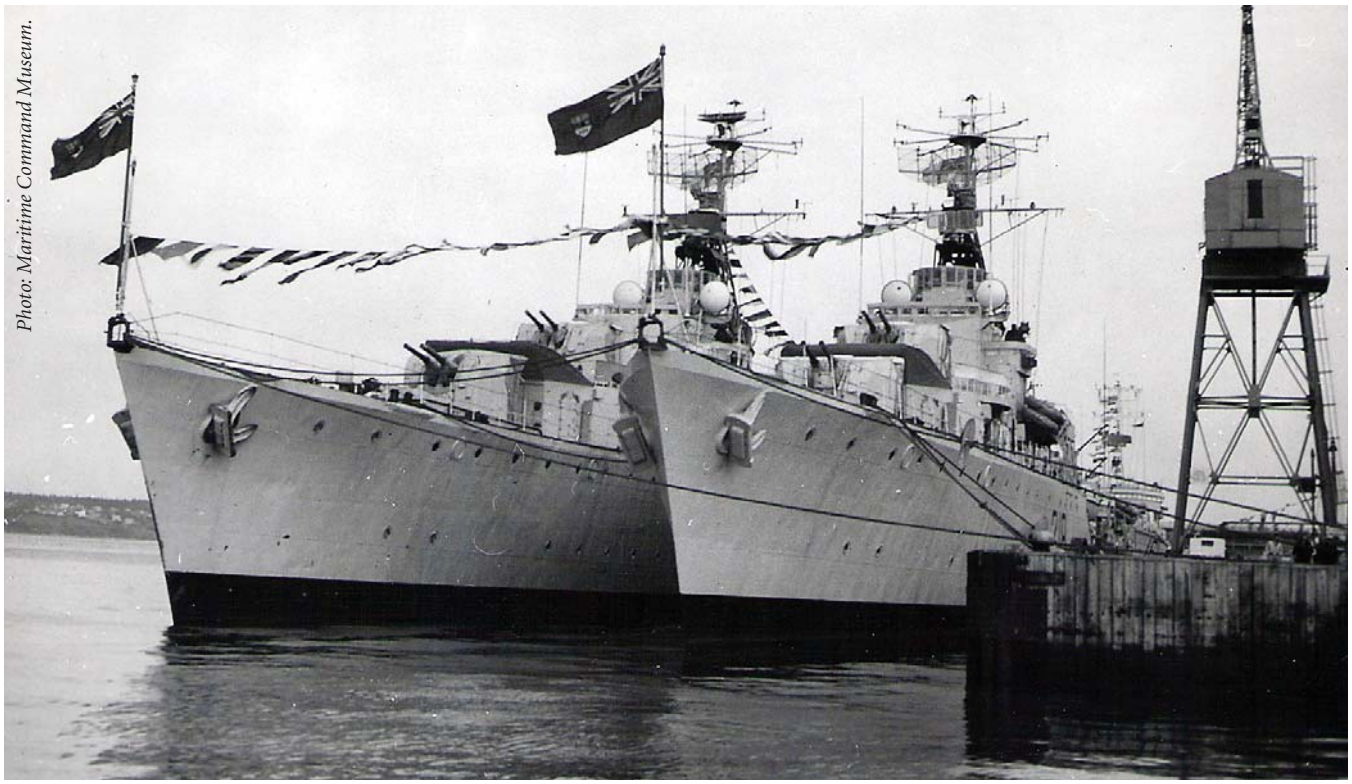

Photo: Maritime Command Museum.

*HMCS **Athabaskan** and HMCS **Cayuga** alongside in Halifax in 1948 not long after both ships were completed in Halifax Shipyards. With HMCS **Sioux**, these two ships were the first to go to Korea in July 1950.*

Introduction

Although the Korean War has been overlooked as an important watershed in Canadian naval history, the experience proved critical at a number of levels. First, it reminded politicians of the navy's value and thus gave it a credible *raison d'être* at the political level. Second, the Royal Canadian Navy's (RCN) operational success in Korea gave it a boost that lifted it out of the doldrums of the late 1940s, and launched it into its legendary 'Golden Age.' Finally, the Korean War experience helped solidify what can be dubbed the Canadian naval way of war – a 'can do' approach to fulfilling operational commitments based on solid professionalism. This approach had first emerged in the Second World War when the overstretched RCN threw itself into operational commitments at the limit of or beyond its capabilities. Korea marked the first time it had done this in a sustained way during 'peace time,' and it arguably set the navy firmly on a course it follows to this day.

Politicians understood that Canada would have to provide tangible military support to any UN operation in Korea, even though it meant becoming involved in a part of the world where it had little experience.

Deployment

The RCN did not get much opportunity to bask in the glow of its remarkable contribution to victory at sea in the Second World War. From a service of 90,000 sailors and hundreds of warships in 1945, the navy was cut back to peace-time proportions, and in March 1950 RCN strength consisted of 9,322 personnel manning an aircraft carrier and two carrier air groups, two cruisers, 11

Photo: Maritime Command Museum.

*HMCS **Sioux** in action off the Korean coast in 1950. **Sioux** was one of the first Canadian ships in Korean waters and also the last to leave in the summer of 1955. She also made one other deployment to Korea in 1950-51 after a two-month turn-around in her home port of Esquimalt.*

destroyers and a handful of frigates. This was a great improvement over the tiny pre-WW II RCN, but the service was beset by a number of problems. These problems included a distinct lack of resources and budgetary support, friction about whether the service should ally itself more closely with the Royal Navy (RN) or the US Navy (USN), and tension between professional officers and ex-reservists. And, most crippling, personnel problems caused manpower shortages, low retention rates, and a series of mutinies in 1949. There were many positives but the navy was in rough shape, and there was no apparent relief on the horizon.

News of North Korea's attack across the 38th Parallel reached Ottawa on a quiet summer weekend in June 1950, when the members of the Cabinet were enjoying leisurely holidays outside the capital. Unlike today, there were no cell phones – indeed there was no private phone service where most Cabinet members were. One dedicated secretary drove miles to ensure that the Secretary of State for External Affairs, Lester B. Pearson, had the news. Pearson's primary objective became to ensure that the United States reacted to the crisis within the auspices of the then youthful United Nations (UN).

But politicians also understood that Canada would have to provide tangible military support to any UN operation in Korea, even though it meant becoming involved in a part of the world where it had little experience. With the Soviet Union threatening aggression in Europe, the army and the air force were not keen to become embroiled on the other side of the world, but the RCN saw things differently. During the Second World War, the navy's senior leadership had proved adept at seizing opportunities presented by political circumstances, and had thus become a useful – and willing – tool in Canadian foreign policy. Korea offered another such opportunity, and ships were available as three modern destroyers based at Esquimalt were preparing for a long European cruise and could be quickly turned around for Korea. This contribution also had appeal to politicians. It would be seen as meaningful, it would be relatively casualty-free given the small size of the North Korean Navy, and since it would take the destroyers some time to reach Korea, the government would be seen to be taking action while still having time to finalize Canada's precise role.

The RCN took the steps necessary to prepare the ships for emergency service in Korea. But it was only when they received a draft press release from the Department of External Affairs that they knew the three destroyers were to be deployed into the western Pacific on a contingency basis, and if the situation deteriorated further they would head on to Korea. They sailed on 1 July 1950 and after they reached Pearl Harbor on 12 July they were ordered to Korea.

The main concern at naval headquarters over the course of the conflict lay in keeping the commitment to maintain a strength of three destroyers off Korea. In all, eight

Photo: Maritime Command Museum.

*HMCS **Sioux** underway as she would have looked in 1950.*

Photo: Maritime Command Museum.

*HMCS **Cayuga** (inboard) and three other **Tribal**-class destroyers alongside in Halifax in the late 1950s. The seven **Tribal**-class destroyers and the four other fleet destroyers formed the backbone of the RCN until the late 1950s when the new **St. Laurent**-class ships entered service in strength.*

of Canada's 11 destroyers served in Korea over the course of the conflict, and this effort exacted a heavy toll on the navy. Keeping three destroyers on station in the Far East actually required five ships; three in Korean waters and two 'relief' ships preparing to go. When the first rotation was getting ready to depart, Pacific Command had to 'borrow' personnel from other duties to get the three ships up to war-time establishment, and this policy of robbing Peter to pay Paul to meet war-time complements continued throughout the conflict. The navy, which also had to meet its commitment to NATO, was strained to the limit. The Korean commitment affected virtually all facets of the navy, Training was affected, and rotation requirements for Korea forced an 11-month delay in the program to convert destroyers into anti-submarine destroyer escorts. In addition, it meant that adequate trained personnel were not be available to man additional new construction and modernized ships as they become available, and this led to a general shortage of ships. At one point the navy had to ask the RN to provide a plane guard destroyer for *Magnificent* on a European cruise. In short, the Korean commitment threatened to bankrupt the service.

