CANADIAN NAVAL REVIEW

VOLUME 2, NUMBER 4 (WINTER 2007)

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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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Photo: Cpl Rod Doucet, Formation Imaging Services Halifax

*HMCS **Windsor** returning to her home port, Halifax, in December 2006 after a three month deployment.*

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Editorial: The Navy's People Problem

In her Spring 2006 "Plain Talk" commentary, Sharon Hobson provided an excellent overview of the current expansion of the Canadian Forces (CF), and the significant difficulties the military faces in increasing its ranks by the combined 5,000 regular force members promised by Paul Martin's government and the 10,000 promised by Stephen Harper's government. Since that article was written, several developments have occurred that merit a revisiting of the recruiting issue.

- on 17 May Parliament voted to extend Canada's military commitment to Afghanistan for another two years, through February 2009;
- since 17 May, the Canadian contingent in Kandahar has taken significant casualties;
- in October, amidst the debate over the proposed 're-roling' of naval and air force personnel for service in Afghanistan, serious concerns emerged publicly about the military's ability to staff the Afghanistan mission; and
- in November the military's senior leadership gave apparently mixed testimony on the current state of CF recruiting before the defence committees of the House of Commons and Senate.

What then, is the current state of the Canadian Forces, from a personnel perspective?

On 22 November 2006, Rear-Admiral Tyrone W.H. Pile, Chief of Military Personnel testified before the Senate's Defence Committee that the military was on track to meet its recruiting targets and increase the regular force to 70,000 members by 2010, and had successfully enrolled 5,800 recruits in the previous year. In testimony before the House Defence Committee two days prior, however, Lieutenant-General Andrew Leslie, Chief of the Land Staff, speaking on behalf of the army stated "we are unable to increase our strength quickly enough, and this is a source of some stress." Similarly, in his interview in these pages, Admiral Drew Robertson, Chief of the Maritime Staff, describes the navy's recruiting results as "mixed."

Why the disconnect? Part of the answer might lie with the time lag between an applicant entering the recruiting process and becoming a trained and effective member of the Canadian Forces. Reports abound that many of the army's best trainers are deployed in Afghanistan, and given the mission extension, this will remain the case throughout the planned expansion. Furthermore, despite the recent efforts at revamping the training system, for years the recruiting system has been barely capable of maintaining the status quo, and rarely produces more than double digit increases. It is now faced with the prospect of processing an average of 1,000 additional personnel per year until 2010.

Photo: DND Combat Camera

The Right Honourable Michaelle Jean, Governor General of Canada inspects the Honour Guard of HMCS ***Iroquois****, Flagship of SNMG1, when she visited the ship in Casablanca, Morocco, in December 2006. Shown here talking to Master Seaman Larry Adams.*

No doubt complicating this process further is the decision to allow new recruits to join the military without passing a fitness test, provided they can do so within 90 days. According to the Auditor-General, over the last three years, roughly 12 per cent of the yearly *applicants* to the CF were rejected for being physically unfit. The new policy would presumably count these underperforming applicants as 'enrolled' *recruits*, and although they may be forced out later for failed physicals, this could potentially increase the annual recruiting intake by well over 1,000 new members a year.

Superimposed on these pressing recruiting issues are the crushing demands of the operation in Afghanistan. It has become clear that the army, and in turn the whole CF, is having great difficulty staffing the Afghan mission, with worrisome implications for the navy. The recent controversy over the proposed 're-roling' of future recruits into

the infantry before allowing them to continue on to other military occupational specialities highlighted the navy's significant personnel contributions to the mission, particularly in support roles, and both the Chief of Defence Staff (CDS) and the Minister of National Defence have indicated that this will increase in the future. At the same time, the demands of the mission will presumably put pressure on the recruiting process to produce more combat arms soldiers, infantry in particular.

The other significant impact of the Afghanistan mission will be its effect on the CF attrition rate. At the time of writing, since the current deployment in Kandahar began last February, the CF has suffer 36 fatalities, and between 2002 and November 2006, 170 CF personnel were wounded in action. Additionally, it is significant to note that the CF have only just begun to understand and appreciate any impacts of post-traumatic stress disorder (PTSD) on the first Kandahar rotation. As the combat in Kandahar has been described as the most intense Canadian troops have experienced since the Korean War, it can only be assumed that there will be some measurable incidence of PTSD. None of this is meant in any way to demean the actions of the CF in Afghanistan, nor imply that Canada should pull out. Rather, this is merely meant to indicate that the combat operations in Afghanistan may negatively affect the CF attrition rate based on medical discharges alone, from now until February 2009.

Since the military's *Annual Report on Military Personnel 2004-2005* projects the percentage of serving members leaving the military each year to increase substantially in the future as the average age of the Canadian Forces increases, any Afghan-related attrition will only add to the number of people leaving. Furthermore, now that the military has instituted a "universality of service" policy

Photo: MCpl Charles Barber, SNMG1 (NATO)

*Ordinary Seaman Jason Dunn of HMCS **Iroquois**, uses semaphore flags to send a message to another ship.*

Photo: MCpl Charles Barber, SNMG1 (NATO)

*Captain (N) Dan MacKeigan, Commanding Officer of HMCS **Iroquois** during a replenishment at sea approach exercise while sailing to Aalborg, Denmark.*

whereby all members must be medically able to deploy on operations, severe injuries that might previously have resulted in a permanent administrative posting in Canada will now result in dismissal from the military within three years. In plain English, the military will need to recruit more and more people each year, just to maintain the status quo. While the numbers mentioned above are relatively small, even an extra hundred or more people leaving is significant when the current recruiting system is hard-pressed to add an extra 1,000 a year, and according to the Summer-Fall 2006 issue of *Matelot*, the navy fell short of its recruiting target by about 100 sailors.

Unfortunately, this renewed emphasis and planned expansion has coincided with falling unemployment rates nationwide, including in all four Atlantic provinces, which have traditionally provided a substantial share of both CF and navy recruits. Thus, more so than in previous years, the Canadian military is competing with the private sector for personnel, particularly those with highly technical skills. In this regard in particular, the navy is at a significant disadvantage due to the technical sophistication of its primary platforms, and has been forced into creative arrangements with community colleges in an attempt to alleviate these shortcomings.

With the launch of *Operation Connection* and edgy recruiting ads, the Canadian Forces have recently given their recruiting efforts some much needed oomph. It remains to be seen, however, if this will actually translate into the significant number of people in uniform needed to carry out the planned increases.

While the promised additions to the ranks, accompanying funds and new emphasis on recruiting by the CDS are most welcome, a bit of caution seems warranted about the looming CF expansion. Right now, everyone has high expectations that expansion can occur in the near future, but it might be more prudent to accept that it could be well into the next decade before the CF can actually expand to the desired strength of 75,000.

Dave Perry

A Conversation with Vice-Admiral Drew Robertson

*On 6 November 2006, Dan Middlemiss and Peter Haydon of the **Canadian Naval Review** Editorial Board met with Vice-Admiral Drew Robertson, Chief of the Maritime Staff, to discuss the Canadian Navy's development plans.*

CANADIAN NAVAL REVIEW

Admiral Robertson, first may I thank you sincerely for taking time out of a busy schedule to talk to us. I think it is fair to say that the future of the Canadian Navy is of interest to all of us associated with it in one way or another. So, one of the questions most of us would like to pose to you is, what is happening to the single-class surface combatant?

ADMIRAL ROBERTSON

It might also be useful if I give you a couple of words of introduction to my job as Chief of Maritime Staff and Commander of Maritime Command which I view as the Canadian Forces' (CF) steward of maritime capabilities. I believe the Environmental Chiefs of Staff have a role and responsibility that is quite different from that of Associate Deputy Ministers in the department and indeed different from other authorities in the Canadian Forces as well, notwithstanding the changes to our command structure. Fundamentally, my command responsibilities include the continuity of the professional naval service from the links of the past (our history and culture and so on), through to the present including everything that it takes to generate the very capable navy that we have today, and through to operational requirements for its future development. All of that has to be done within the context of a single service called the Canadian Forces and working within an integrated defence team.

I think the fundamental of the navy's attributes, to use the language of the latest defence policy statement, effectiveness, responsiveness and relevance, is that we are the most effective, relevant and responsive we've been in a long time, certainly in my career. And the challenge is how to get to a future where we continue to be effective, responsive and relevant. So, the question of where we are going with a single-class surface combatant speaks to our overall efforts to make sure that we maintain the fleet effectiveness that we will need well into the future.

The single-class surface combatant is going to be of vital importance to the fleet that we're building in the 2017 and beyond time-frame because it's going to ultimately replace both the 280s and the *Halifax*-class. I think any government's plan for defence is going to include some version of the future surface combatant as a replacement in mid- to late next decade which is about as fast as we can expect to achieve an initial operating capability under most procurement models. We face a number of challenges in fleet capacity as we begin the transition to the new fleet over the coming decade.


Photo: DND

Vice-Admiral Drew Robertson, Chief of the Maritime Staff

I think the limited investment made in the fleet over the last decade by previous governments has given us very little room to manoeuvre at this point as we head towards the single-class surface combatant. We also have to get on with modernizing the *Halifax*-class so that it can operate in the contested littoral of the future. If we were not to modernize the class to operate in that kind of environment we will decline in capability rapidly from early in the next decade through until technological obsolescence takes full hold of the ships by the end of the next decade. At the same time, we have to acknowledge that beyond the *Halifax*-class problems, the 280s are aging and that by the middle of the next decade they will be headed well into their forties. Managing the transition between today's fleet and the fleet of tomorrow becomes just as critical to us as developing the next fleet.

We have to maintain an operational capability at a level that will give the government of Canada options even while we're going through the modernization of the *Halifax*-class and the transition to the new fleet. There is not a path that will get us to that future capability without going through *Halifax*-class modernization, so it remains our number one priority.

But at the same time we recognize that we have to replace the capabilities that the 280s provide in terms of command and control and area air defence, because those capabilities are fundamental to our ability for independent action and absolutely fundamental to our ability for international leadership, something that the government values.

Photo: MCpl Robert Buttrill, Combat Camera

*HMCS **Ottawa** patrols in the Arabian Gulf alongside the American Amphibious Assault Ship USS **Boxer**, flagship of the 5th Expeditionary Strike Group in November 2006.*

CNR

Do you foresee a capability gap again, as all the programs start up?

ROBERTSON

There will be a decline in capability from the start of the *Halifax*-class modernization through until its completion. Our ability to deploy for maritime security operations, in single ships or task groups, will be relatively limited during that period, and the more we commit to maritime security tasks, the less we will have available to generate a task group when that capability is required. But we have to generate a task group from time to time even if it's for exercise purposes to maintain the competency of those individual ships that we deploy. So it will be a careful balancing act, but there is no doubt that there will be a dip in our operational capability, our output, if you wish.

CNR

A question that comes out of that is, do you think that the need for a blue-water capability, in particular the naval task group, is adequately understood in political circles and from coast to coast?

ROBERTSON

I think the need for us to have an expeditionary capability based on a task group is well understood. However, there is some question as to what character the littoral environment will have in years to come. In that respect I think Hezbollah's attack on the Israeli frigate off the coast of Lebanon was a clear reminder, to a number of navies, that the littoral is not a benign environment. It is also a marker that can be used to remind people that while some littoral areas around the world could be characterized as benign, most of the places where we're liable to be sent will not be.

CNR

In that respect, do you think a return to Korea to enforce a quarantine is within the navy's capabilities today?

ROBERTSON

Yes, but I wouldn't want to speculate about any particular mission. The ability, in broad terms, to conduct and enforce a mission of the kind we undertook in *Operation Apollo* is fundamental to our navy, and we can certainly do that again.

CNR

Could you talk a little about flexibility and capability, specifically, do you think we still have the necessary capability and flexibility to do new overseas missions, complex overseas missions?

ROBERTSON

That's an important question because it really speaks to the responsiveness and relevance of the navy. It's not enough to have effective combatants, you must be able to deploy them and they have to be useful once deployed. Even with *Iroquois* deployed in the Mediterranean, and *Ottawa* deployed in the Indian Ocean, we still have the capacity to form and deploy a task group. In other words, we still have the degree of flexibility required to create a maritime force to deal with the nation's interests. We still have the unmatched responsiveness that we have seen demonstrated over and over again, with the ability to deploy on 10 days' notice if that is what is required politically. Those are high readiness forces deployed on operations. We have the ability to continue to do that. At the same time, we want to generate more effect with standard readiness ships. For instance, the work that we do with the United States Navy, both in operations and exercises, serves us very well building experience and relationships, but we need to engage more broadly than merely exercising with the United States Navy, given our country's aspirations. So, I think *Ottawa*'s recent exercising with American and Indian forces, which was a first

Photo: Cpl Halina Folfas, Formation Imaging Atlantic

*HMCS **Athabaskan** sails from Halifax on 6 September 2005, as the command ship for the Canadian Task Force (Atlantic) in support of **Operation Unison** in the aftermath of Hurricane Katrina.*

Photo: Formation Imaging Atlantic

Underway logistic support provides strategic flexibility to naval forces and joint forces deployed by sea. Shown here are HMCS ***Protecteur*** *and HMCS* ***St. John****'s refueling.*

for us, is an example of one area where we have interests that need to be reinforced.

CNR

Standard readiness. Is that the new 70% capacity that our latest RPP [Report on Plans and Priorities] talks about as opposed to the 90% capacity for high readiness?

ROBERTSON

A standard readiness ship is one that would not be instantly prepared for the highest level of operations but yet is quite able to do every task assigned to it. It hasn't been put through the final work-ups or the preparations for what might be called a combat mission. There are many regions our navy could deploy to so as to engage in the national interest in broad global maritime security affairs and that might include areas such as the West African littoral, the Caribbean, and some parts of the Americas, areas that we haven't been to for a number of years because we've focused so heavily on *Operation Apollo* and because we've had to deal with the resource challenges of deploying high readiness ships. But we need the broader experience especially as we head towards the modernization of the *Halifax*-class and the eventual dip in fleet capacity. We need to build experience levels with the crews now. But it's more than about building experience levels, it's about international engagement.

CNR

Do you see the need to continue the ships' exposure to the rest of the world just to gain experience working in different climates, working with different navies, and generally staying as an international force rather than just a national force?

ROBERTSON

One of the key lessons I took away from *Operation Apollo* is that you can't go and buy a naval Michelin guide to any new operating environment. You need to have some experience in the area before you deploy there for operations. And in the case of *Operation Apollo*, we gained that experience from the lessons learned and the post-deployment reports from numerous single frigates that were deployed with American expeditionary strike groups over time. That is what gave us the confidence to be able to deploy. Not only to deploy but to know that we had everything we needed to be successful on arrival in theatre. There are areas that we haven't been exposed to enough in recent years where the Canadian Forces may need to go as a result of government interests years from now. Of course, deployments aren't mere recces of potential theatres, they are about contributing to the maritime security of the region while gaining the knowledge that lets one be prepared to return for any operations later.

CNR

The next question is about people. The navy is nothing without people, and there are concerns not just in Canada but within other navies as well. One of these is recruiting and retention. The Australians were even beginning to ponder some form of conscription or national service if they are to maintain the naval footprint that they have in their region. I don't want to advocate that Canada go that route, but clearly one of your concerns must be the flow of recruits into the navy and the retention of individual skills in which the navy has invested.

ROBERTSON

We are much better situated than the Australians when it comes to retention. I don't know what all the factors are that impact on the Australians but they have about a 12 per cent release rate as opposed to our six and a half per cent. In retention, we're doing well compared to other navies worldwide, and we're really staying pretty consistent with our historical averages. There may be some demographic challenges facing us in keeping that rate of release in the next decade as we deal with the fallout of

the force reduction of the mid-1990s. On recruiting, our results have been somewhat mixed, and the navy has to take a stronger interest in helping the Canadian Forces' recruiting system to be successful. We've made some progress in our recruiting support but there's still work to do. We're still under strength in the number of ship drivers we have, and we have a number of distressed NCM [Non-Commissioned Members] occupations. Those are principally the technical occupations where the competitive marketplace is a challenge for anyone that's looking for talent. But we must do a better job at getting the technical personnel into the navy or that will become a limiting factor in years to come. We now have a Canadian Forces Recruiting Group that's under a commander rather than under a staff officer; Commodore Roger MacIssac, who was previously base commander in Halifax, is that commander. We've given him a reminder of just what kind of challenges we face and the encouragement that we'll undertake innovative recruiting efforts if that's what it takes to bring talent through the door.

CNR

Why do the majority of young people join the navy now? Years ago many of us joined because we wanted an adventure. Is that still true?

ROBERTSON

There's still a very broad range of reasons why people join the navy; from that desire for a sense of adventure through to the classic interest of getting an education paid for by the Crown with the possibility of an exciting career afterwards – where people are willing to give us a try in exchange for an education or training.

