



CANADIAN NAVAL REVIEW

VOLUME 5, NUMBER 3 (FALL 2009)

**Was the RCN Ever the Third
Largest Navy?**

**"An Art of its Own": Corporate
Knowledge, the Canadian Navy and
Arctic Operations**

A Way Out for Arctic Diplomacy

**Considerations for a Strategy of
Future Canadian Sea Power**

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Photo: Corporal Dany Veillette, Canadian Forces Joint Imagery Centre, Ottawa

During *Operation Nanook 09*, over 700 sea, land and air force personnel of the Canadian Forces participated in the Baffin Island region for the exercise. Pictured is Commander A.C. Grant, Commanding Officer of HMCS *Toronto*, being hoisted on to the flight deck by a Sea King helicopter during the exercise. The photos on the back cover are also of *Operation Nanook 09*.

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Editorial: Do We Really Need a Canadian Navy?*

Judging by responses to both the government's new Arctic policy and its musings on naval shipbuilding requirements, the basic reason for maintaining a Canadian navy does not seem to be as clear as one might expect. Some critics seem to take the navy's existence for granted in much the same way the use of the Lion's Gate Bridge, or any other major bridge for that matter, is assumed to be a public right. Curiously, those structures are invariably assumed to exist for the public benefit without due consideration of their maintenance or even of the people who ensure that they continue to serve the public.

Such lack of understanding of the management of complex engineering structures, as are both bridges and navies, often leads to a belief that they are 'turnkey' operations always ready for immediate use when needed. Despite the efforts of a host of authors who have tried to explain how the maintenance of the naval structure needs careful planning and the allocation of considerable sums of money to keep the various integral capabilities always available for use, the message does not seem to sink in.

Maybe another way of looking at the naval identity problem is to continue the bridge analogy and pose the question "What happens if it isn't there?" The answer in terms of the bridge is pretty easy; its absence becomes a major inconvenience that costs everyone time and money. The naval answer is more complicated because the benefits derived by society from a navy are not always in plain sight. This 'out of sight, out of mind' factor is one of the underlying problems, particularly in the intellectually landlocked Canadian heartland. Bridges, on the other hand, are constant presences in our lives. How can we deal with this problem?

The broad scope of Canada's maritime interests should be well known by now; they have been explained in this journal and other places time and time again. The navy's role in supporting foreign policy and being a part of the international security process is fairly well understood whereas the navy's domestic role is not as clear. In part, this stems from a lack of understanding of the government's respon-

sibility with respect to the country's maritime dimension. Simply stated, the government is charged with upholding national and international laws in those waters over which it claims jurisdiction. It also has to provide for the security of those waters as well as the security of the people who use them and of the many coastal communities. Failure to do any of that is an abrogation of sovereignty.

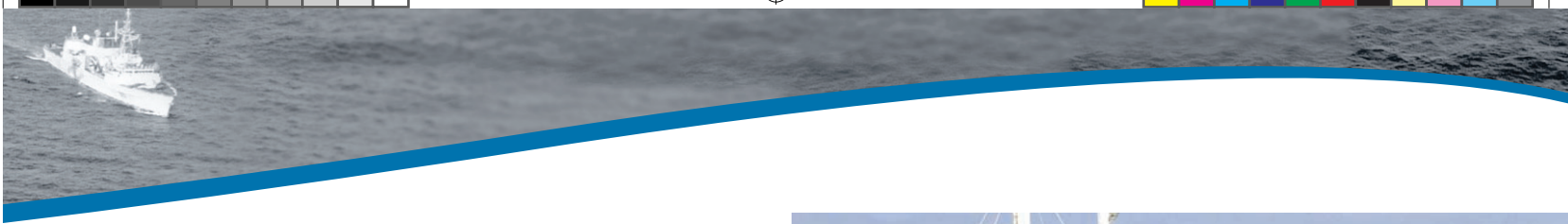
Those responsibilities cover many activities and thus involve several government departments with their own responsibilities for both regulation and enforcement. As one would expect, interdepartmental coordination is absolutely necessary if the overall government mandate is to be executed effectively. Today, this coordination happens at the operational level because the navy has taken the lead. Why? The main reason is that the navy alone has the means of gathering, integrating and refining all the maritime information and data (what used to be called intelligence) into a common picture of activity in Canada's various oceans and waterways.

In some ways, this is a legacy capability from the navy's international activities but it is also a very necessary capability for national security. If that capability did not exist, it would have to be created unless the government



Photo: Internet and Jane's

On 2 September 2009 Fisheries and Oceans Minister Gail Shea, announced a \$194-million contract to build nine mid-shore patrol vessels for the Canadian Coast Guard. Delivery of the vessels, similar in design to the **Damen Stan Patrol 4207**, is expected to commence in the fall of 2011.



wanted to abrogate national security to another country. As an aside, this is an old issue which has been debated many times, and the debate cannot avoid one simple fact: the security of Canada is vitally important to the United States and if Canada doesn't do what is necessary to ensure that security, the Americans will! It is a basic principle of national security and thus sovereignty that a state must be able to protect its interests in its own waters.

Enforcement of national and international laws is a parallel activity to the analysis of maritime information. Some will argue that it is, in fact, a secondary activity because enforcement cannot take place in the absence of information. The means of enforcement at sea is, of necessity, diverse as it calls for specialization. It is unrealistic to expect that customs and excise enforcement be done by the same people who oversee fishing regulations. Similarly, it is unrealistic to expect that those charged with fisheries, environmental and border enforcement be expected to undertake the full responsibility for national security – particularly the management of violence. Warships are also unique in being legally recognized as extensions of their home state (the flag state) with complete immunity from the jurisdiction of any other state. This lies at the heart of a navy's role in supporting foreign policy. This status is not extended to coast guard vessels outside their home waters.

A fairly widespread belief exists that the Canadian Coast Guard should undertake all the domestic maritime security roles in a similar manner to the US Coast Guard. This is more easily said than done. The US Coast Guard is very different from the Canadian Coast Guard in being a paramilitary (non-unionized) force with a broad maritime enforcement mandate that draws in responsibilities that in Canada are shared between several government departments. Although such a change could be authorized with the stroke of a pen, making the related operational transformation would be costly and time consuming. Moreover, one has to ask if the coast guard people would be prepared to work on a basis of continual (24/7) availability or accept far broader responsibilities with the associated personal risk – the unlimited liability criteria under which the military serves. Does the present coast guard structure include people to maintain and operate such things as complex electronic systems, weapons and helicopters? Can an existing coast guard ship muster and land an armed force, albeit limited in capability, to provide a government presence ashore in a remote area in the face of a crisis? Could the Canadian Coast Guard undertake the essential data management task presently done by the navy?



Photo: USCG

A 25-foot US Coast Guard boat provides a security escort for the liquefied natural gas tanker *Matthew* in Boston Harbor, a role shared with the Coast Guard, local and state police and the Massachusetts Environmental Patrol.

The US Coast Guard can do most of these things because it was built to do them and it is deemed to be a paramilitary service whose members serve under a prescribed code of discipline. The Canadian Coast Guard is not. Converting Canada's coast guard to a similar force would be a massive undertaking comparable to creating a new navy. What intelligent person would advocate doing that when a perfectly good navy already exists? Why dismantle the navy only to re-build it? No sensible society tears down perfectly functional bridges or any other complex engineering structures, only to rebuild them. So, what would happen if there was no Canadian Navy? One would have to be created; not just for the domestic security role but also to support foreign policy.