Despite this, senior officers never flagged in their determination to maintain the commitment. Rear-Admiral Harry DeWolf, Vice-Chief of the Naval Staff for most of the period, made it clear that having the destroyers in Korea was important for *political* rather than *operational* reasons. As Peter Haydon has argued, the Korean War enabled the navy to "raise its political profile." It demonstrated that the RCN had a role in the post-WW II world, one that could bring international prestige to Canada. As well, the ongoing presence of three ships in Korean waters demonstrated Canada's strong backing of the UN to international audiences, and increased Canada's clout at the diplomatic bargaining table. In short, there was little that was not attractive from a political point of view. The navy could benefit from that, thus if Korea caused some internal upset, naval leaders were willing to accept that price.

Ships and Logistics

Sailors perform their duties more effectively with modern ships and equipment, and in 1950 for perhaps the first time in its history the RCN went to war with ships the equal of, and in some cases superior, to its allies. *Cayuga* and *Athabaskan*, which combined to do five tours,

were the two newest destroyers in the fleet, commissioned in 1947 and 1948 respectively. Although they were based on a pre-WW II design, they had been upgraded considerably during construction, and they emerged as excellent ships with effective general purpose armament, and superior radar and fire control equipment. The British built *Tribal*-class *Haida* and *Huron* had seen much hard steaming in the latter part of the Second World War but their armament had also been modernized extensively. *Sioux*, a Fleet 'V,' was also a grizzled war veteran but she, too, had been extensively modified, and to the joy of her crew, was the first RCN destroyer with improved habitability systems, including cafeteria messing and bunks in place of traditional hammocks. Although they had joined the fleet in the early post-war period, the Canadian-built *Tribal*-class *Nootka* and the *Crescent*-class *Crusader* had not been modernized to the same extent as the other destroyers.

Although the ships were stars in terms of navigation, logistical support was another story.

Navigation posed a significant challenge off Korea, particularly along the west coast, which featured a wide coastal plain, shallow sea bed, numerous islands, fast tidal currents, and shifting shoals and sand banks. Canadian ships had a distinct advantage over other allied destroyers because they were fitted with high definition navigational radar, which was accurate enough even to detect mud flats from as close as 200 yards. No other UN navy had radar nearly as sophisticated and it became so highly valued by naval commanders that Canadian destroyers were often specifically selected for operations close inshore. They consistently met expectations and became the undisputed stars of west coast operations.

Although the ships were stars in terms of navigation, logistical support was another story. Effective logistical support is essential in keeping ships at sea but support for the Canadian contribution was weak – the RCN destroyers often had to beg and borrow. With no afloat logistics capability of their own, limited strategic air lift available from the Royal Canadian Air Force (RCAF), and no bases in-theatre, they had to scrounge materiel from American and British sources. This was not necessarily a problem as arrangements existed between the RCN and USN for common logistical support, and any stores that could be spared were provided to the destroyers. Despite this, it was often still difficult to obtain purely naval stores from navies which were understandably reluctant to part with equipment or spares they might soon need themselves. It was some time before a small RCN supply depot was established in-theatre, but even then the navy had to operate at the end of a long, undependable supply line.

The Operational Legacy

When the Canadian destroyers arrived in-theatre, in the words of the navy's official history on Korea, "Each ship individually joined TG 96.5 under Rear Admiral Hartman, USN for service with TE 96.50 (Captain Jay) and TE 96.53 (Rear Admiral Andrews, RN)." Amongst this confusing nomenclature delineating task groups (TG) and smaller task elements (TE), was the critical designator 'individually,' which meant that the Canadian ships would be deployed piecemeal under American or British UN commanders rather than as a distinct unit. This echoed the pattern of RCN deployments during WW II and, although the strategy may have simplified command and control from a UN perspective, it detracted from the sense of a Canadian 'national' contribution and limited the coalition experience that could be gained by Canadian officers.

Nevertheless, a 'Canadian' way of war still shone through. Naval personnel were assigned a wide range of operational tasks in Korea, but the nature of many of them suited the 'can do' ethos of the RCN. The carrier task group screening that occupied much of their time proved boring and mundane, but inshore operations such as interdiction, blockade enforcement and support to forces ashore provided plenty of opportunity for destroyer captains to display initiative, imagination and resourcefulness. The effectiveness of Canadian ships on these missions routinely earned praise from UN commanders. It was bombardment operations, however, that proved the main occupation of Canadian ships in Korea, and they went at it with characteristic enthusiasm, pushing closely inshore and never missing an opportunity to smother targets with sustained, accurate fire.

The USN conducted bombardment with similar gusto. The British, however, were more restrained. As the war continued, the British, suffering from a desperate financial crunch and wanting to display a less aggressive posture in the region, became more cautious, to the point that one Canadian commander reported a "go-easy" policy among RN commanders in the area. The difference in attitudes between the RCN's two main allies was also noticed by a Canadian flag officer visiting from Ottawa. The British commander, he observed, "is of the opin-

*HMCS **Crusader** returning to her home port of Esquimalt.* *Photo: Maritime Command Museum.*

ion that our operations [on the west coast] are a great waste of effort and a drain on the British economy. He is greatly concerned with the risks we are taking with our ships from the navigating point of view and cannot believe they are justified."[1] It was noted that the American commander in the region, on the other hand, "is of the opinion that we do not yet use sea power to the best advantage. He feels we that must press close inshore with our blockade."[2]

Such disagreements are common in coalition warfare, and given the lack of opportunity to study North Korean records it is difficult to judge if any one party's approach was any better than that of the others. The Australian official history supported the British approach and it may well be that the RN and Royal Australian Navy (RAN) were better acquainted with the best way ahead in the region. Certainly, the RCN had no significant Asian experience on which to draw, and was therefore more reliant on the advice of others than it probably would have liked. More importantly, the situation reflected how the RCN was increasingly falling into the USN orbit, a pull that would grow in strength – and, arguably, dividends – throughout the 1950s.

It was in "train busting," not in disagreements with allies, that the RCN made the biggest name for itself in Korea. Train busting, where UN destroyers attacked the North Korean rail network at exposed points along the east coast, required precise navigation, quick wits, accurate gunnery, boldness and guile. The operations were almost tailor-made for the RCN, and Canadian destroyers mauled a number of trains during the campaign. Indeed, *Crusader* piled up the highest score in the legendary "Train Busters Club." The RCN did not have a long fighting tradition and train busting, which received plenty of media attention back home, boosted the navy's reputation both in Canada and amongst its allies, and increased morale within the service itself. It was probably the greatest positive in what was, for the RCN, virtually a war of positives.

*Indeed, **Crusader** piled up the highest score in the legendary "Train Busters Club."*

Conclusion

If Canadian ships knocked a number of trains *off* the rails, the Korean experience as a whole can be said to have put the RCN back *on* the tracks. The navy had been in danger of losing its way in the immediate post-WW II years, and was suffering diminishing public and political support. Naval historians almost universally agree it was indeed a sickly season. The Korean War helped to turn things around, demonstrating that the navy had a valuable role to play in the post-war world, one at which it could excel. This increased the navy's value to the country, and forged a foundation of operational professionalism within the navy itself that would serve it well when it confronted the challenges of the Cold War.

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Notes

1. Cdr J. Plomer, RCN, Canadian Commander Destroyers Far East, "Korean War Report, part 2," Directorate of History and Heritage (DHH), 81/520/1650-239/187.
2. Commodore J.C. Hibbard, RCN, "Inspection Report," May 1952, DHH, 88/6, p. 7.

Making Waves

Setting the Record Straight

Mark Tunnicliffe

Perhaps in its formative year the *Canadian Naval Review* might choose to strike a small blow in the name of historical accuracy. The file picture in Richard Gimblett's article "The Many Origins of the RCN" (*CNR*, Vol 1, No 1, Spring 2005) isn't a picture of *Niobe*. Yes, I know that the same picture was published in James Boutilier's 1982 book, *RCN in Retrospect* (presumably from the Maritime Command Museum files if I read the credits correctly) but it is misidentified there too.

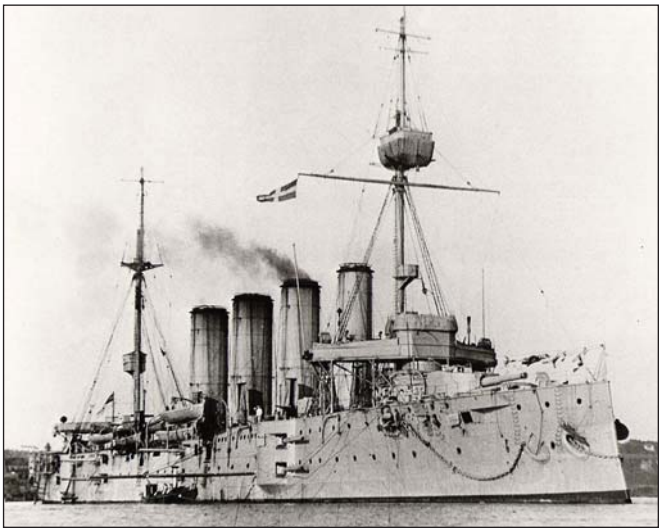
HMCS ***Niobe*** *in drydock; notice the forwards guns.*

Niobe was a *Diadem*-class first-class protected cruiser – the last class of this type built by the Royal Navy (RN). The RN followed this design with the *Cressy*-class armoured cruisers, a modification of the *Diadems*, which they consequently resembled. When these proved less than successful, the RN developed the *Drake*-class of armoured cruisers as a significant upgrade to the earlier design. This upgrade included improvements to the vertical side armour (introduced in the *Cressys* and absent, by definition, in the *Diadems*), the addition of four more 6" guns in the two "double storied casemates" and a speed increase to 23-24 knots (the *Cressys* and *Diadems* could make 20-21 knots). One improvement touted for the class included "the cutting down of the upper works and the elimination of the boat deck and the absence of ventilators"[1] saving some top weight and exposure to splinter damage.