Photo: Pte Darcy Lefebvre, Formation Imaging Atlantic

*Canadian Coast Guard Ship **Terry Fox** refuels HMCS **Montréal** in Dundas Harbour, Devon Island, in August 2006 as part of **Operation Lancaster**.*

Photo: Cpl Rod Doucet, Formation Imaging Atlantic

*HMCS **Cornerbrook** returning home to Halifax in December 2006.*

Part of the reason we're so effective abroad is that our training is without equal. We send ships abroad with our sailors individually better trained and our ships companies as well trained as any other, and we're able to do that in part because of the investment we've made in infrastructure over the years and some of the work done in establishing both distributive learning and indeed some investments in synthetic environments for training and experimentation and concept development.

CNR

Is there a bit of a two-edged sword in this? Because you are training the people so well they become attracted to the private sector, and some of the financial incentives may be more attractive than you offer, particularly in the high-technology trades?

ROBERTSON

I think that the individuals recognize that we have a commitment to what's commonly called lifelong learning, and that the education that they've been provided to date in their career is but the start, more will follow to prepare them better for further challenges. At any rate, I don't think it's anything we could dumb down in a hope that others wouldn't find people attractive. We have to train at the levels we do, especially for the technicians, given the complexity of the ships and operating environments.

CNR

Are the new recruiting advertisements effective? The students at Dalhousie we asked were quite impressed.

ROBERTSON

They have been effective, my only concern is they might be a little dark. We're going to get the adventure seekers, many of them no matter how we advertise. But we need the swath under that of people who are interested in joining but aren't really so sure that they're up to the challenges because they don't fully understand them.

Photo: WO Randolph Rice, DND Public Affairs Ottawa

Members of the US Navy beachmaster mentorship team wait for Canadian equipment and personnel to disembark from a US Navy landing craft at Camp Lejeune, North Carolina, in November 2006 during the CF Integrated Tactical Effects Experiment as part of the development of the Standing Contingency Force.

We'll take them, grow them to be able to deal with those challenges and help them onward.

CNR

Are three JSS [Joint Support Ships] enough? Would you like four?

ROBERTSON

I think government funding was provided to give us the ability to acquire three, but it's no secret that four JSS, as with four AORs, means that one always has at least one available on each coast. Having said that, I think our experience over the last 30 years showed our ability to manage the maintenance cycles in a way to make sure that we always had capability available. I'd like to have had four JSS but we have to be realistic about the budget that's available to us. What I do know about three JSS, or at least what I can anticipate about three JSS, is that with the capacity that they're going to bring, not just for the navy but for the Canadian Forces as a whole, they're likely to be three of the busiest ships in the Canadian Navy.

CNR

Finally, what about the submarines? Are they entrenched in the force structure or are they under threat again?

ROBERTSON

I think what matters is that we're making great progress with the submarines. As you've probably seen we are well on our way to gaining the full capability that we're pursuing. And that capability is going to deliver us exceptionally capable boats. I think that the work that *Windsor* did during the spring exercise reminded everyone what a powerful combination stealth, skill and persistence is in the naval environment. That combination is sometimes demonstrated in exercises in our waters against our allies; for instance, we've demonstrated those abilities against American battle groups, which is clearly not the reason we purchased the submarines, but those skills are rapidly transferable to use in other situations. And that's what people have seen I think with the Pathfinder exercises conducted in the spring, both by the insertion of the Pathfinders into the submarines and the boats' ability to deliver them.

CNR

We've had a couple of instances when, in talking to the local media, we've come to the conclusion that the media is anti-submarine. There seems to be an engrained suspicion of the submarine. Some believe that is the result of their being shut out of the *Chicoutimi* enquiry.

ROBERTSON

The demonstrations of steadily building submarine expertise in ISR [intelligence, surveillance and reconnaissance], surface warfare, sub-surface warfare, and so on, make the case that they are valuable. Adding the work with the special operations personnel and the Pathfinders on top of all the other skills helps show their versatility. We also need to demonstrate those capabilities abroad. In that way, we are reminding people why we need those submarines. In fact one of our challenges is that our secrecy with submarines was such during the Cold War that many people didn't understand why we had submarines in the Cold War and hence it's hard for them to understand where we may be going, to the extent that those who have not had any exposure think that we purchased the submarines only for the ability to train surface ship crews. Should we be surprised then that they have a longstanding belief that there's not a need? I think we did ourselves a disservice by not publicizing, or explaining broadly, what we did in the Cold War.

CNR

Admiral, thank you for a truly fascinating overview of what lies ahead for our navy.

Bruce S. Oland Essay Competition 2nd Prize Essay

Mending Fences: Assessing the Canadian Decision to Expand NORAD

Brian Nicholson

Photo: DND Combat Camera

Two aircraft from 425 Tactical Fighter Squadron, 3 Wing Bagotville. The 2 CF-18 Hornets are armed with 2 Sparrow missiles and 2 Sidewinder missiles.

On 7 May 2006, Canada's elected officials voted by an overwhelming majority to expand the mandate of the North American Aerospace Defence (NORAD) command to include the coastal waters surrounding North America. The new agreement, which tasks NORAD with a "maritime warning mission," enjoyed the support of both the opposition Liberal Party and the governing Conservative Party. Numerous advocates for increased integration suggested that there was a pressing need for Canadian maritime assets to have arrangements similar to what the Canadian Air Force has with its American counterpart in NORAD. A small group of politicians and defence analysts expressed reservations, some going as far as suggesting that an expansion of NORAD would involve Canadian maritime forces becoming merely an extension of the US Navy. In the wake of Canada's refusal to partake in the war in Iraq and the US Ballistic Missile Defence (BMD) Program, the Canadian government's response to NORAD renewal begs a very important question that was best asked by David Rudd of the Canadian Institute of Strategic Studies: "should this be seen as merely a fence-mending gesture or the result of a sober appraisal of Canada's security interests?"[1] Indeed, do Canadian maritime defence requirements necessitate a similar framework for Canada-US defence cooperation as found in NORAD?

Two criteria must be examined: (1) the utility derived from NORAD expansion; and (2) the risk NORAD expansion poses to Canadian sovereignty. A thoughtful analysis will illustrate the limited gains achieved with an expansion of NORAD to the maritime realm at the expense of a more independent Canadian defence policy. It will become clear that the ratification of NORAD expansion may have had little to do with expanding real Canadian defence interests, and more to do with appeasing American concerns for Canada's lackluster commitment to North American defence and nurturing our long-term bilateral defence relationship.

Do Canadian maritime defence requirements necessitate a similar framework for Canada-US defence cooperation as found in NORAD?

Assessing the Utility of an Expanded NORAD

Former NORAD Deputy Commander Lieutenant-General George Macdonald has noted that the following elements make bilateral defence cooperation between the United States and Canada operationally efficient: information integrity; training and exercises; confident communication and procedures; and technical compatibility.[2] Taking the maritime sphere into account, however, it can be argued that every strategic advantage garnered from a NORAD-like integrated command structure was already attained through the Bi-National Planning Group (BPG) established in December 2002. Not only did the BPG properly fulfill its mandate by addressing the gaps in continental maritime cooperation, it also took measures to remedy these deficiencies. In actuality, through the successful work of the BPG, these four elements of bilateral defence cooperation were already successfully established prior to 7 May 2006.

Photo: Private Vaughan Lightowler, 19 Wing Imaging Comox, BC

Two CF-18 Hornets from 4 Wing Cold Lake's 441 Tactical Fighter Squadron over Vancouver Island. Mounted on the aircraft are 3 external fuel tanks, 2 Sparrow and 2 Sidewinder air-to-air missiles.

First of all, it cannot be denied that there already existed an extremely high degree of communication and cooperation between the two military forces. Canada-US naval cooperation was extremely efficient prior to the 11 September attacks. Through the two recently established Marine Security Operations Centres (MSOCs) on each coast, the Canadian Navy is in even closer contact with its American counterparts south of the border, including the US Coast Guard Operations Centers as well as US Naval Command. Further contact with US maritime forces is facilitated through the Interdepartmental Marine Security Working Group (IMSWG), consisting of all the major players in Canadian marine security.

The BPG further established a reliable means in which to collect and transfer information between two independent yet highly interoperable entities. According to Captain Daryl W. Morrell, "the BPG has facilitated the development of a combined Canada-US maritime awareness product that provides each nation with a picture of maritime activity around North America."[3] This was facilitated through the efforts of the NORAD Working Group on Maritime Surveillance and the Maritime Plans and Surveillance Working Group. Through this the military of both countries are aware of the other's activities and continuously exchange information on vessels moving through their respective areas. As of 2004 the BPG had already developed eight threat scenarios that focused on weapons of mass destruction, terrorists and natural disasters. The BPG contingency plans outline the processes to be followed by Canada and the United States in response to a threat or incident in either country or in the maritime approaches to North America.

Former Liberal Senator John Wiebe asked why "we have to reinvent the wheel?"[4] In other words, why would what is good for the aerospace domain not be good for the maritime domain? There are a number of reasons why NORAD solutions are not useful for the maritime domain. First of all, the nature of the threat has changed in drastic ways since the inception of NORAD in 1957. Rather than preparing for massive Soviet air strikes, those in charge of Canadian maritime security must now take into consideration a diverse range of traditional and non-traditional security perils. But a more appropriate answer may be found by examining the inherent differences between the two military domains. The time factor involved with aerospace threats demands a robust command and control structure that can respond in an extremely short time. This is not the case in the maritime context where 'unknown' naval vessels do not require immediate response. As Lieutenant-General Macdonald explains:

> In an air situation, you may have to respond in a couple of minutes to whatever you suddenly detect on your radar screens, whereas in a maritime situation, it is likely that, with the proper intelligence and surveillance capabilities, you can track a potential threat for quite a long period of time and you will have the luxury of being able to decide how to address it without having to respond in a matter of a couple of minutes.[5]

Thus, it is not immediately evident why an integrated command structure is essential when there is ample time to coordinate individual or combined responses to a potential maritime target.

In contrast to the aerospace domain, it is simply not necessary in the maritime context to have a certain group of naval platforms assigned to NORAD on a day-to-day basis. Rather, with solid contingency plans in place, it is reasonable for the corresponding maritime authorities from Canada and the United States to deal with maritime threats on an ad hoc basis. Seeing that the final agreement reflects this reality, it is even more important to ask why this extra layer of defence integration is required.

During the Cold War, the maritime problem was handled without the politically contentious obstacles found in NORAD. According to John Orr,

> Difficulties were experienced in the NORAD context due to the different expectations of the two governments with respect to consultation. On the other hand, in the maritime context, the ease of interoperability permitted the flexible handling of a significant threat to North America without necessarily tying Canada to a predetermined reaction or overt posture.[6]

With this in mind, the determining factor for effective cooperation in the maritime sense may not be an integrated command but, rather, extensive communication and a high level of interoperability. The co-location of the BPG and NORAD at Colorado Springs facilitated this real-time sharing of information necessary for threats from the maritime approaches. Thus, it can be argued that the BPG already established an excellent environment for Canadian and American naval forces to combat modern maritime threats.

Endangering Canadian Sovereignty?

Critics of the NORAD integrated command structure often protest that Canadian sovereignty is endangered when operational control of Canadian forces is given to an American commander. The 1962 Cuban Missile Crisis and the 1973 Middle East crisis are often put forward in support of these accusations. However, it should be noted that there are procedures to allow US personnel to replace Canadians should the two governments disagree on the need for a response. And contrary to Jeffrey Simpson's 2002 accusations, there was no sign that complications occurred on 11 September 2001.[7] Apparently the exchange of information and consultation with the Prime Minister began immediately after the tragic attack, making force deployments and alert level adjustments subject to civil authority concurrence.

Photo: Private Vaughan Lightowler, 19 Wing Imaging

A CC-130 Hercules from 435 Transport Squadron flies over Vancouver Island and refuels 2 CF-18 Hornets from 441 Tactical Fighter Squadron.

Nonetheless, many still fret about the possibility that Canadian national command will be circumvented once again as Canadian forces become increasingly interoperable with the US Navy. Michael Byers specifically focuses on the "co-operative engagement capability" (CEC), a new communications technology that would allow a Canadian ship to engage a target that is being tracked by an American ship.[8] He warns that although the Canadian commander would usually have time to opt out of any particular operation, there would be no time for this if a battle group containing Canadian ships was "unexpectedly attacked." This begs the question with what type of negotiation tactics would Mr. Byers have the commander of our Canadian warship commence if our battle group was unexpectedly attacked?

Despite the ineptitude many pundits say characterizes the Department of National Defence (DND), it is highly unlikely that defence officials would allow the operation of a CEC system without strict guidelines for its use. Although Canadian forces may be under operational control of an American admiral, that admiral is limited in his use of that command as set forth by the operational parameters outlined in Ottawa. The Canadian Navy proved in *Operation Friction* and *Operation Apollo* that it could operate in such a framework without endangering Canadian sovereignty. In fact, it is odd why there is no such uproar when Canadian ships are placed under the operational control of Dutch or German commanders for NATO exercises similar to that created by American operational command in NORAD. Not only does the new agreement clearly stipulate that NORAD will not exercise operational control over maritime assets, NORAD arguably never did pose a threat to Canadian sovereignty with regard to operational-level command and control.

Two Canadian CF-18 Hornets with a CP-140 Aurora fly in formation off the coast of Hawaii in celebration of Canada Day, while participating in RIMPAC 2006.

A traditional justification for bilateral defence cooperation has been the moderating influence Canadian officials are supposed to have on American defence policy. Stephen Clarkson has written that NORAD "would guarantee Canada vast flows of intelligence plus influence, including the right to be consulted, the right to participate, and the right to sit at the table where decisions are to be made."[9] Yet, it is obvious that many defence pundits may have oversimplified the real extent of Canadian influence in the integrated command and control structure. Joel Sokolsky suggests that Canadians have a "seat at the console rather than a seat at the table."[10] In effect this means that beyond the initial consultations, NORAD does not offer Canada special influence over US decisions. Seeing that Canadian participation does not go much beyond threat assessment and consultation, it is intriguing to know what kind of influence, if any, is being transmitted in this relationship.

There have been a number of instances during the NORAD experience in which Canada has been influenced by, rather than shaped policy in Washington. These instances would include the removal of the Anti-Ballistic Missile (ABM) clause from the NORAD treaty during renewal negotiations in 1981 and US cruise missile tests in Canadian airspace in the 1980s. Alarmingly, these were issues that many Canadian political leaders felt very strongly about yet, with pressure, their decisions were reluctantly reversed. In a relationship between a large and a small power, the smaller power is influenced far more than the larger one – so Canada has *been* influenced much more than it *has* influenced. Reconsideration of the 'seat at the table' argument puts into question the advantages of being in such an entrenched bilateral defence relationship with the world's sole remaining superpower.

At the level of 'grand strategy,' Canadian defence policymakers independently determine broad national objectives that will shape overall defence policy. More often than not, and not surprisingly, Canadian grand strategy acknowledges the importance of cooperating with the United States in common defence objectives – and as such can be considered an autonomous decision by Canadian officials. Yet, this evaluation must go beyond threat assessment and consultation mechanisms to the military strategic level of cooperation. This level of cooperation often goes unnoticed, but it is at this level that autonomy becomes a murky issue. Essentially, autonomy is safeguarded when Canadian military commanders are able to choose between a set of options designed to satisfy national military objectives. Yet, it becomes far more contentious when that list of strategic options is dictated to Canadian authorities by a foreign actor, as is arguably the case in NORAD deliberations.

The source of the problem may be found in the Permanent Joint Board on Defence (PJBD) where Canadian officials supposedly cooperate in the combined planning of North American defence. In reality, however, the PJBD appears to be a venue for Canada to review policy options once alternatives have been eliminated either in closed US planning sessions or in joint Canadian-US NORAD Command. The most effective time and place for Canada to influence American defence and security policy-making is at the planning stages, but we are not present there. By the time we receive information about programs, the plans are already well developed and are at a stage when we can decide only whether to participate or not.

Bilateral defence policy formulation does not begin at the 'what's best for Canada?' level, rather it becomes a choice between what options Canadian commanders are left with after American defence policy has been determined. This is how Canadian officials found themselves supporting a sometimes overtly aggressive nuclear doctrine towards the Soviet Union during the Cold War.

One may also argue that US naval strategy for continental defence may begin to influence Canadian long-term force procurement to the detriment of international commitments. Philippe Lagassé believes that it would be unlikely that Canada could participate in a maritime NORAD without a "thorough revision of naval policy and force structure."[11] Such a revision is not a simple task due to the fact that our current force structure maintains versatile vessels capable of both continental defence and international operations. Despite Canadian defence officials' latitude in making autonomous decisions, participation in alliances such as a maritime NORAD may constrain subsequent policy by limiting the number of options Canadian commanders have to pursue national objectives in the future. Once command is integrated into a permanent institution and the force structure has been altered, it is not a simple matter for Canada to reverse this process.