A navy is an instrument of government policy at sea in both home and distant waters. The problem is that it carries out its duties out of sight of most of the citizens of its home country and so it falsely gives the appearance of secrecy. This is unavoidable; but navies leave footprints ashore and somehow the naval leadership needs to find a way of using those footprints to explain that without their navy, Canadians would not only lose a great deal but Canadian sovereignty at sea would also be in jeopardy. 🇨🇦

Peter Haydon

Note

* This is a simplified argument, a more complete discussion can be found in an earlier paper and available at http://centreforforeignpolicystudies.dal.ca/pdf/marsec_working/WhyCanadaNeedsaNavy.pdf. Back issues of CNR also contain many papers looking at the navy's 'home' and 'away' roles.





Winner Canadian Naval Memorial Trust Essay Competition

Was the RCN ever the Third Largest Navy?

Rob Stuart

Introduction

At the beginning of the Second World War the Royal Canadian Navy (RCN) was very small, with just 309 officers and 2,967 ratings,¹ and only six destroyers, four minesweepers and three auxiliary vessels. During the course of the war it was greatly expanded, to 95,000 officers, ratings and Wrens, and over 400 vessels of all types. It was quite possibly the only navy to end the war with more *vessels* than it had had *officers* when the war began. With the Italian, German and Japanese Navies having surrendered, and the French Navy having been decimated, it is often claimed that the RCN was the third largest navy when the war ended, the two largest being the US Navy (USN) and the Royal Navy (RN). Among those asserting this is Dr. Roger Sarty, on the website of the Canadian War Museum, and Dr. Marc Milner, in *Canada's Navy: The First Century*. On the other hand, Commander Tony German, in *The Sea is at Our Gates*, claims that the RCN was the third largest *Allied* navy, and other reputable sources describe the RCN as the fourth largest navy. Interestingly, the 2002 official history claims only that it was the "largest of the Commonwealth navies next to the RN."²

With the Canadian Navy celebrating its centenary in 2010, it seems an opportune moment to look in some detail at the question of whether or not the RCN was ever the third largest navy and, if so, how long it held that distinction. It is hoped that if the present article does not settle this question it will at least go some way towards answering it.

What to Count ... and When

It might be supposed that determining which navy was the third largest is simply a matter of totting up the number of ships in each one and comparing the sums. Alas, it is not nearly so simple. It turns out that up to four navies may have a claim on the honour of having been the third largest in 1945, depending on the criteria used, so this is where we must begin.

The first point is that only ships in commission should be counted. In the RCN and most other navies, decommissioned ships were by definition unmanned and not operational. Some navies, notably the Japanese, sometimes kept non-operational ships nominally in commission but they are discounted in this article.

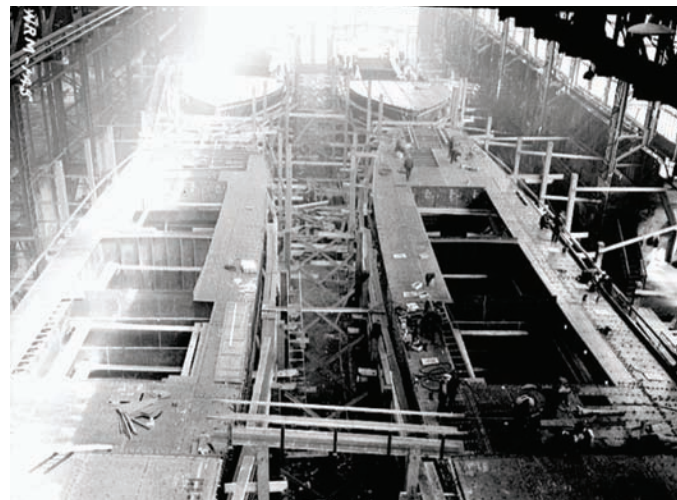


Photo: Library and Archives Canada

Canadian corvettes under construction during the Second World War (1940).

Another key issue is the types of vessels to be compared. The norm among historians comparing Second World War navies is to ignore surface vessels smaller than destroyers, but this would leave most of the RCN's fleet out of the reckoning. The present comparison will encompass all warship types, apart from auxiliaries, armed yachts, coastal craft such as motor torpedo boats (MTBs) and motor launches (MLs), and midget submarines.

Probably the most important criterion is the minimum tonnage. In this comparison, only vessels of 200 tons standard displacement or more are considered. This permits the inclusion of all RCN minesweepers, the smallest of which were the 228-ton *Llewellyn*-class, and is consistent with the inclusion of vessels larger than MTBs and MLs.

Not everyone will agree with these criteria. Some might exclude submarine chasers for example, perhaps thinking them simply too small to count. Soviet submarine chasers were indeed quite small, the biggest of them displacing only 240 tons, but most of the Japanese and all of the French submarine chasers were of over 400 tons, or about two-thirds the size of the RCN's *Bangor*-class minesweepers, most of which were employed as coastal escorts. As this is how the Japanese and French used their submarine chasers, it seems reasonable to count them.

The case may also be made that amphibious warfare



vessels should be excluded from the tally. Given, however, that the RCN always counted its two 5,700-ton landing ships, *Prince David* and *Prince Henry*, among its major units, it seems obligatory to list them – and then one has to include their foreign counterparts. The auxiliary anti-aircraft cruiser *Prince Robert* is included for the same reason.

The final criterion to be clarified is what date is meant by ‘the end of the war.’ Victory over Japan Day (VJ-Day), 15 August 1945, is generally recognized as the end of the war, although hostilities between Japan and the USSR continued until 2 September. But some sources cite the RCN’s strength on Victory in Europe Day (VE-Day), 8 May, when claiming that it was the third largest navy at the end of the war. To resolve any possible confusion on this score, the relative standing of the RCN on both VE-Day and VJ-Day will be established.

The Royal Canadian Navy

A number of sources disagree concerning how many vessels the RCN had in 1945. The Juno Beach Centre website says the RCN had “450 ships in all, plus many



Photo: John Daniel Mahoney, LAC 3264016

Crew stand on damaged stern of the destroyer HMCS *Saguenay*. *Saguenay*’s stern was blown off after her depth charges exploded following a collision with SS *Azra* south of Cape Race.

smaller auxiliary units.”⁴ Dr. Milner has given the total as “over 400 warships of various types” but Dr. Sarty has put it as “250 seagoing warships.”⁵ *A Nation’s Navy* puts the total at “some 365 warships.”⁶ Dr. Tucker’s 1952 official history states that by VE-Day the RCN had over 375 ships “armed for offensive action against the enemy,” plus more than 500 auxiliaries and “local craft performing miscel-