Comparing the ship in the picture in Gimblett's article with pictures of *Niobe* in, say, Marc Milner's 1999 book *Canada's Navy*, or G. Tucker's 1952 book *The Naval Service of Canada, Its Official History, Vol. 1*, reveals the absence of the line of large ventilation intakes (cowls) on either side of the funnels that characterized the *Diadem* and *Cressy* designs.

There are other items that might reveal a difference between the ship in the *CNR* picture and *Niobe* – the lack of a third line of scuttles forward, the upper midships 6" gun casemates which were lacking in the *Diadem* and *Cressy* designs (the lower gun is obscured by the boat boom in the picture) but the most obvious feature of the ship in *CNR* that says it isn't *Niobe* is the big gun turret on the fo'c'sle supporting a barbette mounted single 9.2" gun (a similar one would be on the quarterdeck). *Niobe* had two 6" guns in shields mounted singly in a parallel arrangement (again, similarly on the quarterdeck).

So what is this ship? It is undoubtedly a *Drake*-class armoured cruiser of which there were four representatives (*Drake*, *Good Hope*, *Leviathan*, *King Alfred*). If the picture was indeed taken in Halifax, it could be of either *Drake* or *Good Hope* both of which visited Halifax. Most poignantly perhaps for the RCN, one of the last pictures of *Good Hope* was taken in Halifax in the



This is not ***Niobe*** *(as incorrectly identified in CNR) but most certainly HMCS* ***Good Hope*** *in Halifax, summer 1914.*

summer of 1914 on the occasion of the transfer of Rear-Admiral "Kit" Craddock's flag from HMS *Suffolk* to *Good Hope*. He took with him four young RCN midshipmen who were serving their "big ship time" with the RN and who were subsequently killed with him at the Battle of Coronel, 1 November 1914 – the first RCN casualties in action, and indeed the first Canadians to die in World War I. A picture of *Good Hope* in Halifax on that occasion can be found at http:www.gov.ns.ca/nsarm/virtual/royalnavy/archives.asp?ID=85.

I noted that in the course of some research on *Niobe* that DHH has some photos of her that may be of reproducible quality – but they are photos that I have never seen elsewhere. It may be an interesting project for *CNR* to showcase some of the lesser known images of Canada's naval past.

1 T.A. Brassey, *The Naval Annual 1902* (Portsmouth: J. Griffin and Co, 1902), p. 5.

Canadian Offshore Patrol Vessels: Further Thoughts

"Poseidon"

Since the Making Waves article in the last issue, I have heard discussion suggesting that the acquisition of offshore patrol vessels (OPVs) for the Canadian Navy would weaken our case for a blue water navy, and it would be better not to confuse the issue: Give me a break!

Here we are, the second largest country in the world with the longest coastline bordering on three oceans. We are a G-8 state, we are next-door neighbours to the world's only superpower, and we must ensure the integrity of our maritime borders if we are to continue to enjoy the prosperity resulting from our access to American markets. We have a "home game" and an "away game" to play with our maritime forces, and we are wearing out our expensive major warships, particularly our frigates, by employing them for domestic patrols. Of course we want to put some muscle in our own waters, but if we truly wish to be a presence in our own offshore areas there are other ways to do this. As has been pointed out, technological developments such as High Frequency Surface Wave Radar (HFSWR) will help to cue our ships and aircraft where to look, but there is nothing like being in the myriad nooks and crannies of our extensive coastline in a naval vessel to let everyone know we are intent on being the masters of our coastal domain.

Photo: from website.

Royal Danish Navy ***Thetis****-class frigate.*

On top of everything else, big, ocean-going vessels are required if we are to stay at sea in all weather conditions. Remember that the North Atlantic and North Pacific provide some of the most extreme conditions in the world. In addition, if we are serious about being seen in the Arctic during the summer navigation season, patrol vessels with long endurance (fuel and food) are necessary as well as tough hulls. It is a very long way between fuel stops in the far north.

The Danes and Norwegians know that, and they have built highly suitable ships for the role. We could learn much from their ships, for instance the Danish Navy's *Thetis*-class frigates and the Norwegian Coast Guard's *Nordkapp* vessels. Both classes of ship are strengthened for operations in first-year ice, are armed, have excellent endurance and sea-keeping capability, operate light helicopters (Lynx), can refuel medium helicopters such as Sea Kings and the new Cyclone, and they are optimized for fisheries and sovereignty patrols as well as search and rescue. Their crews are remarkably small, 60 and 52 respectively, including helicopter detachments. These big, solid vessels certainly look like they are up to the job of patrolling our waters.

The corvettes, or light frigates, described in *CNR* #3 would also be good patrol vessels, operating manned helicopters and perhaps UAVs. Some of the weapons and

Photo from website.

Norwegian Coast Guard vessel ***Nordkapp*** *(North Cape).*

sensors could be deleted in order to keep manning and construction costs down and concentrate on constabulary roles.

The acquisition and operation of vessels such as these would do much to tell the world that Canadian waters will be well patrolled, and that we intend to know what is going on in them.

Canada's Empty Coastlines
"Nereus"

The first edition of the *Canadian Naval Review* made reference to Canada's "empty coastline" but no one has yet taken the time to elaborate on the real extent of that emptiness. I know of two examples of how such emptiness can become a national vulnerability and I can offer one hypothetical situation that should make several people stop and think carefully.

The first example is quite well known, but not as well known as it should be. In the summer of 1943 an audacious U-boat commander took his vessel close to the entrance to Ungava Bay and from there made a careful trip through the Home and Avayalik Islands to the Hutton Peninsular. There he and his men set up a remotely operated weather station that would pass meteorological information to Berlin. This would have been enormous help for the other U-boat commanders waiting to attack Allied convoys in the North Atlantic because they would have been able to use bad weather to cover their movements. Fortunately for the Allies, the weather station only worked for two weeks. Apart from the audacity of the act, the remarkable fact is that nobody in Canada heard about it until long after the war when historians began to reconstruct U-boat operations. If people could do that 60 years ago without being discovered, it is pretty certain that it could be done now. That coastline is still virtually uninhabited as are other parts of the coast.

Such strategic vulnerability is not exclusive to the Canadian north as the second example shows. A few years ago, a small foreign-registered vessel tied up to a government wharf in a fairly remote part of Guysborough County, Nova Scotia, and proceeded to load high-value vehicles. This was done very quickly and anyone passing was invited to move so they could not see what was happening. What was going on? Were those vehicles stolen and being shipped to Eastern Europe for sale? Did the vessel have authority to be there? When one of the passersby made enquiries, there were no answers available. The point of this story is that the Canadian shoreline has countless small harbours and inlets that can be used with ease for subversive operations. Do we have the ability to prevent that sort of incident from happening? I very much doubt it.

Last, let me give a hypothetical scenario. Adventure tourism is a growth industry especially along Canada's more rugged and scenic coasts. These coasts, for the most part, are sparsely inhabited and have few facilities that can be used by visiting vessels. Consider the situation where a vessel with several hundred passengers catches fire or suffers some other damage while on such an adventure cruise. Who would be there to help? Worse, who would know that an accident had taken place if the vessel could not communicate with the outside world? Who, then, would be held accountable for the non-provision of search and rescue. I believe solo long-haul sailors are required to post some form of security bond or take out insurance to cover the eventuality of an accident. Do we require the owners of adventure tourism vessels to do that? I doubt it. This, surely, is something about which we should be concerned.

These three scenarios point to a simple truth: effective security and safety require a full understanding of what is happening in the waters under one's jurisdiction. Is Canada doing this? I suspect not. Should Canada do it? Yes, most certainly. The challenge is to strike the right balance whereby vigilance is effective but not unaffordable. There must be a role for new technologies. If the Germans could put a remotely operated weather station on the Labrador coast in 1943, perhaps we could also exploit technology to watch over our empty coastlines.

Supporting the Landing Force
"Artemis"

I contend that the most interesting thing to happen to the Canadian Forces in many years is the Standing Contingency Task Force (SCTF) concept: the capability to deploy a high-readiness sea-based Joint Task Force on 10 days' warning – anywhere in the world. It will likely take until 2015 to achieve the final operational capability (purpose-built ship(s), specialized communications and sensors, staffs and soldiers comfortable with amphibious operations) able to operate in littoral areas, rather than from a frequently insecure and certainly expensive land base as has been the case with army operations for many years.