Furthermore, it is hard to deny that there exists a correlation between an integrated command and expectations of unquestioned or automatic support in the future. Ottawa may also be concerned about its lack of 'counterweights' to offset the highly asymmetrical continental defence relationship with the Americans. The dwindling effectiveness of Canada's participation in the United Nations may give Canadian officials little room to actualize their independent policies. Finally, we must also take into consideration the sensitive issue of Canada's sovereign control of the Northwest Passage. As Byers notes, "Now we're expanding the NORAD agreement with the US, the nation that we are concerned about with regards to our Arctic sovereignty, and we're going into partnership with them on monitoring the same waters that are in dispute.... It doesn't make too much sense.[12] Although it is not clear at this point whether greater cooperation in maritime surveillance in the Arctic will be a wholly negative development, one must admit that it adds a whole new level of complexity to the status of the waterway.

*Rather ... Canadian defence **policy** once again does not match Canadian defence **interests**.*

In light of these considerations, there is reason to believe that the level of cooperation inherent in the BPG structure may have been ideal for Canadian maritime security. Lieutenant-General Macdonald highlights the fact that through the BPG "each country can decide how to deal with an incident in the pre-established way that we could arrange with the United States."[13] Rather than facing an assortment of limiting options similar to NORAD, if need be maritime officials were at least able to pursue a relatively independent policy from that of the Americans.

The BPG framework allowed for effective cooperation, but still protected policy independence and political sovereignty. The framework provided the processes for the countries to work together but did not force them to do so. Thus, the BPG framework permitted both countries to react in unison if they so wished but did not entail the same degree of expectations for predetermined reaction as NORAD. In this way Canada's choice to opt out or participate in coordinated responses on an ad hoc basis in the BPG framework did not carry with it the same political ramifications evident in the NORAD framework.

Conclusion

If an integrated command structure for the maritime realm were to be an extremely valuable development, then, as in the past, Canadian officials could of course overlook certain sovereignty concerns in order to ensure greater security. However, the utility of expanding NORAD to include the maritime sphere is negligible, making it difficult to set aside apprehensions regarding Canadian autonomy. In this way the 7 May vote to expand NORAD to the maritime sphere may not have been what many referred to as the "logical next step." More likely, it was more about sacrificing short-term Canadian sovereignty concerns for what may be perceived as a stronger bilateral defence relationship with the United States. Expanding NORAD created the impression both south and north of the border that Canada was willing to play an increased role in the defence of North America. In reality, expanding NORAD may have done very little to increase the protection of North America's coastal waters.

Although the political benefits of maintaining a positive Canada-US defence relationship are difficult to put a value on, they should in no way be ignored. Thus, the author makes no attempt to claim that our political leaders have made the wrong decision in expanding NORAD into the maritime realm. Rather, the author wishes to emphasize that Canadian defence *policy* once again does not match Canadian defence *interests*.

Notes

1. David Rudd, "Canada Missile Defence Muddle," *Canadian Institute of Strategic Studies*' Commentary (February 2005), p. 2, at http://www.ciss.ca/Comment_MissileDefenceMuddle.pdf.
2. LGen George Macdonald, "Interoperability at Work," in Ann L. Griffiths (ed.), *The Canadian Forces and Interoperability: Panacea or Perdition?* (Halifax: Centre for Foreign Policy Studies, 2002), p. 153.
3. Daryl W. Morrell, "Group Working to Improve Safety and Security," *Maple Leaf* Vol. 7, No. 29 (1 September 2004), at http://www.forces.gc.ca/site/community/mapleleaf/html_files/html_view_e.asp?page=vol7-29p6-7.
4. Honourable Jack Wiebe, Standing Committee on National Defence and Veterans Affairs (SCONDVA).
5. LGen George Macdonald, testimony before SCONDVA, 6 May 2002, at http://www.parl.gc.ca/37/1/parlbus/commbus/senate/Com-e/defe-e/14eva-e.htm?Language=E&Parl=37&Ses=1&comm_id=76.
6. John L. Orr, "The Canadian Forces and the Doctrine of Interoperability," in Griffiths (ed.), *The Canadian Forces and Interoperability*, p. 191.
7. Jeffrey Simpson, "What Matters is Defence Integration, Not the Eggleton Sideshow," *Globe & Mail* (9 February 2002), p. A18.
8. Michael Byers, "The High Price of Getting Too Cosy," *Globe & Mail* (7 December 2004), p. A19.
9. Stephen Clarkson, "Uncle Sam and Canada After September 11th," in Griffiths (ed.), *The Canadian Forces and Interoperability*, p. 81.
10. Joel J. Sokolsky, "Seat at the Table: Canada and Its Alliances," *Armed Forces and Society*, Vol. 16, No. 1 (Fall 1989), p. 21.
11. Philippe Lagassé, "Canada-US Cooperation in the Defence of North America: Canada's Maritime Security Conundrum, *Canadian American Strategic Review Online Symposium 2004/2005* (September 2004), at http://www.sfu.ca/casr/ft-sr-lagasse1-1.htm.
12. Michael Byers quoted in David Pugliese, "NORAD Expands Surveillance Role, Includes Maritime Responsibilities," *Defense News* (22 May 2006).
13. LGen George Macdonald, testimony before SCONDVA.

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Reflections on the Canadian Amphibious Task Force

Colonel (Ret'd) B.K. Wentzell

The government of Canada has enunciated a foreign policy that links diplomacy, development assistance and defence activities with the pursuit of Canadian interests in the world. The current focus is upon failing or failed states where the three mechanisms can be brought together to assist the international community in salvage of a particular situation by allowing the people of that country to regenerate their national identity, institutions and infrastructure. In more urgent cases the requirement may include an expeditious evacuation of Canadian citizens or those of other countries. Canada intends to work through the United Nations, the North Atlantic Treaty Organization (NATO), coalitions of willing states and non-governmental organizations to achieve its goals.

From the perspective of the Canadian Forces (CF), there are numerous opportunities flowing from the revised foreign policy. For the CF the real challenge is to develop an integrated general purpose military capability that spans the full range military activities from fighting a war, as in Afghanistan, to providing humanitarian relief, as was done in tsunami-stricken south Asia. The full range of activities may be required simultaneously. The challenge for the Canadian Expeditionary Forces Command (CEFCOM) is to implement the required military options in a manner that is "relevant, responsive and effective."[1]

History has taught us that not all such situations will arise with advance warning or allow us time to respond. The 1964 Cyprus crisis, the 2004 tsunami in south Asia, the 2006 evacuation of Lebanon, and several natural disasters at home illustrate this point. Other events, such as the continuing troubles in Haiti, East Timor and Sudan

Photo: DND Combat Camera (2005)

The object is to move an effective fighting force ashore. An "O" group from "C" Company 1 PPCLI during an exercise in 2005 at CFB Wainwright.

have attracted our national interest at various times but there was time for reflection before national commitments were made.

Consequently, CEFCOM must have the capabilities to respond quickly to any military commitment. Invariably, there will be a need to move military personnel, government officials, their equipment and adequate supplies to the effected country to support our integrated operations. There will be a requirement to move the reconnaissance party and its equipment within a few days to investigate the situation. Once the decision has been made to deploy forces, the vanguard, with its basic protection, communications, engineering, logistics and medical support elements, must deploy rapidly to pave the way for the main body and its equipment.

With the acquisition of the Boeing C17 Globemaster III, the reconnaissance and vanguard elements will be more readily deployable than in the past. The new aircraft can be supplemented by the existing strategic and tactical air transport fleet or commercial airlift. Even if destination airports are not initially available, it will be the task of the coalition to secure the necessary airfields. However, airlift is not the sole or most economic means for the movement of heavy equipment, bulky items and supplies into a theatre of operations. This is better accomplished through effective strategic sealift.

Frequently, the condition of infrastructure, or lack thereof, in the operational theatre will present a challenge. In many failing or failed states the local infrastructure is damaged or destroyed by internal strife or looting. If the theatre is in a coastal region or within easy helicopter reach of the littoral area, the concepts of sea basing and tactical sealift are useful as a means to overcome such challenges whilst deploying to the theatre. This will require a naval task force with a sealift capability that has the ability to move some personnel, much of the equipment and supplies over the beach. In the longer term, as facilities are built up in the port and ashore, the tactical sealift requirement will transform to a need for a strategic logistics transportation service which could be provided by commercial shipping.

So, what does this mean for CEFCOM and its Standing Contingency Task Force (SCTF)? At present, these groups are preparing plans and concepts for the SCTF. With the assistance of the US Navy, the US Marine Corps and others the plans and concepts are being discussed, tested and evaluated. Undoubtedly the staffs are gaining a great deal of knowledge as they move forward. However, amphibious operations remain very complex and

Photo: WO Randolph Rice, DND Public Affairs, Ottawa

*USS **Gunston Hall** showing the well deck from which the landing craft operate.*

demand considerable planning and unique resources.

Current Canadian thinking appears to favour a single two ship amphibious task group designed to land military forces in a permissive environment over the dock or over the beach.[2] A single Maritime Amphibious Unit (MAU) is being formed to conduct over-the-beach operations, which are inherently more complex than using an existing sea port. There would be a primary amphibious ship and a transport ship. The latter would likely be one of the three Joint Support Ships that are scheduled to be operational in the 2013-15 time-frame. The primary ship could be a Landing Ship Dock (LSD), like the USS *Gunston Hall* or the Dutch *Rotterdam*, or a Landing Platform Helicopter (LPH) ship, such as the FNS *Mistral*. The latter type is essentially a small aircraft carrier that would carry several hundred troops, their personal equipment, some vehicles, several medium helicopters, landing craft and possibly vertical takeoff and landing fighter jet aircraft or attack helicopters.

Taxpayers should not be afraid to ask some basic questions about the amphibious proposals.

To provide relief for refit and maintenance cycles, at least two primary amphibious ships would be required. The procurement cycle for such specialized vessels would be at least 10 years unless used units were made available by an ally. The costs and delivery times for the construction of the ships (or even the refit of old vessels), the acquisition of landing craft, helicopters, specialized beaching equipment and training of the MAU would be very demanding in terms of money and people. This would come at a time when the navy is struggling with the submarine project, the frigate modernization program, the Joint Support Ship Program and approval of new ships for command and air defence of the task force.

Photo: DND Combat Camera November 2006

*A US Navy crewman directs a Canadian Bison AFV into a landing craft aboard the USS **Gunston Hall** during the November 2006 Integrated Tactical Effects Experiment to test the concept of the Standing Contingency Force.*

Taxpayers should not be afraid to ask some basic questions about the amphibious proposals. Can the amphibious capability be made operational quickly? Will such a capability allow us to intervene in a timely fashion to achieve our national interests? Is there another way to get the capability with a lesser call on resources?

With the programmed strategic airlift capability, the movement of people to a theatre of operations has been addressed. Subject to access to suitable airfields, the deployment of reconnaissance elements, a reinforced light infantry company or special forces troops and their basic equipment will soon be practical. The airlift of the remainder of the force will be possible over several days or weeks, but the heavier equipment and supplies must travel by sea. A non-combatant evacuation (NEO) may require both sea and air resources.

Strategic sealift of vehicles, equipment and supplies from Canada to the theatre of operations can be done by specialized naval vessels or by commercially built roll-on, roll-off container ships (ro-ro ships) that are chartered or owned by the CF. Using naval, contract or civil service crews, the ro-ro ships can easily move the required material from either a home port or a staging area to the port of disembarkation. As Canada is a long way from Africa, the Persian Gulf and South Asia, the pre-positioning of the sealift ships and embarked equipment would be necessary if the Canadian participation is to be timely and relevant. The public criticism concerning the timeliness of the Disaster Assistance Response Team (DART) to Sri Lanka after the tsunami in 2004 and the evacuation of Canadians from Lebanon in 2006 cannot be ignored. Speed has a quality all of its own and our politicians are well aware of this.

As ro-ro ships are commercial vessels, without the over-the-beach delivery capability and often without self-unloading equipment, they require a serviceable port with ramp space and heavy cranes. Such ships can unload in a permissive environment. If the port must be first secured, the forces required will have to be airlifted into place or landed by ships. This implies the requirement for a naval task force with some tactical sealift for over-the-beach and pier operations along with command, air defence and sea-basing capabilities. It also implies that the naval task force must be in close proximity to the sealift ships and the theatre of operations. Therefore the issue of forward deployment of the naval task force must be considered.

Can Canada afford to pre-position complete naval and amphibious task forces in Gibraltar, Abu Dhabi, Singapore or another sea port? If not, is there an alternative method to transport the personnel, their equipment and supplies to the theatre? The answer to these questions would be easier if the CF had a generous budget. Lavish defence spending, however, is not the Canadian reality. Canadians do not see their country as an adventurer in world affairs, but they have compassion for the poor, the disadvantaged and downtrodden people of the world. Therefore, the government and CF must respond to crises in a way that makes the best use of financial, human, physical and political resources to address the situation effectively, efficiently and in a timely fashion.

Initial thinking in the CF envisaged a landing force built around an infantry battalion. Colonel (Ret'd) Gary Rice has described the battalion group in some detail as having 777 personnel and 91 vehicles.[3] The force would likely be employed in either evacuations or intervention in a failing or failed state. There is a need in the former scenario for secure assembly points, protected convoy routes and a secure embarkation area. In the second situation there is a need to establish command, communications, accommodation and logistics facilities for longer term operations as well as to secure a sea port or beachhead and a helicopter landing zone or airfield. If this was an independent Canadian operation a battalion group would provide barely enough capability. In a coalition operation Canada could contribute effectively with fewer personnel and other resources on the ground. A November 2006 experimental amphibious exercise involved the landing of an infantry company which has fewer people and less material.

There are two Western states that have approached this issue from different perspectives – Denmark and New Zealand. A robust alternative is found in Denmark. Its government has, through the agreement of Parliament, developed a defence policy and structure for the years 2005-2009. The policy completes the transition of its

armed forces from a Cold War configuration to a flexible structure that supports Danish foreign policy. The policy is remarkably similar to that of Canada as it concentrates on the furthering of overseas interests using diplomacy, development and the defence organization.

The role of the defence organization is to prepare naval, army and air forces for limited expeditionary operations throughout the world in support of Danish interests. Denmark has jettisoned capabilities that are unnecessary in the post-Cold War era and depends upon coalition members to provide capabilities that are not found in its armed forces. The army is expected to sustain a 1,500 person commitment while the navy and air force must be able to sustain a 500 person commitment. Their tasks could, with coalition assistance, cover the full range of integrated military operations from combatting terrorism to providing evacuation and humanitarian aid.

Photo: DND Combat Camera November 2006

A team of combat divers secures the beach prior to the main force being landed.

Prior to the concept of a primary amphibious ship being conceived, the CF seemed content with the idea of the Joint Support Ship (JSS).

With a small force Lockheed C130J Hercules aircraft, supplemented by NATO-leased and owned airlift, the bulk of the army personnel will be airlifted to the theatre of operations. A naval task force comprising one of the two new *Absalon*-class flexible support vessels, two frigates, two mine warfare ships, a few transport helicopters and two chartered strategic sealift ro-ro ships (with a combined 5,000 lane metres of vehicle space or the capacity to carry 1,500 TEU containers) will provide the sealift. The naval vessels will protect the ro-ro ships, provide joint command facilities and move equipment and supplies for the army landing force to the port of disembarkation. The task force can also be used for independent military and humanitarian operations. The unique feature of the task force is found in the *Absalon* herself.

The *Absalon* is essentially a frigate with an extra deck for army vehicles, additional accommodation, and a joint operations command centre. The ship mounts a 127 mm naval gun, eight Harpoon surface-to-surface missiles, anti-missile defensive systems, Evolved Sea Sparrow anti-aircraft missiles, and can carry, in a hangar, one medium helicopter. The ship has accommodation for 200 joint command staff and army troops plus she can carry a range of special forces, infantry, reconnaissance, armoured or logistic vehicles, as necessary, to support the embarked troops. The available space on the 6,300 ton ship is limited so the vehicle capacity equates to about 250 lane metres or one-half of the standard vehicle establishment for a company-sized unit.

The ship can make 23 knots and is capable of landing the troops over the beach by landing craft, long-range interdiction craft or helicopter. She cannot land the vehicles by landing craft but she is well equipped for over-the-pier unloading. The Danish have accepted the absence of an integral over-the-beach capability. One of the two ships will be at high readiness for deployment to the areas of the eastern Mediterranean Sea, Africa or the Persian Gulf. When the ships are not engaged in expeditionary operations they are available for domestic and NATO missions. It is likely that one will become the command ship for the Standing NATO Maritime Group 1 in a few years.

By foregoing the capability for the beach landing of vehicles and equipment, the Danish forces have accepted the need for a coalition partner to provide tactical sealift. As a result they have built a ship class that is flexible and meets their overall maritime defence requirements. It is also faster than most amphibious ships so it can move more quickly into a theatre of operations.