Table 1. RCN Strength on VE-Day and VJ-Day

Type	In Commission 1 Sept 39- 8 May 45	Lost Before VE-Day	Paid Off Before VE-Day	In Commission On VE-Day	In Commission On VJ-Day
Escort carriers	2	–	1	1	1
Light cruisers	2	–	–	2	2
Aux. AA cruiser	1	–	–	1	1
Destroyers	28	7	1	20	14
Frigates	70	4	1	65	55
Corvettes	123	10	–	113	18
Minesweepers	80	5	–	75	62
Landing ships	2	–	1	1	–
LCI (L)	30	–	30	–	–
Sub-total	338	26	34	278	153
MTBs	21	7	–	14	–
Motor launches	80	–	3	77	20
Armed yachts	16	2	4	10	2
Auxiliaries	52	3	5	44	32
Fishermen’s Reserve boats	61	–	56	5	5
Sub-total	230	12	68	150	59
Total	568	38	102	428	212

laneous harbour duties.”⁷

To confirm whether the RCN was the third largest navy in 1945, it is essential to sort out these figures. Fortunately, a number of references offer detailed information on Canadian warships, including the dates of their commissioning and their decommissioning or loss. Table 1 compiles this information and covers all RCN vessels in commission between 1 September 1939 and VJ-Day, excluding harbour and small craft. It is derived from *The Ships of Canada’s Naval Forces 1910-2002* and other authoritative sources.⁸

A couple of comments on this table are in order. Only vessels commissioned in or manned by the RCN are listed. This means that the eight *Western Isles*-class anti-

submarine trawlers counted in many tallies of RCN ships are excluded. They were built in Canada, named after Canadian islands and operated in Canadian waters under RCN control, but were commissioned in and manned by the RN, so they do not belong on a list of RCN units. Also excluded are the two surrendered German submarines in the RCN’s possession on VJ-Day, as they were in commission only for testing and evaluation. On the other hand, the RN escort carrier HMS *Puncher* has been included, as it was manned by the RCN.

The reference to the 30 Landing Craft Infantry (Large) (LCI (L)) may require a word of explanation. These were US-owned vessels of 380 tons, loaned to and manned by

Table 2. Ships in Commission, 1945

	8 May				15 August				31 December		
	USSR	Japan	Canada	France	USSR	Japan	France	Canada	Sweden	Australia	Canada
Carriers	–	–	–	1	–	–	1	–	–	–	–
Escort carriers	–	–	1	1	–	–	1	1	–	–	1
Battleships	3	1	–	2	3	–	2	–	–	–	–
Coastal battleships	–	–	–	–	–	–	–	–	7	–	–
Heavy Cruisers	6	3	–	3	6	–	3	–	–	2	–
Light Cruisers	3	4	2	6	3	3	6	2	2	2	2
Aux AA cruisers	–	–	1	–	–	–	–	1	–	–	–
Armed merchant cruisers	–	–	–	1	–	–	1	–	–	–	–
Destroyers	52	18	20	13	52	17	13	14	27	8	11
Frigates and destroyer escorts	–	22	65	12	10	18	12	55	–	8	15
Torpedo boats	–	3	–	5	–	2	5	–	–	–	–
Corvettes	19	114	113	27	19	94	27	18	–	47	8
Submarine chasers	17	27	–	30	17	17	30	–	–	–	–
Minesweepers	62	11	75	36	98	5	36	62	14	–	16
Minelayers	2	17	–	–	2	15	–	–	2	–	–
Amphibious vessels	–	26	1	–	30	19	–	–	–	3	–
Submarines	173	50	–	22	175	56	22	–	26	–	–
Total	337	296	278	159	415	246	159	153	78	70	53



Landing craft filled with soldiers disembark from HMCS *Prince David* off Bernières-sur-Mer, France, 6 June 1944.

the RCN for the Normandy invasion. The RCN received the first of them in December 1943 but retained none of them beyond the following September.⁹

The Fishermen's Naval Reserve, which is usually referred to simply as the Fishermen's Reserve, was an auxiliary force of volunteers who carried out inshore patrols of the West Coast. Usually they simply operated their own fishing boats but some manned boats seized from interned Japanese-Canadians. It was a navy within a navy, but by the end of 1944 it had ceased to exist, except that five boats formerly serving with it were retained for a time.¹⁰

The detailed sources on which Table 1 is based are generally in agreement, but there are a few discrepancies with respect to damaged ships. The destroyer *Saguenay*, for example, lost her stern in 1942. The stern was sealed off rather than replaced, and *Saguenay* spent the rest of the war as a training ship at Cornwallis. Most sources show her as still being in commission on VE-Day but because the 2007 volume of the official history lists her as a total constructive loss as of 1942, she is listed under the 'lost' column in Table 1. There are also discrepancies in the case of some auxiliary vessels and Fishermen's Reserve boats, but they are not large. If there are any errors or omissions in Table 1, they are not likely to be significant.

Table 1 makes it clear that, excluding harbour and small craft, 568 vessels served in the wartime RCN up to VE-Day, but no more than 428 were still in commission on that day. In terms of the types of vessels which will form the basis of our comparison of the RCN with other navies, a total of 278 were in service on VE-Day.

Well before VE-Day it was decided that the Canadian naval contribution to the final operations against Japan would be limited in size. Apart from its light cruisers and any light fleet carriers it might acquire, the RCN was to deploy to the Pacific theatre only its newest destroyers, 36 of its 65 frigates, and eight of its 113 corvettes.¹¹ Decommissioning of vessels not earmarked for the Pacific war began almost immediately after VE-Day. A total of 125 vessels were paid off by VJ-Day, an average of more than one a day, which brought the RCN down to 153 vessels. The Japanese surrender prompted another wave of decommissioning, and there were just 53 vessels left by the end of 1945. By the end of 1946, the RCN had fewer vessels in commission than at the start of the war.¹²

The Soviet Navy

Just as the importance of the Eastern Front may be underestimated in the West at times, the sheer size of the wartime Soviet Navy is often overlooked. In May 1945 it had three battleships, nine cruisers, 53 destroyers and flotilla leaders, and 173 submarines, plus escorts and mine warfare vessels. As shown in Table 2, the Soviet Navy totalled 337 units.¹³

It is clear from these figures that the Soviet Navy had about 60 more vessels than the RCN on VE-Day. And as 1945 advanced, the Soviet fleet grew. Ships under construction were completed, captured vessels were put in service and numerous ships were acquired from Allied countries – including 10 *Lake*-class minesweepers from Canada. It is clear that the Soviet Navy, and not the RCN, was the third largest navy on VE-Day in numbers of ships. After VJ-Day, with the demise of the Japanese fleet, it was also third in terms of total tonnage, aircraft and personnel, as is shown in Table 3.

Nihon Kaigan

In 1941 the Nihon Kaigan, the Imperial Japanese Navy (IJN), was easily the third largest navy, but it was on its last legs by VE-Day. It still had about 300 units, but had only eight operational surface combatants larger than destroyers. Furthermore, there was almost no fuel, and there were no aircraft or trained aircrew for its remaining carriers, which were for all practical purposes decommissioned. Nevertheless, on VE-Day it still had about 20 more units in commission than did the RCN. Under incessant Allied attack throughout the spring and summer of 1945,



Table 3. Relative Naval Strength on VE-Day, Per Alternate Criteria

	Criteria	Canada	USSR	Japan	France
	Surface ships of over 200 tons plus all submarines (i.e., the criteria used for Table 2)	278	337	296	159
1	Surface ships of over 200 tons (i.e., disregarding submarines)	278	164	246	137
2	Destroyers and larger surface combatants, plus all submarines	24	237	76	49
3	Surface ships of over 500 tons, plus submarines of over 500 tons	264	222	251	87
4	Surface ships of over 500 tons, plus all submarines	264	292	260	93
5	Surface ships of over 200 tons, plus all MTBs, MLs and submarines	369	c. 900	c. 500	c. 185
	Total tonnage of all surface ships over 200 tons and all submarines	323,500	381,600	401,500	272,350
	Aircraft	None	2,800	7,300	c. 130
	Personnel	95,000	266,000	1,700,000	78,200

the IJN was smaller still by VJ-Day, but the RCN shrank even faster, due to its frenetic demobilization, and by then had some 90 fewer ships than the IJN.