Photo: from website.

US Navy 5-inch 62-calibre gun firing Extended Range Guided Munitions (ERGM).

One of the issues that should be addressed during the SCTF implementation period is that of fire support to the force ashore. Since the loss of the 5-inch gun from the *Iroquois*-class destroyers as part of the TRUMP conversion, we have had no real capability to conduct naval gunfire support (NGFS). Yes, fire support could also come from armed helicopters, land-attack missiles and rockets of various types, and from howitzers and mortars organic to the landing force. Nevertheless, NGFS continues to be an important and highly flexible means of supporting ground forces. One suspects that the army did not lobby for a NGFS capability when the design of the *Halifax*-class was being finalized. The Bofors 57 mm "peashooter" is a good anti-aircraft weapon, but it is essentially useless as a bombardment gun.

A major update of our frigates is scheduled over the next 10-12 years, coincidentally the same period that the SCTF capability is being developed. Wouldn't it be a good idea to "up-gun" at least some of the frigates during this period?

This author would select the American 5-inch 62-calibre gun that, with rocket-assisted and precision-guided munitions, has a range of over 60 nautical miles. Much development work has gone into this weapon and its projectiles, and many countries are adopting it for new-construction surface combatants. Why isn't the army clamouring for this? Why isn't the navy? Surely we are not going to let the opportunity to replace the "peashooter" with an NGFS-capable weapon slip through our collective fingers. We should certainly not wait until our next shipbuilding program in the far distant and murky future!

Plain Talk

Sharon Hobson

Will the "big honking ship" survive the election? And if it does, will it survive the politics? When the government announced its new defence policy last April, it stated that the defence of Canada and North America "must be the Canadian Forces' first priority." However, it also noted that "security in Canada ultimately begins with stability abroad."

So it's no surprise that the naval equipment projects outlined in the Defence Policy Statement (DPS) put the emphasis on expeditionary capabilities. The DPS says that with respect to maritime capabilities, the Canadian Forces will:

- enhance the ability of their ships to support the Special Operations Group, and carry out littoral operations as part of the Standing Contingency Task Force and Mission-Specific Task Forces;
- proceed with the acquisition of ships that will be able to:
  - pre-position or deploy the Standing Contingency Task Force,
  - support land operations,
  - provide a sea-based national or multinational command capability,
  - deploy tactical unmanned aerial vehicles, and
  - sustain naval task group operations worldwide.

It also says that the *Victoria*-class submarines will be brought into service, the *Halifax*-class frigates will be modernized, weapons systems to support land forces will be acquired, and work on a new class of surface combatant (Single Class Surface Combatant (SCSC)) will begin.

There was no specific mention of an amphibious transport ship or even the Joint Support Ship (JSS) which has been in the works for the past 10 years. (Although the capabilities listed above could be included in a JSS and/or amphibious ship.)

At a media briefing, however, General Rick Hillier, Chief of the Defence Staff (CDS), filled in some details of his plans for the navy with the announcement that the military would be acquiring an amphibious transport ship. He said he wanted a "big honking ship" that can carry four to six heavy-lift helicopters and a light task force of approximately 800-900 soldiers.

Hillier said the amphibious ship would complement the three Joint Support Ships. In regards to its acquisition, he said "we're going to have to take an appetite suppressant. Everybody says, okay, so you want the *San Antonio*-class ship. That's a pretty expensive ship to go get. We believe there are others around, designs around, that would easily meet our requirements that are less expensive."

And he's a man in a hurry. He says "I really would like to see the first exercising and validation of it in 2006, with the initial operational capability to immediately follow that. Clearly we're not going to be able and obtain a big honking ship, an amphibious ship, to do that in the short term, but we can cobble together the necessary pieces to do the joint evaluation of the concept."

In a recent *Toronto Star* article, Hillier was quoted as saying that the acquisition process for an amphibious ship will not be dragged out like the one for the new maritime helicopter. He is quoted as saying, "The troops need it. They need it now, not 15 years from now, not 10 years from now, not even five years from now. They need it as soon as possible."

This is making the navy a little nervous. It desperately needs to replace its two auxiliary-oiler-replenishment (AOR) vessels. The plan to do so has been around since the early 1990s, although it has been revised several times as the navy attempts to fit its needs within the political climate. It has been both fast-tracked and back-burnered. The JSS is now verging on actually proceeding, having received the government go-ahead for three ships in April 2004, but the decision to acquire a 'big honking ship' may throw a spanner in the works. Not only will the ship have a tremendous call on resources – financial and personnel – but there are still many questions about the role of the two different classes that need to be answered first, before anything can move forward.

For example, what is meant exactly by "sea basing," and how far offshore will the ship be expected to operate? Will it be used as a joint command headquarters or will that role reside with the JSS? Will the ship carry attack helicopters to support the land forces as well as heavy-lift helicopters? And if, as frequently reported, the CDS is set on getting CH-47 Chinook helicopters for army transport, how exactly are these helicopters, which are non-marinized and have a non-folding rotor, going to operate from the ship? What kind of equipment fit will the ship have? How will this ship work with the other

ships in the fleet, how independent will it be, under what conditions will it be deployed and what other air and fleet resources will it need to call upon?

These, and other questions on roles, missions and force structure, should be answered in Hillier's promised "Defence Capabilities Plan." In July 2005, the general described the capabilities plan as "an adjunct" to the DPS, and said "how we develop the capabilities is what we're going to spend the next four to six months walking through."

After producing the capabilities document, Hillier noted that costs could then be determined. As always with Canadian defence policy, cost is key.

Even if the government provides the additional funding needed for the 'big honking ship,' the navy does not have the personnel to run all related projects for this ship, plus the JSS and SCSC at the same time.

This brings us back to the navy's nervousness. In last year's Impact Assessment, Vice-Admiral Bruce MacLean, Chief of the Maritime Staff, noted that, with the JSS having been given the governmental go-ahead, "I have elevated the Single Class Surface Combatant project as my top priority in order to address the block obsolescence issue facing the fleet." Of course, that was before the amphibious ship was announced. So does the amphibious ship, being a joint project, trump the SCSC and take priority? Even if the government provides the additional funding needed for the 'big honking ship,' the navy does not have the personnel to run all related projects for this ship, plus the JSS and SCSC at the same time.

And that really brings up the question of into whose constituency the 'big honking ship' fits. Does the army want it – enough to give up some of its other equipment plans? Not so you'd notice. The army seems to be putting the strategic lift projects on the shoulders of the navy and air force. When asked at the CDA in 2004 about the army's involvement in planning for sea lift in order to deploy on international operations, the Chief of the Land Staff, Lieutenant-General Marc Caron, replied that he was interested in "whatever means available to get us there, we don't care. We want to get there." His opinion was that the army just wanted the "best way to get there that the CF can provide us."

And what about the air force? Is it willing to allocate its limited capital budget to the ship over strategic air lift vehicles or other air force programs?

Within DND the emphasis is on joint operations. But how many within the army, navy and air force really, in their hearts, accept that concept of operations? Intellectually it may make sense, but has anyone noticed a lessening of service rivalry?

The army seems to be moving full speed ahead, buying 155 mm howitzers, armoured patrol vehicles, unmanned air vehicles, and other necessary equipment for its Afghanistan-bound troops. The air force is still trying to figure out how it can be something other than a taxi service. And that leaves the navy trying to behave jointly, but not so jointly so that it loses or delays its much-needed ship replacement programs.

These are conceptual questions that must be answered even before the planners get down to the practical questions of ship design. And, of course, the design will open up a whole new set of issues, many involving a very vocal industry.

Just look at what has happened to the Joint Support Ship. There is no offshore design suitable for the navy's diverse requirements, so the project office has been forced to pioneer a unique Canadian design. But after 10 years there is still no definitive design, and now, with the proposed amphibious ship, there is ambiguity about the role.

Although there are a variety of offshore designs for the amphibious ship from which to choose, the CF will first have to decide what it requires. The designs, of course, will all present a plethora of opportunities for tinkering. And all this will add to the cost and the time.

Instead of having to deal with trade-offs for the design of one class of ship, now the navy has to harmonize the design of two classes with complementary, and even overlapping, roles.

So it's not surprising that further on in the aforementioned *Toronto Star* article, the Director of Maritime Requirements, Captain (N) Peter Ellis, is quoted as saying the plans for the ship are in the "embryonic" stage, and the ship is not expected in the fleet until some time between 2012 and 2017.

So much for Hillier's desire to get the ship quickly.

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

Joint Task Force Atlantic's Debut – *Operation Unison*

Lieutenant (N) Richard Decker

After Hurricane Katrina subsided and the destruction and devastation to Biloxi, Gulfport and New Orleans was revealed, the US military lost no time in deploying to address the emergency situation. Even though there had been a mandatory evacuation order, tens of thousands stayed behind to ride out the storm as they had on previous occasions. High winds caused much of the damage in Biloxi and Gulfport, essentially leveling the area and leaving nothing but debris. Katrina's storm surges broke through numerous levees around the low-lying city of New Orleans and caused massive flooding that stranded many people on rooftops or in attics without food, water or means of survival. It was a natural disaster of unique dimensions on this continent and called for unique responses.