New Zealand has taken another route to create a strategic and tactical sealift capacity in order to cover its area of interest from the South Pacific Islands through South Asia. The Royal New Zealand Navy (RNZN) will take delivery of its multi-role vessel, HMNZS *Canterbury* in early 2007. The design of this new 19 knot, 9,000 ton ship is derived from an Irish Sea ferry. It is intended to land troops and vehicles by helicopter, by landing craft over the beach, or by side and stern ramps over the pier.

Photo: WO Randolph Rice, DND Public Affairs, Ottawa

A Canadian Army AFV leaves a US Navy landing craft during the November 2006 Integrated Tactical Exercise.

The vessel will have accommodation for a company-size force, a command staff, and a helicopter squadron comprising one Sea Sprite maritime helicopter and four NH 90 medium-lift helicopters. The landing craft will be of 60 tonne displacement and can carry vehicles and/or troops. The ship can also undertake patrol, training and humanitarian operations. While the ship is fitted with weapons for limited self-defence, it is clearly intended for operations in a permissive environment with protection by accompanying *Anzac*-class frigates or coalition forces. Although it is a different concept for sealift than chosen by the Danes, the result is similar with considerable reliance placed upon coalition partners to provide the remaining capabilities.

So what should Canada do? Prior to the concept of a primary amphibious ship being conceived, the CF seemed content with the idea of the Joint Support Ship (JSS). These ships will have similar tactical sealift capabilities to the *Absalon* and HMNZS *Canterbury*. Are the JSS capabilities sufficient for our strategic sealift purposes? The answer to this question depends entirely on the size of the required landing force. Until this is determined by the CF, the arguments in favour of one solution or another remain largely theoretical. In developing the requirement for the three JSS ships, there was a perception that 7,500 lane metres of vehicle space was required to carry the vehicles and equipment of the vanguard force. Each ship will have a dedicated 1,500 lane metres of space and the helicopter deck can provide an additional 1,000 lane metres, for a total of 2,500 lane metres. There are two obvious problems. First, helicopters are sacrificed for vehicles. Second, there will never be three ships available simultaneously to fulfill such a mission. The ships may be committed to naval replenishment work or in refit and therefore out of position for sealift purposes.

The CF could task one JSS as the high readiness expeditionary response vessel. It could move an infantry company or an equivalent combat arms, engineer, logistics or medical unit to a port and provide command and logistics support for some extended period of time. It would carry the bulk of the equipment and vehicles for the embarked troops. The landing of personnel, lighter vehicles and equipment could be by helicopter with heavier items being landed over the pier using ramps or a prepared beach using the embarked landing craft. Like HMNZS *Canterbury*, the JSS will require heavy cranes to handle and load the landing craft. However, unless prepositioned, the ship would not provide a quick response to a crisis. It will require the protection of a naval task force, perhaps provided by a coalition partner. Without all three JSS being available, there will be a need for one or more ro-ro ships, with 5,000-6,000 lane metres' capacity, to bring the remainder of vanguard force vehicles, equipment and supplies. Creating this capability will be a significant challenge for the CF.

Photo: DND Combat Camera (November 2006)

Members of 1 PPCLI during exercises at CFB Wainwright.

In conclusion, the CF should leave dedicated large-scale tactical sealift to those allies and partners who have the resources and experience to undertake such operations. As well, allies and partners that are closer to potential deployment areas should secure the points of entry. It is better for the CF to airlift the troops and their basic equipment quickly into the operational theatre and let the navy undertake the strategic sealift tasks with one JSS dedicated to sealift and joint operations supplemented by one or more ro-ro ships.

Notes

1. The CEFCOM Motto, available at http://www.cefcom.forces.ca/default_e.asp.
2. See Major R.D. Bradford, "An Amphibious Task Group for the SCTF," *Canadian Naval Review*, Vol. 2, No. 2 (Summer 2006), pp. 16-19.
3. Colonel Gary Rice, "Making Canadian Forces Amphibiosity a Reality," available at http://www.cda-cdai.ca/pdf/SCTFALR.pdf.

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Dodging Icebergs and Talking Policy: HMCS *Montréal*'s 2006 Northern Deployment

Commander Paul Dempsey and Dr Edna Keeble

Introduction

On 12 August 2006 as HMCS *Montréal* was anchored off Iqaluit, Prime Minister Stephen Harper and Minister of National Defence Gordon O'Connor made it a priority to go on board as part of the new Prime Minister's first visit to Canada's three territories in the north. After delivering a speech at the Nunavut legislature in Iqaluit where he articulated his government's commitment to the enforcement of Canada's sovereignty in the region, the Prime Minister rode *Montréal*'s Rigid-Hulled Inflatable Boat (RHIB) to the ship and had lunch in the Commanding Officer's cabin with a few of the ship's officers and crew. He also toured the ship's bridge, Operations Room and sickbay, witnessed the formal opening of *Operation Lancaster* with the firing of a 6 lb saluting gun, and spoke briefly with members of the crew as they stood at attention on the flight deck. This visit of the Prime Minister to one of Canada's warships leading a joint military operation in the eastern Arctic signalled not only the Conservative government's support of Canada's naval personnel, but also the kind of priority it placed on what is commonly known as "Arctic sovereignty."

The pristine beauty of Canada's north as seen from the water reaffirms both the majesty and the fragility of the Arctic area. So few Canadians have seen this part of their country, and yet this was the second visit for a number of *Montréal*'s crew to the eastern Arctic. Two years earlier, the ship was part of Exercise Narwhal, a military-led training exercise that brought together sea, land and air elements as well as federal, territorial and municipal levels government departments. The ship acted as a supporting unit for land forces, and the exercise was focused on army training in the north premised on a scenario of land forces having to locate and recover satellite debris on southern Baffin Island after a failed launch of a fictitious satellite. This time, *Montréal* went further north into Lancaster Sound, the eastern extremity of the Northwest Passage, undertaking maritime insertion and extraction of military and civilian personnel as part of a larger maritime surveillance operation under the command of Joint Task Force North (JTFN). This was a real operation, as opposed to a training exercise, with the intent of proving the operational capability of JTFN, a new entity under Canada Command standing up in February 2006 and replacing Canadian Forces Northern Area (CFNA). The JTFN Commander embarked in *Montréal* for the duration of the operation.

Photo: Pte Darcy Lefebvre, Formation Imaging Atlantic

Commanding Officer HMCS ***Montréal*** *talking to local fishermen at Nain, Newfoundland and Labrador, while travelling north for* ***Operation Lancaster****.*

This article is about *Montréal*'s 2006 northern deployment set within the context of greater renewed interest in Arctic sovereignty by the new Conservative government. The unresolved jurisdictional disputes in Canada's north have arguably become more pressing for recent governments because in an era of climate change and globalization continued neglect of Arctic sovereignty may have significant negative consequences for Canada. An emphasis on the Arctic would fit in the post-9/11 environment with the focus on the 'home game' by the Canadian military and specifically the navy.

Montréal's month-long deployment to Canada's north from 31 July to 31 August 2006, focused not only on the detailed machinations of *Operation Lancaster* as a joint military endeavour in the Arctic, but also on the ability of a warship to liaise with other government departments, host and educate media personnel on board, and connect with local communities, including the conduct of two vice-regal cruises as the ship carried the Queen's representatives from Newfoundland and Labrador as well as from Nunavut at different times during the deployment. Arguably, *Montréal*'s experience is a prime example of the operational and political usefulness of a Canadian warship as it conducts, in this case, Arctic sovereignty patrols under a joint command. At the same time, the ship's deployment illustrates some of the specific challenges of operating a Canadian warship in northern waters but there are arguments to be made that versatility and flexibility, rather than specialization, should drive the navy's future make-up even in the context of the current government's focus on Arctic sovereignty.

[D]uring the Cold War, ... the security threat in the north was (obviously) the Soviet Union but the sovereignty threat was (perplexingly, at least from a military-strategic perspective) the United States.

The Issue of Arctic Sovereignty

Immediately after the election of his minority government on 23 January 2006, Prime Minister Harper used his first news conference to comment specifically on statements made by the US Ambassador to Canada, David Wilkins, on Conservative Party election promises to bolster a military presence in the Canadian Arctic. Harper addressed the classic US position articulated by Wilkins that the Northwest Passage is an international strait by asserting that his government would defend the country's sovereignty in the north, thus highlighting apparent limits to Conservative efforts to bolster Canada-US relations. In this case, the Prime Minister appeared prepared to hold steadfast against American claims and not simply stay the course taken by the previous Liberal government under Paul Martin, and to place even greater weight to what has been a policy area neglected by successive Canadian governments.

The issue of Arctic sovereignty involves a number of unresolved jurisdictional disputes between Canada and its

Photo: Pte Darcy Lefebvre, Formation Imaging Atlantic

Dr. Edna Keeble, on the flight deck of HMCS ***Montréal*** *during a port visit to Makhovic, Newfoundland and Labrador, while travelling north for* ***Operation Lancaster****.*

circumpolar neighbours – the United States, Denmark/Greenland and Russia. Although former Liberal Defence Minister Bill Graham made headlines in July 2005 with a visit to Hans Island, a small barren island off the coast of Ellesmere Island also claimed by Denmark, historical assertions of Canadian sovereignty in the Arctic can best be understood within the Canadian-American context. From the voyages of the SS *Manhattan* in 1969 and the USCG *Polar Sea* in 1985 to the (unacknowledged but widely understood) continuous transits of US submarines under Canadian Arctic ice, these American incursions into what Canada considers sovereign territory have led to the sort of public outcry, periodic as it may be, that fuels political responses. Wrapped up in this kind of outcry is a fundamental notion of Canadian identity grounded in the need to differentiate the "true North" from its southern neighbour. This leads to what Rob Huebert has called the "Arctic sovereignty/security false dichotomy" in Canadian thinking first pronounced during the Cold War, where the security threat in the north was (obviously) the Soviet Union but the sovereignty threat was (perplexingly, at least from a military-strategic perspective) the United States.[1] However, this dichotomy, false as it may be, helps to explain the apparent neglect by successive Canadian governments of sovereignty protection in the north because it rests on a strategic framework of military action against Canada's principal ally.

The contemporary context can be seen quite differently. Arguably, what is precipitating the urgency for Canadian government action is both a change in global temperature which is melting polar ice caps, and the anticipated actions of global shipping companies seeking to exploit a new shipping route to save time and money. Two compelling arguments are being presented:

- first, global climate change is causing the average amount of Arctic sea ice to decrease dramati-

cally, thus expanding the ice-free season of the route connecting the Atlantic and Pacific Oceans through Canada's Arctic archipelago; and

- second, a viable shipping route through the Arctic would result in the saving of thousands of miles to ships having currently to transit the Panama or Suez Canals, or Cape Horn or the Cape of Good Hope between Europe and Asia.

The problem, or threat, however, is not the United States, but rather the position it holds – shared by European and Asian countries – regarding the status of Arctic *waters* through the Canadian archipelago. Canada's demonstration of control over this area is seen as a necessary step to international recognition of the country's jurisdictional rights to legislate, enforce and adjudicate measures as Canada sees fit. In that way, the Conservative government's position regarding Arctic sovereignty arguably presupposes a strategic framework predicated on globalized environmental and economic changes where the focus is on those who might not abide by Canadian law (e.g., shippers) as opposed to those who might destroy the Canadian state (e.g., enemies).

Some would argue that law enforcement has become a particularly important part of the 'home game' for the Canadian Navy. In the post-9/11 environment, homeland or domestic security has become a central element of new American and Canadian institutional structures, from the creation of an omnibus government department (i.e., the US Department of Homeland Security (DHS) and Public Safety and Emergency Preparedness Canada (PSEPC)) to the standing up of military commands (i.e, the US Northern Command (NORCOM) and Canada Command). The maintenance of domestic security rests specifically with law enforcement agencies in both countries, but in the waters off the American coast the law enforcement role is undertaken by the US Coast Guard (USCG), thus accounting for why the USCG is part of the DHS except for wartime. The Canadian case is different because not only is the Canadian Coast Guard not an armed service, but the Canadian Navy has historically had both the responsibility and capability to support law enforcement, whether for fisheries patrols, drug smuggling operations or the interception of smugglers dealing in illegal migration. These actions in aid of other government departments were evident before 9/11 but interdepartmental cooperation and coordination have become even more imperative in the post-9/11 era as 'defence' and 'security' have become increasingly blurred.

Not surprisingly the focus has been on terrorist organizations as the primary threat to national interests, but globalized threats also come from other malevolent groups such as transnational criminal organizations as well as apparently benign actors like multinational corporations in the form of, for example, international shipping companies. Canada wants to have the authority to inspect, regulate and generally ensure that ships proceeding through the Northwest Passage meet Canadian safety standards in the same way that the St. Lawrence Seaway Authority carries out inspections prior to ships transiting through the Great Lakes-St. Lawrence Seaway system. Littoral waters are littered with wrecked ships belonging to shippers trying to maximize profit margins

*HMCS **Montréal** closing the coast near Nuuk, Greenland, where she stopped for fuel.*

by minimizing operating and maintenance costs. Even a Canadian warship operates under stricter safety and environmental regulations in the north than it would in other parts of the world. In the future, given the potential of regular international shipping through the Northwest Passage and the health of Canada's Arctic at stake, the government may want to apply even stricter – and more expensive – regulations on these profit-oriented corporations.

The point is that global actors like international shipping companies challenge a state's purview over its territory and, as evident in global environmental changes outside of the control of governments, these challenges also come in the form of '(hu)man vs nature.' The terrorist attacks on the United States forced Western governments to pay greater attention to their domestic front. The 'home game' has meant that states can no longer take for granted the sanctity of their borders. We can place Arctic sovereignty operations within the context of this globalized framework that has come to even greater

Photo: Pte Darcy Lefebvre, Formation Imaging Atlantic

*HMCS **Goose Bay** launching her RHIB in Navy Board Inlet.*

prominence in the post-9/11 era. Although anti-terrorism efforts are clearly not the governing rationale for such operations, these operations are part of the 'home game' and the navy's contributions have become central to Canadian presence in the north.

HMCS Montréal's Northern Deployment

The month-long deployment of *Montréal* to Canada's north exemplified in many ways the versatility of the Canadian Navy and the multiplicity of tasks that could be successfully executed by a warship, oftentimes concurrently. *Montréal* deployed without a full crew complement, including the absence of a helicopter and air detachment, thus allowing bunk space and flexibility in the movement of both military and civilian personnel over the course of the trip. The movement of personnel turned out to be an important factor because *Montréal*'s program was illustrative of Arctic sovereignty not simply in terms of maritime surveillance in a joint context, but also of naval support to other government departments and of connections with local and national communities, both directly by the ship's company and indirectly through the media. Not only did the JTFN Commander stay in *Montréal* during *Operation Lancaster*, but at various points the ship also hosted fellow military personnel in the army, air force and Canadian Rangers as well as people from the Canadian Coast Guard (CCG), Royal Canadian Mounted Police (RCMP), Public Safety and Emergency Preparedness Canada (PSEPC), Parks Canada and a number of media outlets, both print and electronic. As well, His Honour the Honourable Edward Roberts, Lieutenant-Governor of Newfoundland and Labrador, was on board from 4-7 August, followed by Her Honour the Honourable Ann Hanson, Commissioner of Nunavut, from 13-17 August.

Montréal's deployment supported broad mission objectives centred on the establishment of a joint military presence in the eastern Canadian Arctic under the command of JTFN in order to assert Canadian sovereignty. *Operation Lancaster* formally took place from 12-22 August, and with the decision by the JTFN Commander, Colonel Christine Whitecross, to remain in *Montréal*, the ship became the command and control headquarters for the entire joint sovereignty operation. The Commanding Officer of *Montréal* not only acted as the Maritime Component Commander (MCC) and directed the two maritime coastal defence vessels (MCDVs), HMCS *Goose Bay* and HMCS *Moncton*, sailing with *Montréal* as part of the operation, but also ensured that his ship's staff and resources were deployed to aid the JTFN Commander in her planning and execution of the entire operation. The three ships patrolled Canadian waters as part of the sovereignty mission, and were central to the joint operation which involved the insertion and extraction of soldiers from the Royal 22nd Regiment along with Canadian Rangers at three observation posts, one on both sides of the northern entrance to the Navy Board Inlet and the third on the north side of Lancaster Sound near Cape Home west of Dundas Harbour.

Although different scenarios involved the use of military air assets, namely Twin Otter planes and Griffon helicopters, to insert and extract land elements, ultimately this was accomplished by maritime forces. The three warships landed the soldiers on 17 August. In order to facilitate further interdepartmental cooperation, the Canadian Coast Guard became involved in the extraction of forces on 20 August and CCG *Henry Larsen* extracted the infantry in the two observation posts at the Navy Board Inlet entrance. *Montréal* removed the forces from the post on the north side of Lancaster Sound. The 'jointness' of the operation was clearly evident with the different uniforms (navy, air force, army and Canadian Rangers) on board *Montréal*.