The formal Japanese surrender did not take place until 2 September and hostilities with the USSR continued until then, but VJ-Day is generally taken as the date of the *de facto* disbandment of the Imperial Japanese Navy. It is therefore also the day on which it was supplanted as the fourth largest navy.

La Marine Nationale

In 1939 France had one of the world's great navies, but it suffered crippling losses during the course of the war. The defeat of the French Army and the armistice with the Axis powers in June 1940 prompted the Royal Navy to destroy a number of French ships the following month, lest they fall into German or Italian hands, and the French themselves scuttled 80 ships at Toulon in November 1942.¹⁴ Others were lost during the Allied occupations of Syria, Madagascar and North Africa, and some were lost during encounters between Vichy and Free French forces.

On VE-Day the French Navy was smaller than the RCN,

but while the RCN shrank during the summer the French Navy did not. By 15 August the French Navy had six more ships than the RCN, if the figures in Table 2 are accurate. The author concedes that the margin of error in his figures may be greater than six, but the RCN paid off 10 more ships during the rest of August, and at least another 30 by the end of October. If the French Navy was not larger than the RCN on VJ-Day, it certainly became so very soon thereafter.

Conclusion

As discussed above and shown in Tables 2 and 3, the Soviet Navy was the third largest navy on both VE-Day and VJ-Day, by any reasonable choice of criteria. It was certainly larger than the RCN. Indeed, by VJ-Day its 175 submarines by themselves outnumbered the 153 ships of the RCN.

One can argue that the RCN, rather than the IJN, was the fourth largest navy on VE-Day. If submarine chasers or landing ships were to be excluded from consideration, which would not be an entirely unreasonable thing to do, then the RCN would be marginally larger than the IJN, but it would be just as reasonable to include MTBs and



MLs, in which case the VE-Day tally for the IJN would be larger than the RCN's by about 130 units. Furthermore, since Canadian warships were decommissioned after VE-Day faster than Japanese ships were sunk, the RCN would have become smaller than the IJN at some point before VJ-Day even if submarine chasers and landing ships were disregarded.

It is possible that the RCN was somewhat larger than the French Navy on VJ-Day, if the author's count is slightly out or if one chooses different criteria. In this case too, however, the RCN would have been the fourth largest navy only very briefly, perhaps for less than two weeks, given that it paid off 10 ships between 15 and 31 August, and certainly not beyond the end of October, by which time it had paid off at least another 30 ships. It continued to shrink over the next months and by the end of 1945 ranked below such moderately sized navies as those of Sweden and Australia.



French fleet alongside and aflame in Toulon Harbour after being scuttled by her own crews, 28 November 1942.

During the Canadian Navy's centennial year many a sailor will toast its Second World War record. They can salute with justifiable pride the RCN's role in the Battle of the Atlantic, its support of the Normandy invasion and its other contributions to victory. They can certainly say that the RCN grew from 3,300 men and 13 ships to 95,000 men and women and 428 ships. They can also claim that in 1945 the RCN may have briefly ranked as the fourth largest navy, if they make certain qualifications and explanations. But that would make for a long toast. Perhaps they should just say that the RCN had one of the largest fleets in the world. That is remarkable enough. 🍷

Notes

1. W.A.B. Douglas, Roger Sarty and Michael Whitby, *No Higher Purpose: The Official Operational History of the Royal Canadian Navy in the Second World War, 1939-1943, Volume II, Part 1* (St. Catharines, Ontario: Vanwell Publishing, 2002), p. 30.
2. Roger Sarty, "The Royal Canadian Navy and the Battle of the Atlantic,

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Winner Bruce S. Oland Essay Competition

“An Art of Its Own”: Corporate Knowledge, the Canadian Navy and Arctic Operations

Richard Mayne

Sailing a warship into Canada's Arctic is by no means an easy task. Even in the summer it is a forbidding and stressful environment which tests Canadian naval crews in ways that are truly unique from their normal operating areas in the Atlantic or Pacific. Regardless of the challenges, demonstrating sovereignty in this region is recognized as an important role for the navy. Take, for instance, the account from Captain (N) Paul Dempsey, who, having commanded HMCS *Montreal* during her 2006 trip to Baffin Island, found that:

[His ship's] experience is a prime example of the operational and political usefulness of a Canadian warship as it conducts ... Arctic sovereignty.... [and] at the same time, the ship's deployment illustrates some of the specific challenges of operating a Canadian warship in northern waters.

One of Dempsey's brethren made a similar assessment after sailing into Frobisher Bay, observing that “Apart from its importance as a means of testing the efficiency of equipment and the ability of personnel, [this northern deployment is] considered of importance to Canada as a whole, as a means of emphasizing the sovereignty of the country to a population.”¹ The fact that these two observations are so similar is extremely significant, particularly since the latter came from a pivotal report on Arctic operations by the Commanding Officer of the frigate HMCS *Swansea*, Lieutenant J.P.T. Dawson, almost 60 years ago.

Swansea's deployment in 1949 was not the Royal Canadian Navy's (RCN) first foray into the Arctic, however in many ways it was the most important of these pioneering expeditions. The information contained in Dawson's report not only represented a gripping portrayal of his ship's journey to the Arctic, but it also shed so much light on the issues the RCN would face when sailing in its own frozen backyard that Dawson was recommended

for official commendation. Unfortunately, Dawson's “very excellent and comprehensive report”² is long forgotten, and a comparison of its conclusions with comments made after modern deployments to the Arctic reveals that when it comes to northern operations the Canadian Navy can learn much from its own past. The aim of this article, therefore, is to use *Swansea's* 1949 voyage to show that the Canadian Navy not only has a long Arctic tradition, but also that it has had difficulty establishing an enduring sense of corporate knowledge of northern operations due to an inability to maintain a consistent presence in the region. As a result, Maritime Command (MARCOM) has consistently found itself in the unfortunate position over



Map showing islands and waterways in the north of Canada.



A powerful expression of the RCN's early commitment to northern operations: the newly commissioned carrier, HMCS *Magnificent*, accompanies HMCS *Nootka* (pictured here) and HMCS *Haida* on the first leg of their deployment to the Arctic during Northern Cruise 1948.

the past 60 years of learning and then relearning many of the same lessons in the Arctic.