Photo: Canadian Coast Guard (website).

*CCGS **Sir William Alexander** not only made up for the non-availability of a navy ship with heavy-lift capability but also did noble service restoring aids to navigation.*

Canada decided to send a Canadian Forces (CF) team, and the newly-formed Joint Task Force Atlantic (JTFA) was assigned the mission, designated *Operation Unison*. The aim was to augment the relief assistance already being provided. As the infrastructure ashore was in such bad condition, it made sense to send a self-sufficient task force. A Joint Task Force (JTF) under the command of Commodore Dean McFadden was assembled, comprising three warships (HMCS *Athabaskan*, HMCS *Toronto* and HMCS *Ville de Quebec*), a medium icebreaker/buoy tender from the Canadian Coast Guard (*Sir William Alexander*), a Composite Dive Team (CDT), a Naval Construction Troop, and the Combat Assault Boat Team from the Fourth Engineering Support Regiment (4ESR).

As the first truly "joint" operation JTFA had conducted since its inception 1 July 2005, *Operation Unison* was an excellent learning experience. What follows is an overview of that operation, the challenges and the outcomes associated with the efforts of the CF and the Canadian Coast Guard.

Initial Challenges and Planning

To prepare ships for sailing on the last long weekend of the summer, leave was cancelled and personnel recalled to their units to prepare gear, load stores and to make the ships technically and mechanically ready to deploy for an expected 30-day period.

There was ambiguity and uncertainty about conditions and requirements on the ground in the Gulf Coast area in the early stages of planning. We did not know the command structure being used by the United States, so liaison officers within Second Fleet and Northern Command were asked to make contact and confirm details. Internet and television news reports were used to develop an appreciation for the situation in the mission area. As it was not known what roles the task force (TF) would be requested to perform, there was the potential for hundreds of possible tasks. Thus planning commenced without having all the answers, and this required an extremely flexible approach.

Naval ships were assigned to the TF based on readiness levels and availability. Not having the support ship HMCS *Preserver* available resulted in a lack of both heavy lift and refuelling capabilities. This affected our ability to transport large quantities of construction materials and other heavy stores and had a critical impact on self-sus-

Ships of the Canadian Navy Task Group refuelling from the USNS ***Patuxent*** *en route to the Gulf of Mexico. Not having the AOR, HMCS* ***Preserver****, available made the US Navy's help necessary.*

tainability. Although heavy lift concerns were somewhat offset by the assignment of *Sir William Alexander* to the TF, it did not resolve the sustainability issue. Refuelling at sea would have to be done by US vessels that serviced the eastern seaboard.

This was the first joint operation in which a Canadian Coast Guard (CCG) vessel was placed under the operational control of the navy. To ensure integration into the TF, naval staff embarked in *Sir William Alexander* to provide an overview of the military aspects of the operation and to maintain communication by installing and operating military cryptographic and communications equipment.

Helicopters were a necessary and indispensable asset for the operation, given the vast number of possible tasks and the flexibility they provided. The challenge for the air force was to provide three Sea King helicopters and sufficient personnel to support the operation while maintaining the ability to sustain operations at home and to plan for "follow-on" forces in the Gulf of Mexico if required. The TF's flexibility was expanded with the *Alexander*'s embarked BO-105 – a small yet versatile helicopter with an experienced pilot.

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We would not have been ready to sail on such short notice had it not been for the efforts of many people ashore, both civilian and military. A huge effort was necessary to get Canada's contribution ready on such short notice, including a call for personnel and supplies, assistance from local merchants, and procuring, packaging, organizing and preparing the ships to sail over a holiday weekend.

The Transit

The task group (TG), the naval component of the whole TF, left Halifax for the Gulf of Mexico on the afternoon of 6 September 2005. During the 2,500 nautical mile transit the ships conducted preparatory training in a variety of areas such as first aid, critical incident stress management, small boat and radio familiarization, as well as holding briefings on potential safety hazards. Soon after leaving Halifax, the TG refuelled from the USNS *Patuxent*, which was en route to Gulf of Mexico to support

Photo: DND Combat Camera.

A Canadian Dive Team working under difficult conditions amid the devastation caused by Hurricane Katrina.

US Navy ships. *Patuxent* transited in company with the TG, conducting replenishments at sea to ensure that the Canadian ships had sufficient fuel to conduct sustained operations on arrival.

The transit was not without incident. Hurricane Ophelia, a category II hurricane, was deemed a potential threat, and approximately four days after departing, the decision was made to change the TG's course to the east to avoid it. The detour added approximately 12 hours to the planned arrival time, but ensured the safety of the ships. Because of *Sir William Alexander*'s delayed departure from Halifax and her approximately seven knot slower speed during the transit south, she slowly fell astern of the TG but was able to maintain communications due to the embarked military communications equipment and personnel.

On Arrival

Canada's first contribution on the ground in Louisiana and Mississippi was the Composite Dive Team (CDT), led by Lieutenant (N) Rollie Leyte. This team, made up of 17 members of Fleet Diving Unit (FDU) Atlantic, 18 members of FDU Pacific, and five members of 4ESR, left Canada on 5 September on a Hercules flight to Pensacola Naval Air Station, and initially set up their base of operations at the Naval Station Pascagoula. Later they moved to the NASA Booster Repair Facility in Michoud, on the outskirts of New Orleans.

On arrival, they immediately set to work and joined up with US Mobile Diving and Salvage Unit Two (MDSU2) to commence diving operations. The integration with MDSU2 was instantaneous and seamless due to long-standing relationships and similar work – the same reason the integration of the joint capability within the

Photo: US Navy (website).

*USS **Bataan** provided support to the Canadians during **Operation Unison** – some of this support would have been available had HMCS **Preserver** sailed with the task group.*

CDT itself was also effortless. Canadian divers were the first in the waters around the Louisiana coastline and were tasked to clear underwater obstructions and jetties, recover navigation aids and re-open navigable sea routes along the Gulf Coast.

A key to mission success was the establishment of the Forward Logistics Site (FLS) in Pensacola on 9 September under the command of Lieutenant-Commander Anthony Thys. This ensured that logistic support and sustainment of the operation were coordinated. FLS members also commenced liaison with the American emergency assistance agency (FEMA) distribution pipeline and US counterparts to ensure that Canadian relief supplies made it to where they were most needed in a expeditious manner.

The TG (less *Sir William Alexander*) arrived in Pensacola, Florida, 12 September and commenced offloading humanitarian relief stores and construction materials. In a matter of hours the majority of the supplies were landed and the ships proceeded to an anchorage 18 nm south of Gulfport/Biloxi, Mississippi, adjacent to the USS *Bataan*, an amphibious warship with helicopter and landing craft utility (LCU) capabilities. The distant anchorage for the TG was necessary as there were no accessible ports due to massive damage to infrastructure, sunken vessels and other underwater obstructions closer to shore. The Naval Construction Troop and Combat Assault Boat Team, who were also engineers, disembarked from *Toronto* upon arrival Pensacola and immediately proceeded to Bay St. Louis, Mississippi, where they readily integrated with the US Navy's Construction Battalion (SeaBees) to form the Composite Construction Engineering Group (CCEG). The CCEG conducted clean-up efforts in the Bay St Louis/Gulfport region and constructed numerous temporary relief distribution centres.

Sir William Alexander arrived in Pensacola 14 September and immediately proceeded to offload heavy construction materials and other relief supplies, remaining alongside until the 16th. On receiving an official tasking request for the services of the *Alexander* from the US Coast Guard, tactical control of the Canadian vessel was transferred from Commodore McFadden to the US Coast Guard so she could commence the important work of restoring safe navigation to area waterways through the restoration of navigation and Ocean Data Acquisition System (ODAS) buoys.

Two ships would provide work parties each day to allow the crews the ability to continue at-sea operations and daily routines.

Once at anchor, ships' companies in the TG were organized into daily work parties consisting of approximately 100 people from each ship. Two ships would provide work parties each day to allow the crews the ability to continue at-sea operations and daily routines. Transporting these eager and capable sailors 18 nm to shore could have greatly limited the contribution as well as the morale of those proceeding ashore to do the work. However, the support of the USS *Bataan* and USN large landing craft to transport all Canadian sailors ashore greatly facilitated the task, which otherwise would have required a frigate to transit part of the distance past unknown underwater hazards to send personnel ashore via rigid-hulled inflatable boats (RHIBs). The work parties did a great deal of work in a very short period of time, conducting clean up of debris at schools, a library, a retirement home (the Armed Forces Retirement Center), and a sports stadium which was planned to be utilized as a distribution centre.

Photo: DND Combat Camera.