However, military personnel were not the only people embarked and disembarked throughout the operation,

Photo: Pte Darcy Lefebvre, Formation Imaging Atlantic

HMCS ***Montréal*** *refueling from CCGS* ***Terry Fox****.*

nor was the operation strictly a military endeavour. As part of *Operation Lancaster* the ship's mission included facilitating interdepartmental cooperation, exposing the media to the military, and interacting with local communities. *Montréal* accommodated a number of civilians from both other government departments and the media while participating in different *Operation Connection* activities ashore. Two specific examples of interdepartmental cooperation involved the CCG and the RCMP. In terms of cooperation with the former, not only did CCG *Henry Larsen* extract land forces from two observation posts as mentioned earlier, but it also acted as the vessel of interest in a naval boarding party exercise undertaken by *Montréal* on 20 August. Exercising in Lancaster Sound with the Coast Guard, *Montréal* hailed *Larsen*, fired 'warning shots' both from 50 cal and 57 mm guns, and boarded *Larsen* in two waves of the ship's boarding party in order to secure the vessel by taking control of the bridge, crew and machinery control room.

As well, *Montréal* fuelled from CCG *Terry Fox* on 19 August in Dundas Harbour as had *Goose Bay* and *Moncton* a day earlier. That same day, *Montréal* also supported the RCMP's grave restoration project at Dundas Harbour on Devon Island, the largest uninhabited island in the world, directly north of Baffin Island across Lancaster Sound. Two RCMP officers were specifically on board *Montréal* to lead a contingent of military and civilian personnel, including the media, to restore two RCMP graves from the early 1920s when, historically, early concerns about the threat to Canada's sovereignty in the Arctic archipelago resulted in the establishment of an RCMP detachment. The symbolic importance of the grave restoration project to an Arctic sovereignty operation was one that both military and civilian personnel clearly understood.

Montréal's crew also participated in a number of *Operation Connection* activities ashore. *Operation Connection* was launched by Chief of Defence Staff General Rick Hillier in February 2006 as part of a general recruiting strategy for the Canadian Forces by encouraging individual military members to reach out and connect with communities throughout Canada, and in the process the strategy also facilitates the military's understanding and appreciation of local communities – the very people and places that the Canadian Forces protect. Nowhere is this truer than in Canada's north. As *Montréal*'s crew participated in activities in Iqaluit and Pond Inlet to encourage greater Inuit representation in the military, they also witnessed first-hand the socio-economic challenges faced by Canada's northern communities. Sustainable development and economic renewal are crucial to the future of Canada's Arctic region.

Arctic sovereignty protection is far from being solely a military endeavour, and it is not a task that only governments undertake. It is not enough to simply ensure cooperation between government departments, be they at the federal, territorial or municipal levels, because Arctic sovereignty protection requires buy-in from local communities and, in that way, *Montréal*'s presence in the north was not merely directed toward foreign entities but also toward Canada's own Arctic communities. In short, *Montréal*'s northern deployment was a success at many levels, accomplishing both military and non-military objectives.

Concluding Thoughts

Although *Montréal* accomplished her objectives, she faced some real challenges while operating in the Arctic. First, as the title suggests, she had her fair share of icebergs of which to steer clear. With limited ice strengthening, *Montréal*'s hull could not withstand a collision with even a moderately-sized iceberg, and even the much smaller 'bergie bits' would have done serious damage to the finely machined propeller blades. Second, fuel management was another concern. With traditional fuelling stops far to the south, *Montréal* had to take extraordinary action to add fuel capacity in the pre-deployment phase, to pay extra attention to fuel conservation while conducting operations and, indeed, to rely on a non-traditional method of extending her range by taking fuel while alongside the anchored CCG *Terry Fox* in Lancaster Sound. And, third, landing the infantry for Observation Post #2 on a rocky beach on Baffin Island with small breaking waves proved to be a particular challenge for *Montréal*'s RHIB crew, requiring exceptional boatmanship and ingenuity to complete the mission safely.

But while these were challenges unique to the Arctic, they were not uniquely challenging to a warship. Thus, although navigating near ice in the Arctic required special attention and care, it took no more attention and care than to navigate around fishing fleets with extended nets in the shallow waters around Nova Scotia. Although fuel consumption and availability was an issue in the Arctic, so too is it an issue while transiting the Pacific Ocean en route to operations in Asia. And while landing army personnel on a rocky beach is challenging and dangerous, similar risks are encountered by navy RHIBs during search and rescue operations in rough seas.

The navy mitigates these challenges by adapting watch rotations for lookouts and radar operators, by pre-planning fuelling opportunities or sailing in company with a replenishment ship, and by training RHIB crews to a high skill level and encouraging and rewarding initiative and ingenuity. Indeed, the challenges faced by *Montréal* did not demonstrate the need for specialized warships in the Canadian Navy; rather it demonstrated the inherent capability and flexibility of the current fleet, even for limited operations in Canada's Arctic.

What is important for the Canadian government is to understand and articulate national interests in the Northwest Passage region. The government does not want to use limited resources to claim sovereignty just for reasons of national pride nor does it want to restrict arbitrarily access to international shippers who might profit from the use of the strait in the future. Rather, the government wants to ensure that the fragile ecology of the region is maintained in harmony with globalized commerce over time. Practically speaking this means that Canada's national interests are to have the international community recognize that Canada's right to regulate, not restrict, the passage of vessels through the Northwest Passage is in keeping with international interests, in the same way as Canada's ability to regulate, in cooperation with the United States, the passage of ships through the Great Lakes-St. Lawrence Seaway system serves the broader community.

Setting navigation system and hull construction safety standards, controlling the discharge of liquid and solid waste, and perhaps requiring the embarkation of pilots or the accompaniment of ice-breakers for a portion of the transit are all measures that further both Canadian and international interests and goals. If the government understands national interests in the Arctic in this manner, it becomes clear that it should not take the navy on a tangent and redirect limited resources toward specialized naval vessels for the Arctic environment. To the extent that the government wants replacement ships to be able to operate in the Arctic, "ice strengthening makes sense," as argued by Peter Haydon, "but there is certainly no need to send a warship there when waters are frozen."[2] There are numerous categories of strengthening above *Montréal*'s Type E hull, a classification dictating the specific times that the ship is allowed to operate in the Arctic region, which the Canadian government might want to consider.[3] In that way, the government would meet its objective of Arctic sovereignty protection while ensuring that the Canadian Navy retain its composition of capable, versatile, flexible ships designed to operate in defence of Canadian national interests at home and worldwide.

Photo: Pte Darcy Lefebvre, Formation Imaging Atlantic

Members of the Royal Canadian Regiment disembark from ***Montréal****'s RHIB after an exercise ashore.*

Notes

1. Rob Huebert, "Renaissance in Canadian Arctic Security," *Canadian Military Journal*, Vol. 6, No. 4 (Winter 2005-2006), p. 21.
2. Peter T. Haydon, "Editorial: The Naval Procurement Predicament," *Canadian Naval Review*, Vol. 2, No. 2 (Summer 2006), p. 4.
3. Our thanks to Lt (N) Jack Macdonald, Engineering Officer of HMCS *Montréal*, for providing us the specific information that classifies different types of ships. *Montréal*'s Type E hull is the least reinforced for ice, but there are different categories of hull-strengthening (up to Type A) before getting into the 10 Arctic Class categories.

Commander Paul Dempsey is the Commanding Officer of HMCS ***Montréal*** *and Dr Edna Keeble is an Associate Professor of Political Science at Saint Mary's University.* *Edna Keeble would like to offer her deepest gratitude to Commander Dempsey and the entire crew of* ***Montréal*** *for giving her the privilege of being part of the ship's company during its northern deployment, 31 July to 31 August 2006.*

Sinking the Navy in Afghanistan

Victor Suthren

Photo: Pte. Regan Chaisson, Base Imaging, CFB Esquimalt

*Crew members from HMCS **Regina** arrive for a tour of the People's Liberation Army (Navy) Missile Frigate **Huai Bei** at a naval base in Shanghai.*

In the harshly competitive era of the Napoleonic wars, a British admiral was known to have cried in desperation that on his tombstone he would want written that he had died for "want of frigates," the omni-capable workhorse of the sailing ship era. More nimble and adaptable than the heavy and lumbering battle ships, frigates were invaluable tools in the hands of naval commanders and flexible instruments of policy for their governments. In Canada's current commitment to the war against the Taliban in Afghanistan, the Canadian government's diversion of Canadian Forces (CF) funding into the war effort may be coming at the expense of future military capability, particularly at sea, where a surface combatant force equivalent to the long-ago admiral's frigates, and other vessels, may be vital to Canada's survival.

The superb performance of Canadian men and women in Afghanistan, and Canada's leading role in the fighting has both restored the stature of Canada within the councils of NATO and engendered bittersweet pride in Canadians. It is a given that every Canadian would insist that those men and women be given the best equipment and support possible as they fight on our behalf against a palpable evil. Yet even as the government provides that equipment and support, its insistence that the CF cannibalize its resources to fund the Afghanistan deployment rather than voting sufficient overall resources to make this unnecessary puts at risk the maintenance of the rest of Canada's defence responsibilities and, more ominously, the development of the air, military and naval forces Canada will need in the future, in a world of increasing uncertainty and peril.

Nowhere is this more evident than in the matter of ensuring that the government of 2020 and 2030 has at its disposal a navy able to deal with the sovereignty, resource protection, environmental custodianship and alliance commitments that the government of the era will face. The Arctic is rapidly transforming into an ice-free ocean that will provide the government of the day with the challenge of policing three busy coastlines, not two. Even with the resolution of the longstanding international disagreement as to whether the waters of the northern archipelago are Canadian territorial waters or international ones, Canadian practical custodianship of those waters is virtually a certainty. The extraordinary economic expansion of China is now being followed by heavy defence expenditures directed toward developing

Photo: Maritime Command Museum, Halifax

*HMCS **Crusader** returning to her home port, Esquimalt, after serving in Korea during the Korean War.*

a large and capable Chinese blue-water navy, and the economic power and growth of other Asia-Pacific states will call into question Canada's capacity to participate in meaningful alliances or provide a deterrent to unfriendly regimes. The vital seaborne trade that lies at the heart of Canadian economic well-being will see the flow of containers into our ports increase tremendously within our lifetime, and the spectre of religiously or politically motivated terrorism mounting a seaborne attack on North America is an increasing rather than diminishing possibility.

To face the current maritime challenges, threats and international responsibilities facing it, Canada has at the moment a superb mid-sized navy formed of general purpose frigates, area air defence destroyers, patrol submarines and mine counter-measures coastal vessels. Their capability equals that of any comparable warships in the world today. Canadian patrol frigates and the modernized area air defence destroyers are currently the only allied warships capable of seamless integration into the world's most sophisticated and advanced naval force, a carrier battle group of the US Navy. This capability was not achieved overnight, but was arrived at by painstaking research and preparation years ago by far-sighted naval planners and the politicians who supported their work.

Modern warships are highly complex mechanisms, similar to a space vehicle in the sense of creating a machine that will sustain several hundred men and women in a hostile environment and carry out a myriad of tasks, often of staggering complexity and variety. The development of such a mechanism is not a matter of buying equipment 'off the shelf' within a matter of months, as the purchase of an armoured car or camouflage desert clothing might be. Technical requirements, design work that is based on projections of naval technology and weapons systems likely to exist in years ahead, and a complicated web of infrastructure ranging from the creation of dockyard and subsystem manufacturing relationships through to the development of politically acceptable work-sharing divisions between Canadian regional contractors, must all be addressed. In short, to ensure that the government of the first half of the 21st century has in its hands advanced naval assets able to protect Canada's national and international interests, the investment in work and planning must occur now.

The government has made a decision to engage thousands of Canadian troops in the Afghanistan deployment, and to maintain that deployment until 2009. But the strains on the CF are already beginning to show as the military leadership casts about for ways to ensure sufficient boots on the ground and find the money in the overall defence budget to fund the effort. Notwithstanding recent announcements of more equipment purchases for the CF, the seeming inability or unwillingness of the government to provide sufficient funds for these expanded operational demands without affecting core functions will mean that the expense of maintaining our gallant men and women in Afghanistan will still require a cannibalizing of overall resources, in equipment, funds and personnel. One of the key things that will suffer – perhaps irreparably – may be the critical planning and development for the needed navy of the future. The country for which young men and women are dying in pursuit of their duty deserves better.

Looming behind this immediate concern lies a far greater issue which the Afghanistan mission has brought into sharp relief, and that is the wisdom of making Canada's future international military response capability weighted heavily toward land forces and their insertion into areas of concern. Notwithstanding the courageous performance of Canadian troops in the Afghan theatre, the reality is that the overall Taliban insurgency continues to grow in intensity and scope, drawing on the inexhaustible numbers of Islamist volunteers in the uncontrollable Pakistani border regions. Sustained land operations against foes of this nature, unless undertaken as part of a robust coalition military campaign without the hesitancy NATO allies are presently displaying, are beyond the capacities of a state with a relatively small population base such as Canada unless a major national effort is undertaken and the national economy is redirected. It also ignores the hardest learned lesson for Western powers in the 20th century – i.e., do not get involved in a land war in Asia.

How then can Canada ensure its security and participate with allies in response to the many and varied threats

and responsibilities the future will hold? The fighting efficiency and valour of Canadian land forces are again evident, as they have been historically. Nonetheless such formations require both transport to the theatre of operations and a substantial support infrastructure which must be placed in territories disinclined to see them as anything other than occupiers rather than liberators, and where they play the role, regardless of intent, similar to American forces in Viet Nam. The wisdom of such deployments into overseas territories which play into the hands of hostile forces or governments anxious to have a visible target against which to focus opposition is not clear, and in many respects may reflect a simple mirroring of the ill-advised bellicosity of the Bush administration rather than a shrewd and measured assessment of the actual situation. This must include, for Canada, the consequences of committing forces which have limited human and financial resources behind them – and which fight in the name of a civilian population rightly unwilling to see their sons and daughters die unless the cause is manifestly a just and winnable one that is clearly in Canada's vital interests. The commitment of land forces allows no ambiguity to surround their use, nor flexibility to the government that commits them, for once the body bags begin to come home the government has little choice but to follow the course of the war, or declare the deaths as ultimately useless.

For a country of small population such as Canada, it can be argued that the large-scale commitment of ground forces into conflict in anything other than a direct fight for home and hearth is already impractical, and unacceptable in terms of both casualties and the gridlock that warfare puts on the options available to the government of the day. The success of the British Empire in the 19th century, a worldwide political and cultural hegemony of astonishing breadth, was established by a small state of relatively few people which maintained a small but highly efficient army available to be used when necessary, but which supported most of its economic and political power with the Royal Navy. The navy provided a force which was ready to be deployed at a moment's notice, the oceans allowed it access to the proximity of virtually any area of concern, it provided the British government with a flexible, adaptable and highly visual force able to arrive 'on station' and maintain itself in the theatre without being a highly visible – and accessible – target. It had the capacity to carry out any duty from the insertion of troops and landing parties through to political negotiation from a position of strength, through to provision of humanitarian aid. And, importantly, from the point of view of a state with a small population, it did not offer the likelihood of heavy casualties that would be unsustainable politically and emotionally.

Photo: MCpl Colin Kelley, Formation Imaging Atlantic

*HMCS **Toronto** while taking part in **Operation Altair** in 2004 to help monitor shipping in the Arabian Gulf.*

For Canada, a similar path is a logical one. Canada's land forces must continue with their transformation into the flexible and mobile 'light infantry' role away from which, as Leopard tanks move into action in Afghanistan, they are being forced by the realities of garrisoning land positions in Asia. They must move back to the transformation on which they were focused before Afghanistan. Canada's air force must consider what combination of air intercept, sovereignty patrol and worldwide airlift will be necessary for the future. But it too must carve out a future that provides the government with as many options as possible rather than an over-emphasis on the support of future Canadian garrisons in hostile territory and prolonged war.

Most particularly, it is important for the Canadian government to recognize the cost-effectiveness of a modern and capable navy, and how a flexible, multi-role fleet gives Canada the most effective and nationally-acceptable means to meet its alliance responsibilities and the many other challenges which will arise.

The same British admiral who earlier bemoaned his lack of frigates in the sailing ship era was taken to task by a politician for his seeming nonchalance at the invasion then being assembled by Napoleon across the English Channel. Secure in his knowledge of the strength and capability of the navy, the admiral replied, "Sir, I do not say he cannot come. I only say he cannot come by sea."

A similar reliance on its navy would serve Canada well.

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Making Waves

The Joint Support Ship: A Worthy Goal or Doomed Investment?