There is a commonly held view that the RCN neither understood the strategic importance of the Arctic in the immediate postwar period nor took an interest in these waters until forced to do so by the government.³ In reality, however, key events from late 1945 to early 1947 make clear that many officers in the RCN were extremely keen to explore these waters and develop an active and sustained naval presence in the north. Unfortunately, a full explanation of the RCN's early attitudes towards the Arctic is too extensive a topic to cover with any justice in this article. Moreover, the period leading up to *Swansea's* epic voyage has been fully explored by historians Jan Drent and Elizabeth Elliot-Meisel and as a result all that is required here is a brief description of those events.⁴

Providing a Canadian naval presence in the north would not be easy as the RCN faced a number of difficult obstacles. First, there were considerable political sensitivities. Indeed, the government was troubled both by the growing Soviet threat as well as increasing American interest in the Canadian north. But unlike some members of his Cabinet who wanted a greater presence in the Arctic, Prime Minister William Lyon Mackenzie King was so anxious about it becoming a trigger for another war that he went to great pains to avoid overtly siding with the Americans in the region's defence and emphasized that Canada's northern policy should be primarily civilian in nature.⁵ Second, the RCN was having trouble maintaining its commitments at sea due to extensive budget cuts and manpower reductions. As a result, the primary challenge for the RCN's Arctic ambitions was to find a way to operate in this strategically significant area with shrinking resources.

Wanting to act unilaterally in the north whenever possible, the RCN quickly laid plans to send the destroyers HMCS *Nootka* and *Micmac* on a five or six week 'Northern Cruise'

over the summer of 1947 as part of a familiarization tour. Unfortunately, just as the RCN was set to put this plan into practice the government cancelled it. The RCN made new plans and in early 1948 it announced its intention to use ice-free periods to conduct yearly Northern Cruises for naval ships starting with a renewed deployment scheduled for 2-28 September 1948. In a symbolic gesture of the RCN's firm commitment to the region, senior planners would even add their most prized asset, the new aircraft carrier HMCS *Magnificent*, to accompany HMCS *Nootka* and *Haida* a good part of the way on a voyage that would take these two destroyers to some of the country's most northern regions. The Northern Cruise of 1948 went well as many lessons were learned, but this initial foray was far too short to provide any lasting conclusions.

It was the RCN's intention to gain more experience in the Arctic by conducting a similar Northern Cruise between 25 August and 15 September 1949. The grounding of *Magnificent* in June, which would require three months of repairs, threatened to scuttle these plans. Although disappointed, some officers on the naval staff saw the postponement as an opportunity. The navy had been desperately searching for ships to fulfill its reserve training commitments and as a result the escorts that were to accompany *Magnificent* could be put to good use for that requirement. The Naval Board understood all too well that the fleet was over-tasked, but maintaining annual northern deployments was deemed important "both to the ships and their crews, and also from a political point of view." Building corporate knowledge in the north would take time and dedication. As a result, the decision was made to send at least one ship to the Arctic "which should be combined with the training commitment, and that if possible the RN [Royal Navy] submarine [stationed in Halifax] be included for the whole or part of the cruise."⁶

No British submarine would participate in the 1949 Northern Cruise, but the 301-foot and 1,445-ton frigate,



Swansea, was given the dual tasks of familiarizing RCN personnel with operating conditions in sub-Arctic waters and collecting scientific data. Her exact route would take the frigate to a number of remote northern locations – such as Frobisher Bay and Koojessie Inlet, Padloping Island, Godthaab, Greenland, and Hebron, Labrador – before returning home, at which point Dawson put pen to paper.

Dawson wanted his ship's experience to make a difference to future Arctic operations and he therefore went into considerable detail in his report. The approach paid off. Divided into topical sections, Dawson's report was an easy, yet comprehensive, read that captured his ship's challenges in the north admirably. Of course, ice and weather naturally received a good deal of attention. From the moment *Swansea* sighted her first iceberg in the Strait of Belle Isle two days after leaving Halifax, Dawson remained preoccupied with ice, noting that "one growler, weighing several tons, will badly damage a steel-hulled and un-strengthened ship such as a frigate." Dawson was right to fear the ice, particularly since constant heavy fogs,

rough weather and night-time conditions all conspired to make the task of detecting these drifting hazards in a timely fashion even more difficult. The key to safe passage in the north, therefore, rested on reducing the ship's speed. *Swansea*, whose route was planned for 14 knots, was "lucky" if she managed five knots in ice-infested areas. Heavy weather only served to compound the problem – often leading to speeds of two knots or less. Dawson made no apologies for taking it slow. "This is not being in any way overcautious," he told his superiors, continuing with the observation that the risk of hitting growlers not detected by radar was simply too great.

Slowing down did come at a considerable cost. Dawson found that the exploratory aspect of his mission did not receive the attention it deserved, reporting to his superiors that "one factor stands out from all others when reviewing the cruise – namely, lack of time. In view of ice and weather conditions it is virtually impossible to carry out a satisfactory survey of these waters and coast lines and at the same time adhere to a definite timeline." The result of tightening the ship's schedule, therefore, was that



Photo: DND

HMCS Swansea in the distance in Godthaab (now Nuuk), Greenland during her 1949 northern deployment.





Photo: DND

Two Canadian sailors from *Swansea* realize how close they are to the North Pole and how far they are from their home port of Halifax.

the amount of scientific information gathered during his expedition was “disappointingly small.”

Ice was not the only factor that had an impact on *Swansea*’s ability to carry out this part of her mission. Soon after spotting Resolution Island, *Swansea*’s officers quickly realized that the navigational charts of the area “were hopelessly incorrect and inadequate” and that the “soundings shown appear to bear little relation to fact.” In other situations there were no soundings at all, and that lack of information resulted in some particularly bone-chilling experiences such as the ship’s passage through Bartlett Narrows where Dawson suddenly found that the depth had gone from 100 to only 8 fathoms in mere seconds. Nor did his navigation woes end there as Dawson also experienced great difficulty finding one of the ship’s scheduled stops since the Cape at the mouth of the Clyde River not only looked very different from its depiction on Admiralty charts but also was in the wrong geographic position. As bad as the charts were, Dawson was equally unimpressed with established navigation aids and found that his magnetic compass was useless. According to Dawson, therefore, navigation in the north was best characterized as “an art of its own” and consisted of a world where one was “either trusting radar

or poking [and] blindly trusting luck.”

While Dawson found that his gyro compass, echo sounder and radar were invaluable assets for both navigation and ice avoidance, he also recognized the value of other kit too. The ship’s dory and dinghy, for instance, were heavily employed sounding waters ahead of the ship and ferrying personnel ashore. In addition to these small vessels Dawson stressed the need for a more durable motor cutter as well. He also argued that fitting ships to carry helicopters was key for Arctic operations as this relatively new technology would save time during deployments due to their ability to conduct ice patrols, assist in navigation, speed up transfers and perform aerial and photographic reconnaissance. And finally, based on the Arctic’s unique conditions Dawson had requested the temporary appointment of a medical and a specialized navigating officer as well as a “pilot with experience in these waters.” His concerns were well-founded. In far too many instances the pilots that were available in the north – such as the ones at Padloping Island whose English was limited to ‘yes,’ ‘no’ and ‘I don’t know’ – were of little help.

Sailing into poorly charted and ice-plagued waters truly made the Arctic a unique operating environment, but insufficient infrastructure in the north created its own logistical problems. Based on the experiences of the 1948 Northern Cruise, Dawson knew that the lack of fueling facilities would be a major source of concern throughout the voyage. To be specific, it was estimated that *Swansea* would approach 30% of her fuel reserves before her rendezvous with the tanker CNAV *Dundalk* at Hebron, Labrador, which, while not having an unacceptable impact on the ship’s stability, was an uncomfortable level of consumption.⁷ Although *Swansea* had done better than anticipated – having 9% more fuel than forecast – the ship was nonetheless riding high in the water and required



Photo: DND

The lifeline for early RCN northern expeditions, the oiler CNAV *Dundalk*.



constant trim adjustments. As a result, Dawson, like the commanders from the previous year's cruise, experienced a euphoric sense of relief when he heard that *Dundalk* was actually in position waiting for him.