A Canadian combat diver at work during ***Operation Unison****. Canadian divers had life-support systems that enabled them to work in polluted waters.*

The Transition Phase

Within a week of Hurricane Katrina, tremendous progress had been made in the rescue of stranded residents and other relief efforts to the point where the situation was no longer deemed a state of emergency. The US military began withdrawal of forces as state and local authorities assumed greater roles. That included the departure of USS *Bataan* and the loss of LCU support on 17 September. These factors influenced the decision to withdraw the naval TG from the Gulf region, as only assistance of the CDT and CCEG would be required. On 18 September Commander Richard Gravel assumed command of the National Command Element, which was established to lead the remaining operations by the CDT and CCEG. He also assumed operational control of *Sir William Alexander*, having support of liaison officers from medical, logistical (in Pensacola) and diving sections, as well as the army and CCG. The TG (less *Alexander*) disembarked augmented personnel, embarked those required for normal naval TG sailing operations, and then sailed out of the Gulf of Mexico to avoid the storm that later became Hurricane Rita.

Having safely evaded yet another hurricane, Commodore McFadden continued to monitor Rita's path knowing full well the fragility of the Gulf Coast area in the vicinity of New Orleans. On 21 September, Commodore McFadden transferred with his TG Staff to *Toronto* and released *Athabaskan* from the TG to continue with preparations for her winter employment. He then ordered *Toronto* and *Ville de Quebec* into Mayport contingent on the impact of Hurricane Rita. On 23 September, after Rita's impact was predicted to be minimal, Commodore McFadden decided that the TG was no longer required and ordered the ships back to Halifax.

Assessment of Operation Unison

Operation Unison was successful in its aim to provide timely transport of relief supplies and humanitarian aid to the Gulf Coast region. Furthermore, the CF again demonstrated its ability to integrate seamlessly with US forces, as a result of close ties and continuous participation in multinational exercises and operations around the world. And while there have been numerous issues identified from this first JTFA joint operation, the lessons learned in initial planning, organization and capability have been tallied and will be applied to future JTFA operations.

Operation Unison was a prime example of the Chief of Defence Staff's concept for joint operations and the future of the CF. The Gulf Coast disaster can be compared to the situation in a failed or failing state, with a breakdown in civil society and limited infrastructure and resources. The lack of Canadian capability for the efficient and effective inshore transport would have been a serious limiting factor in this operation, however this was mitigated by the presence of the USS *Bataan* and embarked landing craft capabilities. The operation highlighted the need for a Canadian amphibious capability, including a flight deck and well deck, in order to provide the maximum flexibility and capability for both helicopter and ground/troop transport operations for self-sustainment in such operations.

Any natural disaster in Canada or abroad could have an impact similar to Hurricane Katrina. Instability and upheaval, whether as a result of natural causes, terrorism or conflict, illustrate a requirement for a self-sustaining amphibious capability.

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Book Reviews

The World's Worst Warships by Antony Preston. London: Conway Maritime Press, 2002. 192 pages, photographs, tables, glossary, bibliography, index. £19.99, cloth; ISBN 0-85177-754-6.

Reviewed by Kenneth P. Hansen

In his 1911 book *Naval Strategy Compared and Contrasted with the Principles and Practice of Military Operations on Land*, Admiral Alfred T. Mahan, wrote: "You cannot have everything [incorporated into the design of one warship]. If you attempt it, you will lose everything. On a given tonnage … there cannot be the highest speed and the thickest armor, and the heaviest battery, and the longest coal endurance." Mahan knew that compromise is always required in the design of warships and that over ambition is frequently fatal. In *The World's Worst Warships*, Antony Preston has assembled 30 examples of what he considers to be the worst warships built between the 1860s and 1970s to illustrate six factors he feels have the greatest influence on warship design. These factors are cost, perceived threat, industrial capacity, design competence, operating environment, and incorrect post-battle analysis (10).

Preston's prodigious reputation as a naval analyst lends great credibility to the arguments he puts forward. The introduction covers many essential areas in the conceptual origins, design, construction and combat performance of warships. Preston's list of essentials includes national strategy, industrial capacity, construction standards, propulsion theory, the difference between engineering performance under trial conditions versus operational conditions, endurance, seakindliness and seaworthiness.

The 30 ships are examined in chronological order in individual chapters of about six pages, beginning with the American Civil War monitors and ending with the French *La Combattante*-class fast attack missile craft. A data table is provided for each ship, all but two have at least one photograph, and 22 are illustrated with excellent line diagrams. Each chapter is summed up with a brief concluding section. Most unfortunately, there is no concluding chapter.

Not every ship examined was an abject failure or a graceless oddity. Several ships are noted for superlative performance in one or two areas (for example, the seaworthiness and internal volume of the British *Powerful*-class protected cruisers; the innovative triple-gun turrets of the Austro-Hungarian *Viribus Unitis*-class dreadnoughts, the endurance of the German *Deutschland*-class armoured ships, and the speed of the Italian *Condottieri*-class heavy cruisers). Preston levels his most pointed criticism at ships that were obvious hybrids between types or which attempted to "cram a quart into a pint pot." Japanese, German and Swedish designs suffered most from trying to accomplish too much on a finite displacement. Preston's analysis relies heavily on the performance of these ships in combat, many of which fought engagements for which they were not designed while engaged on missions for which they were not intended.

Preston clearly expresses his opinion that warships should have certain basic characteristics including good endurance, balanced armament, sturdy construction, seakindliness, ample speed and reliable propulsion. His examples show ships that have sacrificed too much on the sacred altars of speed and armament, proving to be so flimsy and short-legged that they were rendered ineffective even before leaving port. However, the author's bias as a proponent of the Anglo-American philosophy of maritime supremacy is evident in his condemnation of innovative designs born of the continental approach to naval power. Preston's treatment of *why* states built such unique ships to satisfy national requirements is, unfortunately, cursory. The text is without footnotes or endnotes, leaving the opinions expressed without reinforcement.

Several other deficiencies leave this book with a decidedly unfinished feeling. Some of Preston's six factors and essential design areas are not addressed for each ship, rendering the logic incomplete. None of the 30 ships selected are held up against a detailed comparison with contemporary examples of the same type of ship. The result is that the reader is compelled to accept the author's judgements without being offered much in the way of proof. Preston falls prey to his own warning that "the propulsion of warships is another minefield for the non-specialist" (14).

Endurance data is missing for seven ships and the book either does not give cruising range or bunkerage data for nine of the ships. Included in this group are the German *Deutschland*- and *Bismarck*-class ships, whose exceptional endurance was one of their most prominent characteristics. Those that do have complete endurance data are given for differing speeds, making them useless for comparison. The endurance figures given for the American *Wickes*- and *Clemson*-class 'flushdeck' destroyers are

the widely quoted and highly misleading design targets of 2,500 miles at 20 knots, which the author hints was achieved on 225 tons of fuel (82). Norman Friedman's authoritative *U.S. Destroyers* shows that the contracts for the *Wickes*-class actually called for 3,400 miles at 20 knots and the *Clemson*-class were built with 35 per cent greater bunkerage capacity (41-42).

Another major frustration is the author's mixed use between chapters of metric and imperial units for armament and armour data, which also impede the reader's ability to make comparisons. And, a minor detraction from the appearance of this otherwise handsome book is the extremely small and fine font used to set the type, making reading quite difficult.

Preston concentrates most heavily on warships from World Wars I and II and the Cold War. Contemporary readers will not find much insight into the new and radically different security challenges facing naval policy makers and fleet architects.

The only Canadian 'angle' to this book is a passing reference to the *Diadem*-class protected cruisers, of which HMCS *Niobe* was an example (49). Preston praises these 11,000-ton cruisers for their seaworthiness, innovative propulsion system, high endurance, modern layout of their main armament, and ability to transport large numbers of troops (an unintended role for these ships). His criticism stems from their high cost, large crews and the failure of a Russo-French cruiser threat to British trade to materialize.

These expensive ships are held out as "an object lesson in the dangers of accepting over-enthusiastic intelligence estimates" and "designing warships to satisfy worst case scenarios" (47-49). The fact that these large cruisers were retained and subsequently assigned to a number of other secondary roles, such as training, sovereignty patrols, trooping and accommodations, rates very little mention. The broader purposes of sea power beyond fleet engagement are not considered in this book.

The World's Worst Warships falls far short of being the authoritative and informative work that its provocative title and its famous author promise. A more thorough examination of fewer warships using Preston's very credible criteria could have produced an excellent reference work of enduring worth. Without citing other authors and original documents, this book is reduced to an opinion piece of tertiary rank. The lack of more modern examples of poor warship designs is a major oversight. Only the well-known credibility of the author makes this book worth reading for students and enthusiasts. Unfortunately, it is clear that laying out a book requires as much compromise in purpose as does the designing of warships. In this case, too much has been attempted in too little space, and Preston has failed in his attempt to cram a quart into a pint jar.

Grace Hopper – Admiral of the Cyber Sea, by Kathleen Broome Williams, Annapolis, MD: Naval Institute Press, 2004, 240 pages, photos, bibliography.