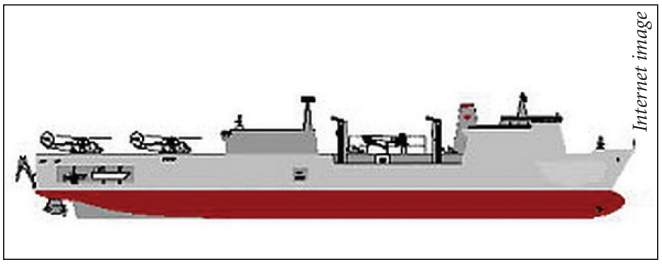
David Overall

The January 2006 election of a minority Conservative government heralded a new era for the Canadian Forces (CF). In stark contrast to previous Liberal governments, a firm emphasis has been placed on desperately needed upgrading of military equipment and capabilities. The "Canada First" defence procurement of July 2006 outlines several major acquisition programs that will greatly improve the mobility of the CF. One of the most ambitious elements of this program is the plan to construct three new Joint Support Ships (JSS).

The JSS program is intended to provide the navy with versatile ships that considerably exceed the capabilities of the current *Protecteur*-class Auxiliary Oiler Replenishment (AOR) vessels, which have served the CF well for over 35 years. The JSS aims to provide at-sea support to deployed naval task groups, conduct sealift operations, and provide support to forces deployed ashore. The specified requirements of JSS include:

- roll-on roll-off (ro-ro) of cargo;
- lift-on lift-off (lo-lo) of cargo;
- space for the operation of three to four maritime helicopters per ship;
- work and living space for additional personnel, over and above the standard crew of up to 165 people;
- capability to navigate in first-year Arctic ice;
- a covered multi-purpose deck space for vehicles and containers with space for additional containers on the upper decks;
- capability to serve as a Joint Task Force Headquarters for the combined operations of the army, air force and navy; and
- ability to rapidly reconfigure deck space to care for survivors of disaster at sea, at shore, or other contingencies.[1]

Clearly, this is an impressive list of capabilities – especially when it is all contained within a 200 metre/28,000-tonne hull. Such attributes would obviously be invaluable to the CF, but the record of small- to medium-sized states developing indigenous military designs is rather mixed. Such states cannot provide the vast procurement resources of major military powers, making any investment in entirely new designs a somewhat risky endeavour. Certainly there are have been some successes, such as Australia's *Collins*-class submarines or Canada's own *Halifax*-class frigates, but even these programs suffered from substantial cost overruns and other setbacks.[2] The danger is that indigenous projects have the potential to consume entire procurement budgets, with other areas of the military starved in order to afford its continuation. At the worst extreme, cancellation results in millions or even billions of dollars wasted.



Artist's impression of the Joint Support Ship (JSS).

Despite this risk, the Department of National Defence (DND) is forging ahead with the JSS plan. While appraisal of the final ship design is mere speculation at this point, the question of whether the JSS program itself is an appropriate course of action for the CF is worth addressing. Is it really the best solution to the needs of the CF?

Benefits and Risks of the JSS Concept

There is no doubt that this is an ambitious program, but it also represents a great opportunity. In no other navy in the world is there a ship that combines the attributes listed in the procurement plan, but should the final design successfully incorporate them all, it will confer significant advantages to both the CF and allied states.

First, the versatility of the design would greatly expand the capabilities of Canadian naval task groups. Speed and response time are increasingly valuable commodities in the conflicts and crises of the 21st century, and the acquisition of the JSS will permit Canada to project force and resources at much shorter notice. The JSS would also be an important addition to multinational forces – for example, NATO's 2002 summit in Prague highlighted the shortage of strategic sealift available to the alliance. While this is an expensive commodity, NATO is dedicated to enhancing its sealift capacity through the Prague Capability Commitment.[3] The development of the JSS will be of great interest to the alliance.

Second, through its sophisticated command and control capability, the JSS would also allow Canada to act independently of major allies if necessary, or serve as the

command centre of smaller coalitions. While Canada has historically preferred to act multilaterally, the 21st century may offer scenarios that will necessitate unilateral action. The JSS will offer greater flexibility to foreign policy and defence planners, allowing Canada to take the lead if larger powers are reluctant to get involved. This would provide needed muscle to Canadian-supported initiatives such as the human security agenda, and greater credibility to peace support operations.

Additionally, the JSS could serve as a force multiplier in the event of a natural disaster at home or abroad, and certainly enhance the quality of the response. As the wreckage of the US Gulf Coast area in the wake of Hurricane Katrina illustrated, even the most powerful states have difficulty responding to large-scale catastrophes. A major earthquake in British Columbia is one of the more likely natural disasters facing Canada; a seaborne terrorist attack in one of Canada's major port cities would be another instance in which the JSS would prove indispensable in providing a coordinated response.

Such capability will come at a price, however. Many navies have individual ships performing single roles, rather than combining two or more tasks into a single hull. Should our planners be concerned over the combination of large quantities of fuel and JSS's transport capability (i.e., is it a good idea to combine explosive ship fuel with hundreds of soldiers and sailors)? The combination of several major roles in one ship could also contribute to force vulnerability. Such a high-value target may become a liability in combat, with its vital nature necessitating excessive protection. Certainly the ability of a naval task group to conduct operations would be severely constrained should its JSS be damaged or suffer a crippling accident.

Furthermore, there is the technical challenge of successfully combining the desired attributes into the finished design. The benefits of the JSS will be considerable, but the sheer complexity of the program will almost certainly engender cost overruns and other difficulties. Canada has a long and distinguished history of shipbuilding, but for the program to be successful the government must be willing to accept that the final cost could be well above the $2.9 billion already committed. Fortunately, however, the technological challenge has been lessened somewhat by the deletion of a proposed floodable well deck, or dock, in the stern. This dock would have added true amphibious capabilities to the JSS, and would have enabled the ship to deploy/embark large landing craft capable of transporting heavy equipment and armoured vehicles to and from shore. The recent announcement that DND would procure a specialized "Big Honking Ship" to transport equipment and support land operations, however, made this earlier plan redundant.

It should also be noted that there are a number of alternatives for achieving this capability, one possibility is leasing or buying a re-configured commercial vessel. In 2004, Australia purchased a new commercial tanker, the *Delos*, fresh from its South Korean builder for a mere AUS$50 million. While the conversion was being planned and equipment acquired, *Delos* was on charter and earning money for the Australian treasury! The ship was modified as an Auxiliary Oiler for about AUS$60 million, and commissioned as HMAS *Sirius* on 16 September 2006 – a total cost of less than CDN$100 million. Granted, this ship is less capable than the JSS, but perhaps the combination of two vessels – a transport and an oiler – makes more sense than one much more complex and expensive vessel.

Another idea is to acquire secondhand naval vessels to meet the amphibious transport and command and control elements embodied in the JSS, at least until a new vessel could be acquired. For example, the Indian Navy is buying the Landing Platform Dock (LPD) USS *Trenton* in a "hot turnover" from the US Navy for about US$50 million at the end of 2006. This is certainly an elderly vessel, but it is thought that this vessel can provide the growing Indian Navy (135 commissioned ships) with an important new capability. In the Canadian context, the debacle of the *Victoria*-class submarines will certainly be fresh in the minds of both policy-makers and the public, but if procurement decisions can be made swiftly then the process may prove a sound investment.

Conclusions

The ultimate question is whether the Canadian Forces should examine proven, albeit less versatile, ship designs as an alternative to an untested JSS concept that may yet prove to be a disappointment. Acquiring foreign vessels would certainly adversely affect Canadian industry, but

if the goal is to provide expanded defence capabilities quickly, such options should definitely be considered.

In the long term, however, I believe the JSS remains a worthwhile investment. Criticism and speculation over the finished product is largely academic now that the JSS has been officially announced and the industrial teams have commenced planning, but there remains time to modify the program and incorporate elements of the options presented in this article. Above all, the policy-makers of today and tomorrow must remember that while the JSS will be a significant asset for the Canadian Navy of the future, it is not a panacea. The Harper government is focused on a "Canada First" defence policy, but additional investment in all branches of the military will be necessary for Canada to realize its long-term strategic goals. The JSS project, while challenging, represents a welcome step in that direction.

Notes

1. "Canada First Defence Procurement - Joint Support Ship," DND Backgrounder, available at http://www.forces.gc.ca/site/Newsroom/view_news_e.asp?id=1958.
2. "Interdepartmental Review of the Canadian Patrol Frigate Project," p. 10/48, available at www.dnd.ca/crs/pdfs/cpf_cont_e/pdf.
3. NATO, Prague Capabilities Commitment, available at http://www.nato.int/issues/prague_capabilities_commitment/index.html.

Will We Send Our Navy to North Korea, Again?

Poseidon

On 25 June 1950 the North Korean Army crossed the 38th Parallel and invaded South Korea. United Nations forces were soon deployed to stabilize the situation. The initial Canadian contribution to the UN force was three destroyers, which sailed from Esquimalt a mere 10 days later. (It was six months before the Canadian Army joined the fray!) Due to recent events, it may be time to start thinking about sending elements of our navy back to Korean waters.

North Korea (NK) exploded a nuclear device 9 October 2006, prompting the United Nations Security Council to approve a resolution five days later barring the sale or transfer of missiles, warships and missile- and nuclear-related materials to the country. Certain countries in the western Pacific, notably Australia, proposed boarding ships at sea to ensure contraband arms and components were not being imported into or exported from NK.

It seems evident that NK's enigmatic leader, Kim Jong-Il, cannot be trusted to keep his word. In September 2005, North Korea and the United States issued an historic and unexpected joint statement in which NK agreed to give up all its nuclear activities and rejoin the Nuclear Non-Proliferation Treaty (NPT). In response, the USA guaranteed not to attack NK, and to provide aid to help develop nuclear reactors for civilian energy needs. The subsequent prolonged silence on the part of Kim Jong-Il and the stalemated Six Party Talks appear in retrospect to have been a delaying tactic until a stronger negotiating position could be achieved – through joining the nuclear club! Now that a nuclear test has been conducted – albeit a fizzle – North Korea has new demands. It is reasonable to expect that lessons are being learned from that first attempt, and that future tests will be more successful. Kim Jong-Il's neighbours and other members of the international community are naturally concerned as to his future plans.

A more immediate question is whether Kim will sell weapons of mass destruction (WMD) and their delivery vehicles to other rogue states and non-state actors. NK is an impoverished nation where many citizens survive on international food aid and grass (the green kind, if they are lucky!). Weapons and missiles are about the only high-tech products it has to sell. It may now be time to initiate an embargo of North Korean shipping to ensure that exports do not take place.

Embargoes and quarantines, particularly those imposed by naval vessels, have been employed for many years to control the movement of contraband cargoes. At this very moment, UN-mandated NATO naval forces patrol off Lebanon to ensure weapons are not smuggled ashore for the use of Hezbollah terrorists.

In May 2003, the Proliferation Security Initiative (PSI) was launched in Krakow, Poland, to stop the spread of WMDs. Since then, more than 70 countries (including Canada) have expressed their support. The UN High Level Group on Threats, Challenges and Change has encouraged all states to support the PSI, and in March 2005, at a speech in Madrid, UN Secretary-General Kofi Annan applauded the efforts of the PSI to "fill a gap in our defenses."

The PSI is not a formal institution, nor is it a treaty body. It is a statement of purpose: an *activity*, not an *organization*. The PSI seeks to involve all states that have the ability and willingness to take steps to stop the flow of WMD at sea, in the air or on the land. The PSI builds upon efforts of the international community to prevent the proliferation of such items through existing treaties and legal, diplomatic and law enforcement regimes. It is

focused upon practical cooperation such as intelligence sharing, interdiction exercises and related efforts to address the proliferation threat.

Canada has been an active participant: we have attended PSI Plenary and Working Group meetings and have indicated that we will participate in other PSI activities such as exercises and operations on a case-by-case basis. Canada's participation provides an important opportunity to advance our own non-proliferation, arms control and disarmament objectives through multilateral cooperation.

Since joining PSI, Canada has been invited to observe or participate in the full range of PSI interdiction exercises. The Canadian Navy, in particular, has the capability to participate in PSI operations. It has been an active participant in maritime interdiction operations off Haiti, in the Adriatic and in the Persian Gulf, and has conducted surveillance, interception and boarding of commercial vessels to verify, re-direct or impound their cargoes in support of the enforcement of sanctions mandated by the UN Security Council or under national laws.

The navy has also conducted a large number of boardings during *Operation Apollo* and the 'war' against terrorism in the Arabian Sea and Arabian Gulf. As the campaign developed, Canadian ships led the multinational maritime interdiction effort – tracking, hailing and, if necessary, boarding merchant vessels transiting the region looking for contraband and violators of UN sanctions. At the same time, our ships were also involved in interdiction operations to stop Al-Qaeda and Taliban members from escaping the region by sea. Thus the Canadian Navy has a wide range of practical interdiction experience and is well prepared to contribute to any potential PSI operations.

The waters off North Korea would be far from easy to patrol, as the RCN learned in the 1950s. However, warship technology and sea-keeping capabilities have improved greatly since that time. The Canadian Patrol Frigate would certainly be near the top of any list of ships suited for this difficult task, should there be a further UN Security Council Resolution to conduct PSI operations in order to deter the spread of WMDs from North Korea.

Maritime Miscommunications
Commander Scott Bishop

In the fall edition of the *Canadian Naval Review*, a reader admonished the navy for failing to answer the &*%&* phone! In this provocative Making Waves article, the author makes the argument that the navy has a serious public relations problem. He observes that few Canadians understand what the navy does, has done, or can do, and laments the fact that naval issues continue to suffer a very low level of visibility amongst Canadians. On the basis of these observations, the author challenges Navy Public Affairs to take a more proactive and dynamic role in promoting the navy.

These arguments are not new. Pundits of naval affairs in Canada have long lamented the citizenry's apathy towards the maritime dimensions of their country. Throughout the years, the navy and other maritime stakeholders have tried, in vain, to convey a patently obvious fact to Canadians – that Canada is a maritime state. Compelling statistics are rolled out to make the point: the magnitude of our ocean estates; the wealth to be found in our oceans' natural resources; and North America's staggering volumes of seaborne trade. Logical arguments are provided to remove any doubt that may remain, including the need to enforce Canada's sovereignty over its ocean domains, the need to provide physical and economic security to our citizenry, the obligation to ensure we are ready for future threats, and the need to make a fair contribution towards global security. All of these arguments have failed – with mundane predictability – to capture the imagination of the average Canadian.

This problem is not unique to Canada. Stakeholders in maritime affairs in many countries struggle against the same lack of public understanding. Chile is a narrow coastal state stretching 4,300 km along the Pacific coast of South America. At its widest point, its landward border is only 173 km from the ocean. Its economy is reliant upon the exploitation of ocean resources and the ability to get its natural resources, such as copper, to international markets on ocean trade routes. One would think that Chileans would see their country as a maritime one, and yet the Chilean Navy finds itself confronted with the same types of communication issues that dog the Canadian Navy. The

Chilean Navy attempts to communicate to the populace in its "Three Vectors Maritime Strategy," and has undertaken a strategic approach to its public communications in an effort to raise public awareness.

Australia, despite being an island wholly dependent upon the oceans for its prosperity and security, has consistently laboured under the same loadstone – public indifference to the importance of the maritime dimension to prosperity and security. This can be seen in the mandates of the Australian Seapower Centre and other Australian naval stakeholder organizations as well as in the 'educational' pamphlets and literature being produced by these organizations.

Perhaps the most illustrative example of the magnitude of the problem can be found in the United Kingdom. Few navies in the world have had such a profoundly central role in building national wealth and security as the Royal Navy (RN). Yet the Royal Navy – a cherished national institution – struggles to articulate its own relevancy in the world today. To counter the public's growing disconnection with the maritime nature of their state, the navy has embarked upon an ambitious strategic communications plan that includes branding of the institution, the incorporation of strategic messaging in recruiting advertisements, and a RN Presentation Team that makes annual tours across the country to communicate with Britons. It has partnered with other maritime stakeholders in the UK to launch Sea Vision UK – an online forum to promote awareness of the UK as a maritime state. Former First Sea Lord, Admiral Sir Alan West GCB DSC ADC, stated in a 2004 address that:

> Very high among my priorities is the task of getting the maritime message across to a wide cross section of the British population who have forgotten, in these days of cheap, easy and rapid international travel, that we are first and foremost a maritime nation. One only has to look at the statistics.[1]

This quotation is eerily familiar to anyone who has studied the attempts of the Canadian Navy to get its message out to the public. The navy has tried to raise public awareness by producing informative pamphlets, co-producing television documentaries on naval themes, publishing navy primers and even by making its strategic literature, like *Leadmark*, available to the public. These efforts have failed. There is no discernible evidence to suggest that the Canadian public's understanding of maritime affairs is any better today than it was 30 years ago.