Operating in such a remote and isolated area for a sustained period resulted in other needs as well. Early predictions that the crew would not require winter clothing for a late summer deployment proved horribly incorrect. As it turned out temperatures averaging between 30 and 40 degrees Fahrenheit ensured that the issue of keeping personnel warm on the upper decks "was a major one," particularly since Dawson was reduced to watching his crew use their woollen socks as a substitute for gloves. Winter clothing therefore became "a definite requirement" for any future cruises and Dawson observed that there were other discomforts that the crew had to face as well. Boredom was one problem. With only four "Class B" movies on board the crew had little entertainment and Dawson feared that such inactivity while off watch could

have psychological effects on the crew. Dawson subsequently relaxed the ship's routine and discipline in order to "compensate for certain discomforts," and these efforts worked. Tales of discipline issues where "scattered cases of ... wishful disobedience or insubordination" among the junior ranks had dogged the ship over the first part of the summer of 1949, yet Dawson was happy to report that his crew felt that they were making a difference in the north and that morale throughout the voyage was "very high."⁸

Swansea's crew had good reason to be proud. Not only had they done well under difficult conditions, but also their deployment stood as a powerful illustration of why the RCN belonged in the Arctic. Having burnt out their bearings and drifting aimlessly some 30 miles off Digges Island, the crew of the RCAF supply vessel *Malahat* was certainly grateful that *Swansea* was in the area. Illustrating that the RCN could play a valuable search-and-rescue role in the Arctic, *Swansea* not only located the helpless



Photo: DND

After an unfortunate breakdown in the Arctic, the RCAF supply vessel *Malahat* is rescued by *Swansea*. The 1,090 mile journey to Goose Bay was the longest tow ever performed by the RCN at that time.



Photo: DND

The importance of domestic operations: *Swansea* crew members interact with the local population on Padloping Island.

Malahat but also managed to tow this stricken vessel to safety. As important as that task was, however, *Swansea* also found herself fulfilling the equally valuable role of asserting Canadian sovereignty. One case in particular illustrates this point particularly well. After visiting American personnel serving at the US air force base on Padloping Island, Dawson was aghast when one American asked him for an explanation as to why a Canadian warship was “in these waters,” to which he responded “in a friendly, but firm manner that it was not unreasonable since this was Canada; a point which seemed to have been forgotten.”⁹

Nor was this the ship’s only opportunity to increase Canada’s presence in the Arctic. The port call to Godthaab, for instance, went a long way to soothing Danish suspicions about Canada’s sudden interest in the area. Finding that Danish officials openly expressed “doubts” regarding the reasons behind the RCN’s visit to Greenland, Dawson was happy to report that sincere discussions over lunch and “drinks” resulted in “thawed” attitudes and even a request for *Swansea* to stay longer. Such breakthroughs with foreign officials were not *Swansea*’s only liaison triumph as the ship’s domestic port visits yielded significant results. *Swansea*’s interaction with local communities certainly gave the indigenous population a unique experience to get to know their navy and raise the government’s profile in the region.

But it was *Swansea*’s primary mission of familiarizing RCN personnel with the Arctic’s unique operating conditions that met with the greatest success. After three weeks in the north it was clear to Dawson that the RCN would need continuously to acclimatize crews by maintaining a consistent yearly presence in the region. He noted in his report that:

Service in these waters adds a considerable strain to almost all sections of the ship’s company.

Amongst the men it is mainly a physical one. To the officers it is a mental one which increases with responsibility. It is felt that, under war conditions, periods of service in these waters will have to be very much shorter than in the more Southern oceans. This will necessitate a manning pool to provide a floating population for ships in Northern operations. It is also thought that officers holding appointments in ships in Arctic Waters will not remain mentally alert and efficient for as long as they would if employed in the North Atlantic.¹⁰

Dawson ideas of a floating pool of personnel and even a potential northern naval base were good ideas, but maintaining a continuous summer presence in the north would require considerable resources that would put a strain on the RCN’s manning requirements as well as training and operational commitments. At first the RCN did what it could. HMCS *Cedarwood*’s voyage and HMCS *Haida*’s participation in an American exercise in the region during the same year helped to expose RCN personnel to northern operations and demonstrate the navy’s resolve to maintain a presence in this forbidding part of the country. However, it did not take long before the navy found itself in what would become an all-too-familiar pattern when it came to northern operations; namely, those who wanted to maintain a naval presence in the Arctic would find their efforts frustrated by the fact that the RCN had insufficient resources to do the job right.

The true significance of *Swansea*’s experience was that it had proven the value of building corporate knowledge of the Arctic, and as a result the RCN went to great lengths (including attempts to scavenge crews and commission ships early) to conduct another Northern Cruise in 1950. Yet without sufficient resources to meet its core anti-submarine commitment in the Atlantic and Pacific, the Naval Board was forced to admit that Arctic operations were “beyond the present and projected physical resources of the Navy.”¹¹ Many within the RCN tried other means through the 1950s – including the commissioning of the specialized icebreaker, HMCS *Labrador* – to maintain at least a token presence in the Arctic, however further cuts and increased operational demands from its alliance commitments resulted in the navy having to give up on its northern aspirations altogether. And this marked the beginning of a situation over the ensuing half century where the RCN would only venture into the Arctic every 10 to 15 years or so.¹²

This unfortunate history has made it impossible to establish any consistent corporate knowledge in the north. Whether

it was HMCS *Preserver* in 1974, HMCS *Ottawa* in 1977, or HMCS *Cormorant* in 1989, each generation that entered the Canadian Arctic did so as if it were the first. The same is true for today's maritime Arctic operations, and in the words of one astute officer, a lack of naval presence for over a decade meant that "corporate knowledge had faded and a trip north really was a trip into the unknown." Testimony from those who have served there make it clear that the Canadian Navy is relearning the lessons that Dawson was trying to teach almost 60 years ago. A comment from a modern-day officer that Exercise Narwhal 2004 was "an eye-opening experience which clearly demonstrated how difficult it is to operate in the north" are reminiscent of the ones made in 1949, as are those from other individuals who have recently sailed in the Arctic and faced concerns over fuel, ice, navigation and the lack of infrastructure.¹³ Such observations show that Arctic naval operating conditions have changed little since the first Canadian warships sailed in these waters, but just as critical is the recognition that the navy can still play the same key roles in the north as it did in the late 1940s.¹⁴

The operational pressure that MARCOM faces from trying to send ships north while maintaining heavy commitments elsewhere is also reminiscent of the situation the navy faced in 1949. Dawson's conclusion that the Arctic was a unique operating environment is equally true today as it was when he wrote his report in 1949, and so too is the observation that the best way to counter these challenges is through a consistent summer presence in the north along with the sustainment of corporate knowledge about this region. In the end, therefore, if history can indeed act as a guide then it suggests that the navy is on the right track. A sustained commitment to annual summer cruises – along with the eventual commissioning of the planned Arctic Offshore Patrol Vessels – is a good way to ensure that current maritime experience in the north does not follow Dawson's excellent account on Arctic operations into the annals of history and become another example of lessons not learnt. 🍷



Pen and ink sketch, HMCS *Labrador* by Commander Anthony Law, 1956.