Reviewed by Robert H. Thomas

Rear-Admiral Grace Hopper was one of the great pioneers in the development of software that ultimately led to the technological revolution. She was a leader in the creation of common business-oriented language (COBOL) and led the development of many of the critical software concepts that form the basis of modern computing. She loyally served the US Naval Reserve from 1943, starting at the Harvard Computation Laboratory, to 1986, when she was forced to retire as a Rear-Admiral at the age of 89 – the oldest serving officer in the navy. She went on military leave of absence from 1967 to 1971, and then subsequently was fully employed by the USN for the next 15 years. In her civilian career she worked for the UNIVAC division of Remington Rand until retirement in 1971. Immediately after retiring from the navy, she went to Digital Equipment Corporation where she maintained a hectic schedule for several years until failing health intervened.

This book is part of a series entitled *Library of Naval Biography*, most of which covers nineteenth century American naval leaders. This slim volume unfortunately falls between two stools. It moves back and forth from the history of the early development of computers to the life of Hopper. The former is cursory and anticipates the reader having a substantial knowledge of the subject. The latter aspect is often limited to a recitation of the positions held, working relationships and technical achievements. It is only in the final, brief chapter that Hopper comes alive as a person. With only 195 pages of text and the extensive list of bibliographic sources, much more could have been said.

Hopper was a driven, strong-willed and charismatic individual. Her character was exemplified by the many challenges she overcame in earning a PhD in mathematics at Yale and breaking new ground continually, both in

the new field of computing technology and in the old one of entering occupations traditionally held by men. Her accomplishments were many and, remarkably, continued over five decades.

Despite her great success, Hopper did not consider herself to be a feminist, believing that success for women was achieved simply by hard work. She chose to ignore the bureaucratic and other obstacles faced by most women of her generation in pursuing non-traditional careers but did, however, recognize that the women employed in lower echelons were not treated equitably. Much more could be said about how her views were formed and the degree to which her remarkable intellectual capabilities and unique qualifications that gained her early entry into the computer world may have limited her understanding of the challenges faced by other, less gifted women. How much of her experience was related to being divorced and childless – a significant factor that permitted her recruitment into the navy at the age of 37.

This book will be of interest to those who wish to understand the bureaucratic processes surrounding the early development of computing in the US Navy and the roles played by emerging civilian companies. It will also be worth reading for young women entering technological fields. They may see how far they have come, but may not gain a complete understanding of how painfully those advances have been achieved.

American Admiralship: The Moral Imperatives of Naval Command, by Edgar F. Puryear Jr., Annapolis, MD: Naval Institute Press, 2005. 647 pages, notes, index, ISBN 1-59114-699-2.

Reviewed by Gary L. Garnett

Commander Puryear has incorporated his life's work of over 40 years of research, interviews and discussion and personal correspondence with over 1,000 officers of one star rank and higher to create this book. *American Admiralship* includes information about more than 125 people of four star rank. Puryear's objective has been to learn why the most senior US naval officers believed they were successful leaders.

Having compiled this prodigious number of interviews and oral history, Puryear opines that there is a pattern to successful American military leadership. According to him, "Among them are (1) willingness to put service before self; (2) the desire and strength of character to achieve positions that require making tough decisions; (3) a sixth sense that enhances the judgment required for most sound decisions; (4) an aversion to yes men; (5) maturity in perception and judgment attained through lifelong professional reading; (6) mentorship, which reflects understanding of the need to develop successors from among the most promising men and women under one's command; (7) delegation of responsibility among one's most respected subordinates; and (8) true character, the cardinal requisite of leadership, as illustrated by a leader who fixes problems and does not blame others or look for a scapegoat when things go wrong. Acceptance of personal accountability is the prerequisite for character."

While this is an impressive list, some questions immediately come to mind. Are all these moral imperatives? Are they more related to peace-time Admirals? Where is courage? Would Nelson fit into this pattern? I suggest not.

One has to get through about half of the book before one former Chief of Naval Operations (CNO) notes that he "learned a lot from him – what not to do." In my experience, observing the actions of one's seniors is just as helpful in learning how to handle people and situations as how not to. Puryear indicates that his intention is to present both "the bad as well as the good" in his chapters but overall he is very gentle in his approach.

Oral histories can tend to be kind to the individuals involved and when selecting from such a large pool as is available to Puryear, it is entirely possible to choose information to support one's own theories. Puryear has written extensively on the subject of leadership and character covering the senior leadership of both the US Army and US Air Force prior to this book about the US Navy. I certainly found the material from the World War II and immediate post-war admirals – e.g., King, Leahy, Halsey, Spruance and Nimitz – to be very interesting where their personal opinions were blended with hard examples. To me, however, the material from the more modern leadership lacks the same degree of credibility as the oral histories are not supplemented with documented sources. In the cases where I knew several of the senior American officers personally or by reputation in my dealings with other senior US officers, the reminiscences often seem to be somewhat generous in nature.

I was particularly interested to read the chapter on Admirals Rickover and Zumwalt to see how Puryear would handle these two controversial leaders. He seems to take

the middle road relying on previously written material and the many interviews and oral histories of the senior US Navy leadership. He appears to conclude that Rickover stayed too long but that it is almost a certainty that no other individual could have done more to establish the US Navy's nuclear submarine capability or its standard of excellence. Rickover is forgiven for his unorthodox relationship with Members of Congress and his disinterest in being a team player within the US Navy on the basis that he always managed to get the budget that was needed for the nuclear community.

Puryear's treatment of Zumwalt is much less generous although he gives credence to the excuse that Zumwalt was too young and inexperienced to have been put into such a position, and that if he had been appointed several years later he would undoubtedly have been one of the finest CNOs in history. It seems to me that Zumwalt had a choice of refusing the appointment on exactly the basis of not yet being ready to take over the position until he had experienced at least a major fleet or an international command. Given the interesting material from Admiral Holloway, his classmate and successor as CNO, it is clear that Zumwalt had spent much of his career preparing for the position and he was not about to let it slip from his grasp when the opportunity arose. Puryear concludes this section by stating that "The Navy does not need another Zumwalt in its foreseeable future."

All in all *American Admiralship* is a useful source on the subject of naval leadership particularly for US naval officers. For those in foreign navies there are many useful lessons both positive and negative upon which to reflect. As a bonus, readers are able to reinforce their knowledge of the major events in naval history over this 60-year period. One is left to wonder, however, which of these Admirals is the "Nelson" of the US Navy.

Protecting Maritime Resources: Boundary Delimitation, Resource Conflicts, and Constabulary Responsibilities, edited by Rachael Heath and Barry Snushall. Sea Power Centre Australia, University of Wollongong 2003.

Reviewed by Sub-Lieutenant John Arthur

Canada's naval community presently finds itself in a season of reflection on its domestic role, that of guardian of Canada's ocean sovereignty. This is happening amidst all the fresh attention higher authorities are paying to domestic operations following last year's release of a National Security Policy – to say nothing of the recent situation regarding Hans Island vis-à-vis Denmark. As always, it pays to consider the parallel experience of our allies, and in that light *Protecting Maritime Resources: Boundary Delimitation, Resource Conflicts, and Constabulary Responsibilities*, a recent volume from the "Papers in Australian Maritime Affairs" series, makes for interesting reading.

The book is essentially a transcript of lectures from the Maritime Studies Period held by the Royal Australian Navy (RAN) at Fairbairn, Australia, in November 2002, with the inclusion of two more formal papers presented there. The topics are varied but relate coherently to the dilemma of sovereignty at sea.

It is only since the 1982 United Nations Convention on the Law of the Sea (UNCLOS) that states have been as driven to establish as clear maritime boundaries as they have land ones. Here, the first paper examines an ongoing disagreement over maritime boundaries between Australia and New Zealand. Mr. Bill Campbell of the Attorney-General's Department of Australia points out that because the process is not arbitration but bilateral negotiation, with input from the Cabinet level – i.e., the process is political rather than legal – it therefore includes factors other than legal ones. No direct negotiation between governments can be conducted on a strictly legal basis, and the intrusion of politics in all its dimensions is inevitable. Friction on a completely different bilateral file may be allowed to hinder a settlement, as will be obvious to any observer of Canada-US relations. In a negotiation, says Campbell, as opposed to a third party settlement, it is open to both countries to take account of any factors they like. Pity those who negotiate at length what a judicial panel could sort out promptly.

Furthermore, the Australian experience demonstrates a "bid high" effect. Because the result of any negotiation is relative to the opening bargaining positions, it is in the interest of the parties to open with the most extravagant possible claims. Thus a difference in opinion over a boundary that was not, in fact, drastic may be escalated by the process itself. This is especially likely if the parties are friendly and there is little pressure to diffuse the dispute – as is also the case with US claims on Canadian waters at the Yukon and Dixon Entrance boundaries with Alaska. Campbell shows us why the least crucial boundary disputes can be hardest to resolve, and why sovereignty patrols in the Pacific may be poignant for some time to come.