The oft-cited excuse is that Canada's coastal areas are a remote hinterland, too far removed from our major population centres to permit national identification with maritime issues. However, we can see from the examples of Chile, Australia and the UK, that close proximity to the ocean translates into neither public awareness nor public concern for maritime issues. At the heart of the matter is the fact that, by and large, populations take the maritime dimensions of their countries for granted and will continue to do so until there is a direct threat to their security or economic well-being. No amount of statistics or logic – no matter how persuasively argued – will be able to change this fact until such a threat materializes.

Public affairs efforts alone cannot hope to make issues such as maritime security and the navy's role in the operations of the Canadian Forces (CF) top issues for the average Canadian. Making this the focal point for a critique on public affairs is both mendacious and unfair. In fact, the navy's public communications efforts are largely very successful when one assesses their efforts against more realistic benchmarks.

While the public affairs element within DND is formidable, only a handful of Public Affairs (PA) officers work directly for the navy. There are only a half dozen personnel at each of the formations and Maritime Staff Headquarters – operating with very modest budgets.

When one looks at the communications support provided by Public Affairs, it's hard to find it wanting – although, of course, there is always room for improvement. The navy's public communications, whether in support of navy involvement in community events, ship visits to Canadian ports, presentations to Canadian audiences, proactive or embedded media events in support of operations or exercises, or coordinated responses to 'gotcha' journalism are generally well handled. There are many positive measures of performance to support this assertion: highly publicized Great Lakes deployments in support of *Operation Connection*, embedded media and VIP ship-riders during the recent Standing Contingency Force (SCF) exercise, the co-production of TV documentaries on naval themes, and a number of positive stories on our submarine program that have been featured in a national newspaper chain. Even the criticism of the *Chicoutimi* incident is misplaced. Despite some serious PA setbacks throughout the incident, the overall success of the public communications effort can be seen in one simple fact: we are still operating submarines.

It is hard to imagine that PA staffs, even if tripled or

quadrupled in size, could ever hope to sustain a public awareness campaign across a broad national front to elevate an understanding of the navy's roles and relevance amongst all Canadians. The cost of the TV and radio advertisement campaign needed to do so – assuming such an initiative could ever get the blessing of DND or the government – would be prohibitive.

Public affairs is primarily concerned with the here and now due to its limited size and resources. It is a proactive organization that attempts to engage the Canadian media in ways that will portray the navy's strengths to the Canadian public. It is also a reactive organization that defends the navy against unfair or inaccurate reporting. This is what PA officers can do for the navy. This is critical work: it is essential to engendering positive feelings towards the navy and building public trust. This, in turn, leads to public confidence in the institution, which is a necessary prerequisite for public support and continued investment. What Public Affairs staff cannot do – even in a substantially larger and better-funded public affairs organization – is educate the entire Canadian public on the importance of maritime issues and the navy's roles. Aside from the magnitude of such a task, there are impediments that stand in the way.

It is important to understand that, unlike most other entities, the navy's communications with the public are not necessarily under its direct control. Major public communications initiatives in the CF must first pass through the directorate of the Assistant Deputy Minister Public Affairs, ADM (PA) within DND. Beyond the department, DND's communications are subject to scrutiny by other civil servants and political staffs. As a result, the navy is not left to its own devices to choose how, what and when it wants to communicate information to the Canadian public. ADM (PA) serves as a filter to ensure that all communications entering the public domain suit the purposes of the department and the government of Canada. Given such a level of oversight, the navy's interests come second and any attempts by an individual service to raise its public profile are likely to meet with determined resistance.

Selling the navy is no different than selling any other product or service. Unfortunately for the navy, you can't sell products and services through compelling logic and factual arguments alone. It's the 'sizzle that sells the steak,' and any successful marketing campaign is designed to appeal to the emotional side of consumers as a consequence. This is why so much effort is devoted towards branding by marketers. Marketers cultivate emotional responses to their product brands. They sell their products by appealing to image-conscious consumers, by associating their products to lifestyles, and even on the basis of sex appeal. What marketers don't do in their advertising campaigns is to provide logical arguments and statistics to convince consumers. Emotion sells, logic doesn't. The inability of the navy to engender a strong emotional response to maritime issues is the underlying reason for the failure of its communications to resonate with Canadians at large. Designing a public relations campaign that incorporates strong emotional elements is problematic, as it would be inappropriate for the navy to engage in communications that targeted powerful primal emotions such as 'fear.' Instead, the navy must typically appeal to much less compelling tertiary emotional responses such as 'pride.'

It is entirely correct to assert that the army is in the hearts and minds of the Canadian public. In 2004, the navy engaged a prominent Canadian pollster, Angus Reid, in the hopes of finding better ways of connecting with the Canadian public. Mr. Reid noted that "The challenge for the Navy is that it's not on the public's radar screen. The image of relevancy for the Canadian public is the soldier holding a rifle in Kabul."[2] It is exceedingly difficult to imagine how this will ever not be the case. It is hard for the navy to get on the public's radar screen because the imagery coming from army missions engenders a strong emotional response – Afghanistan and other army operations are gripping human stories. The imagery is not so far removed from the experience of most Canadians that they cannot imagine themselves being in the same situation as the soldier. They can feel the danger inherent in the soldier's predicament, and they can imagine how they would react when confronted with similar human suffering.

Naval imagery, on the other hand, generally lies on the other end of the spectrum. Both the shipboard and maritime environments are completely foreign – and therefore unimaginable – to the average Canadian. Because of this,

most Canadians can't relate to our imagery on a level that engenders an emotional response. The shipboard environment is technology-intensive, the ocean environment is unknown to personal experience, the enemy is unseen and the danger is unfelt. Unlike army imagery, naval imagery seldom provokes an emotive response. Without emotion, we are left only with the poor stepsisters of logic and statistics to convey our message.

There will be occasions when the media spotlight falls on the navy. Whenever it does, we must ensure that our message appeals to the emotional side of Canadians by focusing on individual sailors in situations that the Canadian public can relate to on a personal level. We must spend less time showcasing our technology, discussing the details of our mission, talking about our success in leadership roles, and similar material that is incomprehensible to the average Canadian.

All is not lost however. Our PA staffs are small, but very good at what they do. Rather than looking to these very small staffs to solve the navy's public communications problems, we should look to the 9,000 or more naval personnel who hold public affairs as a secondary duty. As individuals, we need to communicate with and educate Canadians whenever we have an opportunity to do so. Ship visits to Canadian cities, namesake city events, ship day-sails, the Navy Gun Run, and other interactions between sailors and the public contribute more to public education than any public affairs organization – even one that has been greatly expanded or contracted out.

Moreover, as every good general knows, it is not necessary to capture every bridge on the battlefield – just the ones that matter. In the same way, the navy must re-examine the way it communicates with Canadians and adopt a more strategic approach to its communications strategy. Hitherto, the navy's communications have been almost exclusively focused on dealing with problems of the here and now. In military parlance, our communications efforts have been confined to the tactical level. The key for the navy is to concentrate its limited communications resources where they can achieve the greatest effects, and to develop a long-term communications campaign plan that raises awareness of maritime issues where such an awareness truly matters.

The development of a campaign plan should not focus on the Canadian public at large. Instead, communications should concentrate on cultivating a broader understanding of the navy amongst the many stakeholders who share a common interest in the furtherance of maritime issues and who might act as proxy warriors to further public education in this area. There are many stakeholders in maritime security. They are found in the public, private and not-for-profit sectors. Some of these stakeholders are readily apparent, others are not. Many of the latter group have objectives and purposes that on the surface seem far removed from those of the navy. Closer examination, however, reveals that we share common concerns with respect to the maritime dimension of our country – concerns that are indispensable to all our objectives. Not only is raising the awareness of maritime issues and maritime security amongst these groups possible, it is potentially very powerful over the longer term.

Our brief experience with strategic communications has shown that many important leaps can be made in the short term through stakeholder education and relationship-building activities. It is more important, however, to realize that the true leveraging power of strategic communications spans a much greater time-line. Communication engagements judiciously undertaken at critical nodes over many years have the power to foster a greater understanding of maritime issues amongst decision-influencers and decision-makers. As an initiative with a strategic outlook, such a program must transcend the traditional two-year horizon that permeates much of the navy.

Overall, the public relations problem facing the navy and other maritime stakeholders in Canada is a very real one. It is a problem facing many Western states whose populations are becoming increasingly disengaged from the largely maritime-based resource and supply chain that feeds their prosperity. Trying to overcome public indifference with skilful arguments built upon logic and compelling statistics has not served to change this. We must understand why our communications strategies are failing to resonate and change our approach accordingly. The key lies in showcasing our sailors to the public in ways that generate responses that the citizenry can relate to on an emotional level. While we continue with the tactical-level engagement of individuals, we must also cultivate a more strategic approach to our communications to achieve better results over the longer term.

Notes

1. The Maritime Foundation, Desmond Wettern Media Awards 2004, available at http://www.bmcf.org.uk/dwma2004.php.
2. "Communicating with Canadians: A New Strategy for the Navy," Angus Reid and Associates, July 2004.

Plain Talk: Selling the SCF to Canadians

Sharon Hobson

The Standing Contingency Force (SCF) seems like a good idea, but maybe it just isn't the right time. When the country's military efforts are focused on winning a war in a land-locked country on the other side of the globe, convincing politicians and the Canadian public that resources should be diverted to a joint force structured for future conflicts in littoral regions could be a very hard sell. So it's entirely possible that the Department of National Defence (DND) will have no choice but to delay its plans for a Standing Contingency Force (SCF).

But the Chief of the Defence Staff, General Rick Hillier, is unlikely to give up without a fight. Despite soft political support and some disgruntled muttering in the officer corps, Hillier is determined to move ahead with the SCF.

When the concept was first announced in the Liberal Defence Policy Statement (DPS) of April 2005, it was described as a "high-readiness task-force … made up of existing, designated maritime, land, air and special operations elements, organized under a single integrated combat command structure." The DPS said the SCF would be ready to deploy with 10 days' notice, and provide an initial Canadian Forces (CF) team to work with partners to stabilize a situation or facilitate the deployment of larger, follow-on forces should circumstances warrant.

Hillier told reporters that he envisions a naval task force of three to five ships, including an amphibious ship, air assets including four to six heavy-lift helicopters and CP-140 Aurora surveillance and reconnaissance aircraft, and a land component built around a light task force of approximately 800-900 soldiers. As a first step, he wanted a proof of concept exercise to take place before the end of 2006, and that has now been done. In November, the SCF under the command of Commodore Paul Maddison, conducted an exercise – called the Integrated Tactical Effects Experiment (ITEE) – at the US training range in Onslow Bay using the following:

- USS *Gunston Hall* (LSD 44), a 16,000 ton *Whidbey Island*-class Dock Landing Ship on loan from the US Navy;
- a naval task group (NTG) consisting of HMCS *Athabaskan*, HMCS *Halifax*, HMCS *Preserver*, USS *Doyle*, and the *Victoria*-class submarine, HMCS *Windsor* [1];
- an air expeditionary unit with four CH-124 Sea King helicopters[2] and two CP-140 Aurora aircraft;
- 140 soldiers from B company, 2nd Battalion, Royal 22nd Regiment out of CFB Valcartier; and
- a support group.

The full analysis of the exercise has yet to be completed, but those involved were able to make some preliminary observations. Although the exercise was small scale, it was sufficiently complex, with challenges on both the maritime and land side of the littoral area, to demonstrate what would be required if the SCF was deployed to help secure a failing state being undermined by domestic insurgents and third party interests – i.e., a full-size naval task group and a battalion-size landing force.

The ITEE maritime challenges included air and surface threats, a third party navy, strategic escort, maritime interdiction and counter-piracy. As Commodore Maddison said, this "created a lot of challenges for the naval task group along with the requirement to protect in the shallow waters, the amphibious task group. It was clear we would need a full, robust task group to be able to do all of those pieces." And that should include dedicated helicopters. The Air Expeditionary Unit (AEU) commander, Lieutenant-Colonel Jeffrey Boucher, noted "We tried to use the helos for both [the SCF and the NTG role], it didn't work out very well; the naval task group

Photo: Major Mario Couture, PAO Standing Contingency Force

*USS **Gunston Hall**, docked down to operate landing craft.*

got very little support because the emphasis of the experiment was on SCF."

As for the landing force, Maddison said, "I've come to appreciate that if you're going to have the mass necessary to achieve some effect in an environment that could include up to mid-intensity combat in a coalition setting, then the minimum you need is a battalion-size battle group with all the combat service support elements that come with it." In other words, you need about 1,000-1,100 soldiers. Exactly where those soldiers will come from is a topic for discussion. Maddison says the advice he is getting from Canada's allies is that "if Canada chooses to go forward with this, we need to find a way to generate a standing littoral optimized battle group or landing force."

Assigning standard infantry battalions on an ad hoc basis will not suffice because, according to Maddison, "we are not building a culture of a standing, high-readiness, sea-based, sea-borne force. And we are not building that momentum in the landing force necessary to identify what littoral optimisation really means in terms of personal and collective training and equipment, and then to drive it forward." It would appear that he is leaning towards establishing a Canadian marine corps or naval infantry.

And that may not sit well with the army. It tends to the view that its troops can handle the new role, that the major challenge is getting used to life on board ship and landing on the beach, but once there, the operations are no different than normal land operations. Major Steve Jourdain, commander of the ITEE landing force, said, "once we get our boots on the ground, we're fine, we're ready to go. It was from the ship to the shore that lies the challenge for us."

It is clear that a full-up SCF, as described by General Hillier in April 2005, would require a substantial investment in equipment, personnel and training. But before Canadians agree to that investment, there are a lot of questions that need answering. First of all, what will the SCF be used for? Certainly it will give the government a flexible rapid response capability that can be customized to suit the need, whether it is to secure a failing state or offer assistance in a disaster zone. But the Canadian Forces have already proven they are capable of that kind of assistance, so what is it that the SCF can do that justifies the considerable extra expense? (And here's a recommendation for those attempting to answer that question: stay away from terms such as "task tailoring by negation.")

Photo: MCpl Randolph Rice, DND Public Affairs, Ottawa

A member of the US Navy beachmaster team directs a Canadian Forces G-Wagon onto the beach from a US Navy LCU at high tide.

Second, what is a realistic assessment of the deployment time, from when the government gives approval to deploy the SCF, to when it arrives on scene – for example, in Lebanon, Somalia or Indonesia. What pre-positioning and support need to be in place to get the fastest possible response and sustain the deployment? These are key questions given that public expectations of the Disaster Assistance Response Team (DART) often exceed performance delivery. Third, will there be two high readiness SCFs, one on each coast? Or will there be one SCF built around one amphibious ship, based on one coast, so that rapid response will only be possible in half of the globe? And, fourth, if the government does decide to move forward with the SCF, what will it include, and what will be the all-up cost?

Although the SCF concept may make sense to the military, the public needs a clear explanation of how, when and where it would be used, and especially how much it is going to cost. Canadians are already dealing with the increasing costs and complexities of the Afghanistan mission, they're not likely to want to write a cheque for the SCF without understanding what they're signing on for.

Notes

1. HMCS *Windsor* was pre-positioned in an intelligence-gathering role for the exercise. The submarine was supposed to be used first to insert army Pathfinders, and later to act as a sub-surface threat to the naval task group. Unfortunately, by the time the exercise begun, she had developed an electrical problem and had to put into Norfolk for repairs.
2. The ITEE was meant to include 5 Sea Kings – 4 CH-124B modified for a transport role and one CH-124A for ASW. But on the day the ships left Halifax bound for North Carolina, two of the B models were assessed unserviceable and had to stay ashore. After repairs, they flew cross country to catch up with the ships but bad weather and further equipment problems resulted in only one of them arriving in time to participate in the exercise.

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

Warship Concepts: The Littoral Combat Ship

Doug Thomas

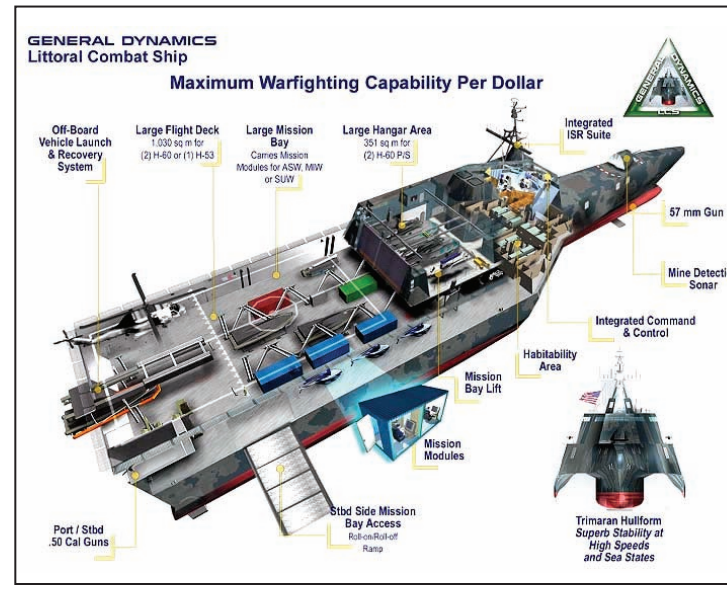
What is Littoral?