Courtesy of the Shearwater Aviation Museum

Notes

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A Way Out for Arctic Diplomacy

Commander James Kraska

Photo: Cpl Dany Veillette, Canadian Forces Joint Imagery Centre, Ottawa



HMCS *Toronto* in Frobisher Bay during *Operation Nanook*, one of three annual sovereignty operations in Canada's north.

Canada has painted itself into a corner. The United States and Canada are among the closest allies on Earth; our economies, people and destinies are intertwined. We share a fundamental interest in North American security. Neither country is secure if the other is vulnerable, which is why the two neighbours have integrated continental defence under the bilateral NORAD command for decades. Membership in NATO provides an additional opportunity for the two democracies to champion stability and freedom, with both countries sharing the burden of combat in Afghanistan.

But on the issue of the Northwest Passage, over the past few decades Canada has gradually, if perhaps unintentionally, embarked on a rather unilateralist course by claiming sovereignty over large areas of the Arctic Ocean. Canadian exceptionalism in the Arctic Ocean has weakened the ties between the two countries, and provided an unflattering glimpse into how governments in Ottawa – both on the left and the right – have irresponsibly used the Arctic to score political points at home and reject multilateralism abroad. At times all states are inclined to feel defensive within the international community, and going it alone feeds a certain hyper-sensitive sovereignty impulse that can appeal to our fears, our pride and our independence.

In a world fraught with both conventional and irregular military risk and political and cultural divide, with the global economy collapsing in slow motion, the United

States, Canada and the strong network of free, democratic and capitalist allies, friends and partners form the fulcrum of stability that holds the world together. Ottawa and Washington are among the foremost defenders of a stable state world system. Both states are rich, with prosperity flowing from the enjoyment of peace, liberty and equality that is only possible with a safe and stable planet.

Seventy per cent of the globe is covered by the single interconnected 'world ocean,' and 80 per cent of the population of the world lives within 200 miles of the coastline. As well, 90 per cent of international trade travels by sea. Consequently, the diplomatic and legal framework for oceans governance is a direct concern to the maintenance of a stable world system. The foundation for oceans governance is the United Nations Convention on the Law of the Sea (UNCLOS), which is the constitution for the world's oceans. Conflict avoidance, international peace and security and global stability are directly connected to the law of the sea.

In the United States, the sovereignty impulse has led us astray, convincing a handful of powerful Senators to reject the Law of the Sea Convention. They believe that going it alone protects US sovereignty and promotes American interests. But as one of the prime beneficiaries of a stable, fair and widely accepted global order, by not working multilaterally to join UNCLOS the United States has abandoned self-interest in favour of placating a false



demonstration of independence.

Likewise, Canada is under the unilateralist spell of oceans sovereignty, going it alone in the Arctic Ocean in a vain attempt to grasp a future of security amidst a rapidly changing geophysical Arctic climate and unsettling and dynamic Arctic politics. Canada has resurrected 'sovereignty' patrols, loudly trumpeted plans to construct ice-strengthened patrol vessels to enforce unilateral rules in the Northwest Passage and retreated behind the mythos of Canadian Arctic sovereignty. The storyline is dutifully recycled by the government-media-academic complex in a desperate wish to obtain the approval – or at least the acquiescence – of the international community, and especially of the United States.

The problem is that the ice keeps melting and no other state has accepted Canada's excessive claims of sovereignty. The reason is that Canada's Arctic claims are inconsistent with the Law of the Sea Convention, to which Canada became a party in 2003. Canadian scholars, government officials and the media have circulated well-practised, if not slightly tortured, theories purportedly grounded in the international Law of the Sea in order to manufacture a rationale that would support Canada's claims to sovereignty over an ocean – something no other state has done. Other states are not buying it, leaving Canada feeling vulnerable.

In particular, the loss of sea ice in the high north has renewed discussions over the legal status of the Arctic and sub-Arctic transcontinental maritime routes connecting the Atlantic Ocean with the Pacific Ocean. The routes, which shorten a transit from Europe to Asia by 4,000 miles, connect the North Atlantic and Labrador Sea with the Beaufort and East Siberian Seas, thereby constituting straits used for international navigation under Article 37 of the Law of the Sea.¹ Canada has succumbed to the sovereignty impulse because it fears that without 'ownership' over vast swaths of the Arctic Ocean and unilateral control over the Northwest Passage, the safety, security and environmental protection of the Arctic archipelago – indeed of the entire country – will be exposed to the vagaries of shipping and aviation traffic from the outside world.

Much like 9/11 absorbed the psychological final measure of the American sense of security and innocence from terrorism, the disappearing ice cap threatens to impose the ugly reality of the world on the idyllic doorstep of Canada. Poorly maintained Third World merchant ships and their multi-ethnic crews from distant and unsavoury lands will discover the new superhighway between Asian manufacturers and European markets. The result is that

the challenging ice-infested waters will produce oil spills, and the multiplying number of ships will bring illegal migrants, or even worse, terrorists.

In this regard, ensuring safety, security and environmental protection in the Arctic and the Northwest Passage is a shared concern – providing an opportunity for greater cooperation not only between Canada and the United States, but among all maritime states and future users of the waterway. Although it is common, but unhelpful, to cast the issue of the Northwest Passage as a bilateral disagreement between the United States and Canada, it is not. The issue is a multilateral matter, involving the interests and equities of states from Asia and Europe.

Consequently, Canada can best secure its interests in sovereignty, safety, security and environmental protection by proactively engaging now to develop an Arctic



Photo: US Navy

Members of the US Applied Physics Laboratory Ice Station clear ice from the hatch of the *Los Angeles*-class submarine *USS Annapolis* (SSN 760) during ICEX 2009 in the Arctic Ocean.



Photo: NASA

NASA data visualization illustrating Arctic sea ice from 1 January 2007 to 16 September 2007. On 15 September 2007 the Northwest Passage was photographed ice-free for the first time since satellite recording began.

legal regime under the framework of Law of the Sea Convention. This will mean abandoning some of the more audacious and unsupported claims of sovereignty, and complying with the rules contained in the treaty. If it acts now, Ottawa will be able to lead the design and implementation of the new Arctic framework before the ships start to arrive.

Canada should move quickly. The Northwest Passage has been fully transited nearly 70 times by surface vessels belonging to Canada, the United States, Norway, the Netherlands, Japan, the Bahamas and Liberia, and the deep and wide passage has been susceptible to transit for decades by submarines of the United States and the United Kingdom and presumably, the Soviet Union and now Russia. Both the United States and Canada have an essential national interest in developing a widely accepted and respected legal regime for the Arctic Ocean and Northwest Passage before climate change alters shipping patterns. If the shipping arrives before the two North American partners can work with the international community to adopt an Arctic regime, both Washington and Ottawa will experience reduced negotiating leverage with the international community and the result will be less control over the Arctic north. Hard-line foot-dragging in Canada is squandering time and diplomatic capital needed to negotiate such an agreement, making both countries less secure in the long run.

Canada exercises complete sovereignty over the islands of the North American Arctic. Although there is not much open to question on the issue of Canada's sovereignty over the northern *lands* (even if the point is typically obfuscated, generating chest-thumping reassurances of

sovereignty), on 10 September 1985, Canada claimed all the *waters* among its Arctic islands as internal waters, and drew straight baselines to encircle the entire North American Arctic.² This claim is inconsistent with the Law of the Sea Convention.