Resource management adds another dimension of com-

plexity. With an enormous ocean area to cover and a limited fleet to cover it, Australia faces even greater obstacles than Canada to enforcing the writ of its fisheries management scheme. In the eighth paper of the book Mr. Paul Ryan examines the problem of reaching far-off Heard and McDonald Islands, a biodiverse World Heritage Site in the Southern Ocean pounded by 17m seas, gales, low visibility, and a polar climate. Like Canada, Australia has also resorted to contracting-out offshore surveillance, but whereas the Canadian program (with Newfoundland-based Provincial Airlines Limited) is limited to flights, the Australian Navy (RAN) has extended the practice to retain private-sector surface vessels. With these vessels lacking military capability when Australia Fisheries Management Authority (AFMA) officials want to board a vessel there is a problem maintaining "hot pursuit" – as required by UNCLOS – out into international waters.

With the contentious notion of "hot pursuit by remote means," RAN vessels could identify tracks by various ISR systems and hail by means of INMARSAT fax or other over-the-horizon communications – while alongside. In theory, this would provide a legal basis for the search and seizure of vessels on the high seas despite a lack of preceding immediate contact in territorial waters, as required by conventional interpretations. In one case, a government charter ship pursued an illegal fisher but, losing water, "hot pursuit" was continued by ISR until a RAN team flown to South Africa could board the suspect from a South African asset as she attempted to exit the Indian Ocean. Given its obvious utility in Canada's own struggle with illegal foreign fishing, any success with this legal limb-crawling will be of keen interest to DND.

Elsewhere in the book, Dr. John Reeve points out the interesting reversal brought on by Al Qaeda's tactics, whereby the nature of sea ports has changed from that of refuge to the locus of threat. For the first time in history, sailors may often be safer at sea. However, his contribution is only two pages, so there isn't much analysis or discussion of this interesting issue. Other chapters have an informality of tone and structure that leaves the reader wishing he had simply attended the conference himself.

Combat-related "glory" topics tend to hog most of the attention from strategists and historians alike, leaving somewhat of a hole in naval literature. Yet, as the editors point out in their Foreword, the RAN is unique among Australia's military services in that it is not only tasked to combat hostile engagement, but also operates at the lower end of the conflict spectrum when it is undertaking constabulary operations in the exclusive economic zone. For readers in countries like Canada which also lack a robust, force-capable Coast Guard to operate as a home fleet, US-style, this role will be familiar. It challenges naval professionals to be informed on a variety of legal, economic and environmental issues in addition to the conventional national security concerns on which other services have the luxury of focusing.

A weightier book would certainly be helpful, but this brief survey is a good start.

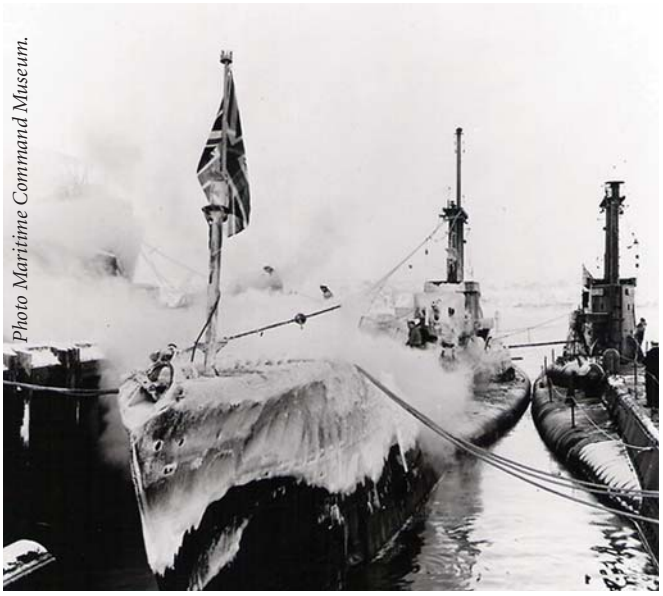

Photo Maritime Command Museum.

In early 1955, the Royal Navy started to maintain a squadron of three "A" class submarines in Halifax to assist in the antisubmarine training of the RCN and the RCAF. The first winter, shown here, was something the British sailors had not expected, and living conditions in the poorly-heated submarines were close to unbearable.

Owen Reid Cote Jr. 2003. *The Third Battle: Innovation in the U.S. Navy's Silent Cold War Struggle with Soviet Submarines.* Newport Paper Number 16, Newport, RI: Naval War College Press, http://www.chinfo.navy.mil/navpalib/cno/n87/history/cold-war-asw.html

Reviewed by Ed Tummers

It is hard to believe that many of the students who enter university this year will have been born after the Cold War ended with the fall of the Berlin Wall in 1989. It is equally hard to believe that it has taken this long for a scholar to come along and document the record of naval innovation in anti-submarine warfare (ASW) during the Cold War. Dr. Owen Cote has written this paper as the

Photo: Canadian Naval Review.

A Canadian Sea King maritime helicopter and a USN nuclear submarine. Such cooperation was a major facet of the Cold War at sea.

first part of a larger project that seeks the best explanation for why and how the US Navy (USN) was able to maintain its record of innovation in ASW throughout the Cold War.

The first step Cote takes is to organize the history of ASW into four battles: the two World Wars, the Cold War and the present. The imbalance between the submarine and the ASW forces has shifted several times with innovations in offensive and defensive capabilities. But, according to Cote, it is important to understand this in terms of asymmetrical warfare, specifically, sea control versus sea denial. During the Second Battle (WW II), for example, a limited number of German submarines were able to deny huge areas of ocean to merchant shipping and naval forces. Eventually, the Allies prevailed, but only because they were able to sustain tremendous losses.

This contrasts with the so-called "Happy Time" for USN ASW forces in the 1970s, when the effective combination of fixed and mobile surveillance sensors and the rapid response of maritime patrol aircraft gave a tremendous advantage over the noisy Soviet submarines. The balance changed again near the end of the Third Battle (the Cold War) when the Soviets were forced to protect their SSBN bastions with their best SSNs against the forward strategy of the USN. In the case of the United States and its allies, which depend on the unrestricted movement of global trade, sea control is vital. Therefore, innovation must focus on the means to impose an asymmetric price on the opposing force.

Cote provides an excellent record of innovation from which to draw case studies and theories. At one point, Cote suggests that pessimism might have been a prime source of innovation. Thus, the imaginations of American engineers always exceeded the American systems actually available to counter them, leaving the Soviets perennially far behind. Another potential source of innovation he described was the response to the unexpected, such as the Allied response to commerce raiding during the First Battle (WW I).

However, there are gaps in the record of the Third Battle which might be further examined to enhance the usefulness of this book in subsequent analysis. For example, from an allied point of view, Canadians tend to place more importance on multilateralism than Americans, and various agencies have been established to further cooperation amongst allies. And it was the combined effort to develop new ASW platforms that led to Canada's part in developing its hydrofoil while the US developed fixed-wing hydrofoils and the UK investigated hovercraft. The discussion of the Third Battle is incomplete without discussing the reasons for USN acceptance of international cooperation as a means to ensure its technological capabilities during a general war.

There is also the thorny issue of security classification and access by allies. To be sure, there were clashes even with Office of Naval Research scientists over the issue of classification. And then there is the whole area of dual use technology in which there are both civilian and military applications for technology. For example, the decision to have private industry develop undersea cables for SOSUS, while at the same time developing a commercial market for trans-Atlantic communications, surely contributed to innovation. The same would apply to the cable ships to lay and repair these cables. These areas certainly had an impact on innovation.

The sections of the monograph discussing allied operations are of particular interest to foreign readers. So, while the USN was engaged with its noisy Soviet adversary in the open ocean, other roles were delegated to allied navies. Coordinated ASW with ships, organic helicopters and maritime patrol aircraft in protection of convoys and high value units became a particular strength of the Canadian Navy, for example. Cote discusses the USN efforts to re-acquire this expertise by activating Destroyer Squadron 31 to improve coordination at the operational levels between IUSS, submarine, fixed-wing and destroyer assets. It would be interesting to find out more about the involvement of the Second Canadian Destroyer Squadron in this effort of innovation during the mid-1980s.

Dr. Cote has provided the reader with an excellent summary of the history of ASW throughout the twentieth century, and leaves the reader with much to think about as we face the new and unknown challenges ahead.

CANADIAN NAVAL REVIEW

Bruce S. Oland Essay Competition

First Prize $1,000

Second Prize $500

Third Prize $250

The top three essays will be published in the *Canadian Naval Review*. The first prize essay will be published in the Summer 2006 issue of *CNR*, and the second and third prize essays will be published in subsequent issues. (Other non-prize winning essays may also be considered for publication subject to editorial review.)

Essays must address issues – past and present – of relevance to current Canadian maritime security.

Submission deadline is 31 March 2006.

Contest Guidelines:

1. **All essays must be original material. They must not have been submitted or published elsewhere.**
2. **Essays are to be no longer than 2,500 words. A limited number of graphics are acceptable.**
3. **Essays must contain appropriate citations in any acceptable format.**
4. **There is a limit of one submission per author.**
5. **Authors should put the title only on manuscripts. Names, addresses, phone numbers and email addresses should appear on a separate cover page.**
6. **The decision of the judges is final. The essays will be judged in a two-stage process. First they will be assessed and shortlisted by the *CNR* Editorial Board and then the winning essays will be determined by a panel of three independent judges.**

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CANADIAN NAVAL REVIEW