There are some facts about our planet that need to be kept firmly in mind when developing defence capabilities and planning military operations. Over 70% of the world's surface is covered by sea, 80% of countries have a coastline and most of the world's population live within 300 miles (500 km) of the coast. The term 'littoral' refers to coastal sea areas and that portion of the land that is susceptible to influence or support from the sea – including sea-based aircraft and land-attack missiles such as the Tomahawk.

In recognition of this reality, emphasis is being placed by many states on enhancing the ability of their navies to operate in littoral regions. Littoral operations involve patrols in shallow water usually within visual range of the coast: these operations will be subject to a broad range of threats, including sea-mines, quiet diesel-electric submarines, small fast-attack craft, shore-based aircraft, and shore batteries of anti-ship missiles and artillery. Coastal operations are also complicated by a number of environmental factors including: underwater noise and reverberation; anomalous propagation; and a degraded radar picture that complicates targeting. In order to counter these hazards, the design and equipment fit of modern ships is changing significantly.

The US Navy's Littoral Combat Ship (LCS) is "designed to defeat growing littoral threats and provide access and dominance in the coastal water battlespace. A fast, maneuverable and networked surface combatant, the LCS provides the required warfighting capabilities and operational flexibility to execute focused missions close to the shore such as mine warfare, anti-submarine warfare and surface warfare."

The LCS will provide a capable, relatively low-cost ship ($350 million) – about one-third the cost of an *Arleigh Burke*-class destroyer. The LCS will be fast and very manoeuvrable, and it will have a maximum draft of 10 feet and steerable water-jets (propellers and rudders are not required), which will greatly enhance its ability to meet emerging green-water (inshore) and brown-water (riverine and estuary) requirements. With modular systems and open architecture, the LCS can be rapidly adapted to meet the requirements of the future. The cutaway view of General Dynamics' LCS depicts how the flexibility afforded by the Mission Bay and the associated Access Ramp facilitate this capability.



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Cut-away drawing of the LCS.

Littoral Combat Ship Design

Lockheed Martin (L-M) and General Dynamics (G-D) are each building two Flight 0, or initial production, Littoral Combat Ships, the size of frigates at about 400 feet in length overall. The two designs are quite different, but both meet performance and technical requirements. The sprint speed of up to 50 knots results in the body of the hull being lifted out of the water as much as possible, thus reducing wetted surface and enabling such amazing speed. While sprint speed can be maintained for about 1,500 nautical miles, an economical speed of 20 knots will permit a transit range of 4,300 nm. They will be able to launch and recover aircraft in Sea State 5, and boats in Sea State 4.

Both designs accommodate equipment and crew for core and special missions. They are both capable of the launch, control and recovery of un-manned vehicles for extended periods. The ability to quickly replace sensor and weapon modules, so that they may change roles from


Internet image

Artist's impression of the LCS.

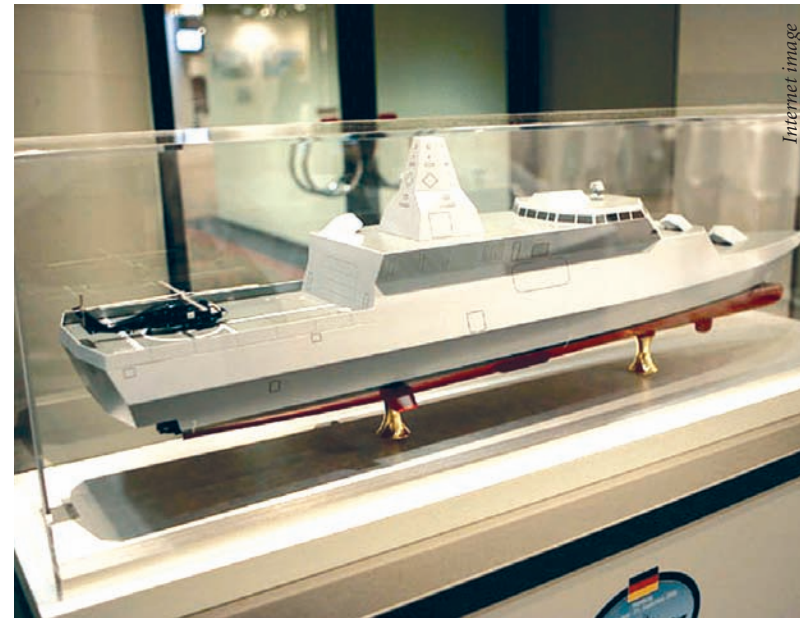
surface warfare to a mine warfare or anti-submarine warfare mission within 24 hours, is a central feature of the LCS concept. Indeed, the acquisition cost of each ship includes two complete modular packages.

These vessels can each carry an MH-60 medium helicopter and up to three Vertical Take-off Un-manned Aerial Vehicles (VTUAVs), will have provision for a manned or un-manned stern-launched RHIB, and be fitted with a 57 mm Mk 3 gun and anti-missile hard- and soft-kill weapons. Initial operational concepts envisage the LCS operating in groups of up to three, and they will be 'netted' into the common operating picture of the rest of the force. Due to their small crews, these vessels will have a 'reach-back' requirement for mission planning, environmental prediction support, intelligence and analytic support, and data fusion from larger ships in the area or from shore headquarters – potentially on the other side of the world! Both designs can be expected to evolve in later flights or batches, based on the experience gained with the initial batch of four vessels.

Flexibility Essential

A flexible crew will be as necessary as flexible equipment fits. A revolutionary new training process is being developed for the LCS, called "Train to Qualify" (T2Q), that will enable its sailors to be fully trained before reporting to the ship. This new system of preparation and evaluation is necessary because of the unique crew size and composition of the LCS. Current plans call for a core crew of 40; a mission package crew and an aviation detachment will be added as necessary, bringing the total complement to about 75.

Sailors will be required to demonstrate knowledge, comprehension and actually do the things they're going to do aboard ship as carefully and safely as they can before they get there. Because of the small crew size, and because the basic pre-joining training will be done ashore in a trainer, the goal is for shore-based unit level training to support follow-on integrated and advanced training at sea and allow more ship operability with multiple crews. There will probably be more than one crew per ship, but how this will be accomplished is still being worked out. It is unlikely that there will be a 'Blue' and 'Gold' crew for each vessel, but there may be six crews for the four initial units – which will all be based in San Diego where trials and training will no doubt help fine-tune how these ships will be operated.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MEKO Concept of the Combat Ship for the Littorals (CSL).

It is interesting to note that the German shipbuilding group, ThyssenKrupp Marine Systems (TKMS), is amending its MEKO (Mehrzweck Kombination, or multipurpose combination) shipbuilding concept. Since the 1970s, the MEKO system (developed by Blohm + Voss, now part of TKMS) has been very popular throughout the world. Frigates, destroyers and corvettes in impressive numbers were built with modularized and interchangeable mission payloads, a concept now seen in the LCS. A new corvette or light frigate concept, the MEKO Combat Ship for the Littorals (CSL), has recently been unveiled. This new proposal is expressly designed to meet requirements for a fast, flexible and reconfigurable surface combatant optimized for operations in the littoral area. Not surprisingly, the CSL concept has much in common with the LCS.

These developments are well worth consideration for Canada's future fleet. A great deal of effort is being expended to ensure that these vessels and their crews will be combat effective in coastal waters, and there is little doubt that we could benefit from this research and development. These very flexible vessels would also contribute greatly to the security of our national maritime borders – when not deployed abroad to tomorrow's peace support and coalition operations.

Book Review

The Admirals: Canada's Senior Naval Leadership in the Twentieth Century, edited by Michael Whitby, Richard H. Gimblett and Peter Haydon. Toronto, ON: Dundurn Press, 2006. 414 pages, photographs, tables, appendices, list of abbreviations and acronyms, bibliography, index. CDN $25.99, paper, ISBN-10: 1-55002-580-5; ISBN-13: 978-1-55002-580-4.

Reviewed by Kenneth P. Hansen

The proceedings of the sixth Maritime Command historical conference (entitled "Running the Navy"), which was held in September 2002 at Halifax, has been published under a cover banner heading that reads "Leadership." The conference endeavoured to shed some light on the key individuals that have played major leadership roles in the Canadian Navy through their service as its commander (a position variously named Director of the Naval Service, Chief of the Naval Staff, Principal Naval Advisor, or Commander of Maritime Command) or as the commander of a subordinate formation or operational area during a critical period. Like the conference, which was held over two days, *The Admirals* is divided into two parts. The first is a collection of 10 biographical essays on 11 admirals by leading naval academic historians or by members of the Naval History Team from the Directorate of History and Heritage. The second part is a series of six autobiographical essays by surviving admirals, although Vice-Admiral R.W. Timbrell has recently passed away. The absolute dearth of this sort of information has been a serious impediment to naval study in both academic and military circles and the arrival of this volume is long overdue.

While the title of the book makes claims to cover Canadian naval leadership in the twentieth century, a large number of important names are missing, which the editors attributed to a lack of time and suitable biographers. Lamentably, Admiral R.F. Falls, a former Chief of Defence Staff but not a Maritime Commander, and Vice-Admirals K.L. Dyer, R.L Hennessey, J.C. O'Brien, D.S. Boyle, A.L. Collier, J. Allan, and J.C. Wood are missing from the chronological list when the book ends with an essay from Vice-Admiral J.R. Anderson. Another five admirals served after him before Vice-Admiral G.R. Maddison's tenure saw the end of the century and a change in title to Chief of Maritime Staff.

The biographical essays offer more fulsome coverage and detailed analysis while the autobiographical entries tend to be shorter and focused upon the main issues during the tenures of the authors. Both sections provide fascinating insights into the management challenges of running a navy that has alternately struggled to survive or been force-fed with a flood of resources. War college students will find the sections on Admirals Nelles and Murray to be of great value in studying the only major wartime operational command held by a Canadian flag officer. Serving officers will learn of the astute political manoeuvring executed by Vice-Admiral J.A. Fulton in getting the Patrol Frigate and Tribal Update and Modernization Programs approved. Unfortunately, the lack of coverage in the period 1974-1980 leaves the procurement of the contemporary *Iroquois*-class destroyers unmentioned. Among the themes that run through later chapters include the Cuban Missile Crisis, unification, inter-service rivalry, and the introduction of women into service in warships.

The text of *The Admirals* flows extremely well and is free of typographical errors. Each chapter is accompanied by a portrait photograph of the subject, most of which are taken later in their careers – the photograph of G.C. Jones as a youthful commander is a notable exception. A curious collection of eight photographs illustrates some of the principal ship types of the Canadian Navy in the period, although the *Iroquois*-class is again left out. An excellent appendix provides a fascinating list of promotions, decorations, courses and qualifications, plus appointments that produces interesting points of comparison for those willing to piece the puzzle together. Strangely absent from this factual information are dates and places of birth and death, except for those who died while in the service.

Although the dust jacket comments recommend *The Admirals* to any reader interested in the Canadian Forces or the navy, it is best suited for mid- and senior-grade officers engaged in professional development studies and academics. Naval enthusiasts and casual readers will likely find the long discussions of naval policy and programmatics to be less than riveting. Nonetheless, the high quality of the scholarship in the first section and the preservation of candid first-person observations by important naval leaders in the second make it easy to recommend this book highly to serious readers of Canadian naval history.

Canadian Arctic Issues in a Changing Climate

Angus McDonald

The seminar, "Canadian Arctic Issues in a Changing Climate," held on 6 December 2006, was an initiative of The Company of Master Mariners of Canada (CMMC). The Company had support from the Marine Affairs Program and the Centre for Foreign Policy Studies, both of Dalhousie University, Halifax, where the seminar, attended by over 100 people, was held. Lloyd's Register North America Inc. also participated and, graciously, hosted the lunch. The objective of the seminar was to provide perspectives on current Arctic issues based on science and experience, and to stimulate discussion. This brief report notes some of the points raised at the seminar.

Two Dalhousie University professors and a former navy climatologist spoke of natural causes of climate change, including atmospheric circulation, solar radiation and cloud cover. They agreed that greenhouse gases and water vapour from fossil fuel burning are also contributory factors.

Photo: Sgt Denis Power, Army News Shilo (from Combat Camera)

Members of the Canadian Rangers and the Canadian Coast Guard launch an RHIB at Shingle Point, Yukon, in August 2006 prior to departing on a patrol.

Coast Guard captains with years of experience navigating in ice stated that in the Arctic ice conditions are unpredictable and they tended to agree with the scientists who showed changes in ice conditions over many years. Storms and wind shifts affect ice cover. Even in areas of open water, hard-as-concrete 'bergy bits' and 'growlers,' undetectable by radar, may damage a ship. In the Arctic there are no support services for shipping – no repair facilities, no fuel supplies, no ports, no docks and depth surveys are incomplete.

Great quantities of mineral resources have been shipped out of the Arctic, mostly by ice-breaking bulk carrier, and exploitation of resources continues. The unpredictable conditions make it hard to predict costs. The scientists stated that along the north coast of Russia the ice cover is receding. This may open the Northern Sea Route. The International Maritime Organization (IMO) initiated a study by Lloyd's Register and other classification societies to develop rules for the winterization of merchant ships which trade in polar regions and regions of seasonal ice. The IMO will require ships sailing in such areas to have suitable hull strength and engine power, and machinery and equipment would be 'winterized' and crews appropriately trained and equipped.

Canada Command embraces joint task forces which give Canada a military capability in the northern territories. Canada Command, divided into regional sectors, has a mandate to respond to natural disasters, threats from illegal activities and also to assert sovereignty by its presence in the Arctic through ground forces and aerial patrols from the base in Yellowknife. Search and rescue in the Arctic faces problems due to lack of area-based assets coupled with the long distances and fuelling requirements when deploying aircraft from southern bases.

Arctic jurisdictional issues were discussed by a specialist in international law and the United Nations Convention on Law of the Sea (UNCLOS). The two main jurisdictional challenges for Canada are: (1) the legal status of the Northwest Passage; and (2) the 'High Seas' beyond national jurisdiction. Canada's *Arctic Waters Pollution Prevention Act* which applies to all vessels operating in Canadian Arctic waters, has a questionable geographical limit. The United States claims that the Northwest Passage is an international passage, and UNCLOS does not state what usage of the passage is appropriate. A speaker from Natural Resources Canada who is involved in delineating Canada's claim of jurisdiction over areas in the Beaufort Sea and the North Atlantic discussed these issues.

Transport Canada has a regulatory role over Arctic shipping through the *Arctic Waters Pollution Prevention Act*. Transport Canada is collaborating with USA and Finland gathering data concerning the environmental, economic and social impact in the Arctic if current levels of shipping increase, and will report to the Arctic Council. Canada is one of eight Arctic states which cooperate in the monitoring of climate change and assess future challenges in the Arctic.

Please visit the CMMC website, at www.mastermariners.ca, for a full report and a list of speakers.

CANADIAN NAVAL REVIEW

2nd Annual 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*. (Other non-winning essays may also be considered for publication subject to editorial review.)

Submission deadline is 31 May 2007.

Competition Subjects:

1. **How relevant is the Canadian Navy today?**
2. **Does Canada take its maritime responsibility seriously enough?**
3. **Who can and who should enforce Canada's ocean policy?**

*Photo: **Canadian Naval Review** 2006*

Commodore Bruce Oland presents Commander Ken Hansen with his prize for winning the Bruce S. Oland Essay Competition for 2006.

Competition Rules:

1. All essays must address some aspect of one of the topics listed above.
2. All essays must be original material. They must not have been submitted or published elsewhere.
3. Essays are to be no longer than 3,000 words. The judges reserve the right to reject essays that exceed the stipulated length. Graphics are acceptable on a limited basis.
4. Essays must contain appropriate citations in any acceptable format. Citations, however, should be kept to a minimum.
5. There is a limit of one submission per author.
6. Authors should put the title only on manuscripts. Names, addresses, phone numbers and email addresses should appear on a separate cover page.
7. The decision of the judges is final. The essays will be judged anonymously – at no point during the judging process will the judges know who the authors are. The essays will be judged in a two-stage process. First they will be assessed and shortlisted by *CNR* and then a panel of three independent judges will pick the winners from the short list.

Please submit electronic copies of entries to naval.review@dal.ca by the submission deadline. Entrants will be notified of the decision within two months of the submission deadline.

Scenes from a busy year

If you can identify these photos, including the location or exercise and the ship(s), send us an email at **naval.review@dal.ca**.

The person who submits the first correct answer will be sent a copy of *The Admirals: Canada's Naval Leadership in the Twentieth Century.*

Photos: MCpl Colin Kelly, Formation Imaging Atlantic.

CANADIAN NAVAL REVIEW