Under UNCLOS, coastal states are entitled to draw normal baselines along the low-water mark of the shoreline, and claim a 12 nautical mile territorial sea projecting into the water. Straight baselines may be drawn in some localities, such as Norway, where the coastline is deeply indented and deeply cut into, or if there is a fringe of islands along the coast in its immediate vicinity.³ Straight baselines must fulfill two additional criteria: they must not depart to any appreciable extent from the general direction of the coast; and the sea areas lying within the lines must be sufficiently closely linked to the land domain to be subject to the regime of internal waters.⁴ So while Canada has drawn a straight line nearly 100 miles wide, enclosing the Mc'Clure Strait for example, that line extends far beyond the low-water mark and runs perpendicular to the general direction of the coastlines.

In some rare cases coastal states may claim parts of the ocean as historic internal waters. But the area claimed by Canada does not support a claim of historic internal waters. The UN has said that three factors are to be considered in determining whether a body of water may be considered historic internal waters: (1) the exercise of authority over the area of the claiming state; (2) the continuity of this exercise of authority; and, (3) the acquiescence of foreign states.⁵ This three-part test makes historic claims notoriously difficult to maintain. The Northwest Passage, which has never been accepted by another state as the internal



waters of Canada, does not meet the test.⁶

It is particularly important to note that, within the context of the Canadian Arctic where straight baselines are established that have the effect of enclosing as internal waters areas that had not previously been considered as such, the international community retains the right of innocent passage through those waters.⁷ That is, even if one accepts Canada's excessive claims for straight baselines or historic internal waters, international shipping still has the right of innocent passage through the waters.

International vessels and aircraft, however, actually are entitled to the more robust regime of transit passage through the Northwest Passage. The routes through the Northwest Passage meet the plain definition in Articles 34 and 37 of UNCLOS of a "strait used for international navigation," in which vessels and aircraft are entitled to the non-suspendable right of transit passage. This means submarines may travel under the surface, aircraft may overfly passage lanes in the area above the water, and ships and airplanes may use the route without the permission of, or prior notice to, Canada. Waters within 12 nm of the coastline are still under Canadian sovereignty, but superimposed on Canada's right of sovereignty is the non-suspendable right of transit passage. Canadian laws still apply, but only so long as they do not impede or impair transit through the strait.⁸

Seeking a positive way forward, some scholars in Canada and the United States have advocated a bilateral solution, suggesting that if only the two countries could cut a deal the issue would be resolved. A bilateral approach will not resolve the issue, however, because it involves global interests rather than purely bilateral equities. Any bilateral agreement between the two countries would not affect the rights of other states such as Korea, China or Germany. Furthermore, a special deal between the United States and Canada provides a precedent for other coastal states to develop a bilateral treaty for controlling traffic in any of the numerous strategic international straits around the world, such as Iran and Oman cooperating to control the Strait of Hormuz.

Under the Law of the Sea, Russian reconnaissance aircraft and Chinese intelligence-gathering ships are free to operate just beyond 12 nm of coastal states, including the United States, Japan and European countries. The Arctic Ocean is no different and Canada does not acquire any special protection in this regard. The benefit of recognizing freedom of the seas beyond 12 nm from the shore and through international straits is that both Canada and the United States are enriched by a liberal world order of the oceans that entitles their commercial shipping and naval vessels and aircraft to operate throughout the globe. Reliant on an increasingly expeditionary military force and

with an economy dependent on transcontinental and cross-border trade, Canada has compelling economic and national security interests in a stable Law of the Sea regime. Being internationalist and outward-looking, and concerned about maintaining global order as part of a forward strategy for ensuring homeland security, both the United States and Canada should be strong proponents of the generous navigation regimes in the Law of the Sea Convention.

Others have suggested that the issues of the Northwest Passage may be best resolved in a new treaty architecture following along the lines of the Antarctic Treaty governing activities in the polar south. The difference is that Antarctica is a *continent*, the Arctic is an *ocean*. The oceans are already governed by a widely accepted treaty, and in order for UNCLOS



A MH-60 Knighthawk helicopter escorts overhead as USS *Kearsarge* (LHD-3) transits the Strait of Hormuz during *Operation Iraqi Freedom*. A Canada-US bilateral agreement in the Arctic would create a precedent for other bilateral agreements that would affect international straits like the Strait of Hormuz.





Photo: Internet

Clean-up crews use high-pressure washers to hose oil from the beach in Prince William Sound, Alaska after the Exxon Valdez ran aground in March 1989. Nearly 11 million gallons of crude oil leaked from the ruptured hull of the ship and washed ashore along 1,300 miles of coastline. Twenty years later and despite an extensive clean-up effort that spanned several years, oil still contaminates areas of the Alaskan coast.

to be stable anywhere it should be observed everywhere. This means that UNCLOS is the point of departure for refining rules for the Arctic. Working in conjunction with the United States, Japan and the EU states, Canada should develop a comprehensive Arctic Ocean framework for ensuring appropriate sovereignty, and safety, security and environmental protection in the Arctic Ocean, including the Northwest Passage.

There is an international institution ready made to serve as an effective multilateral forum for increasing coordination and cooperation throughout the Arctic Ocean generally and the Northwest Passage – the International Maritime Organization (IMO). The IMO is the UN specialized agency for developing standards for shipping and the oceans. The organization already has adopted nearly 50 treaties and hundreds of codes, guidelines and recommendations. It should begin work now under Canadian leadership to develop rules that complement the application of the Law of the Sea in the Arctic. The IMO has in place number of widely accepted treaties that could be strengthened and extended for application to the Arctic Ocean, thereby accommodating Canada's sensitivities and concerns within a strong and stable framework that is universally respected. Existing IMO treaties include:

- The 1974 Safety of Life at Sea Convention (SOLAS), for example, which applies to 98.8% of world shipping, and is generally considered

to be the most important of all international treaties concerning the safety of merchant ships. Among the topics covered in its chapters are ship construction, subdivision and stability, fire protection, life-saving appliances and arrangements, radio communications, safety of navigation, carriage of cargoes and dangerous goods, safe management and maritime security. Chapter V provides for the establishment of ships' routing measures and ship reporting systems, which can be made mandatory if the IMO approves them (Regulations V/10 and 11). SOLAS regulation V/12 provides for the establishment of vessel traffic services where the volume of traffic or the degree of risk justifies such services. Canada could enjoy ships' routing and reporting measures under the authority of the IMO, rather than trying to impose unilateral measures haphazardly.

- The voluntary Guidelines for Ships Operating in Arctic Ice-Covered Waters (2002), which could be strengthened and extended and made mandatory, thereby controlling the types of vessels that are approved for Arctic transits.
- The International Convention for the Prevention of Pollution from Ships (MARPOL), which applies to 97.55% of the world's shipping. Six annexes deal with oil pollution, pollution by



chemicals carried in bulk, harmful substances in packaged form, sewage, and garbage and air pollution. There are also elements on the dumping of wastes at sea, on the rights of coastal states to intervene if their coastline is under threat of pollution following a maritime casualty, and on the use of certain toxic substances in ships' anti-fouling paint. A special annex covering the ice-covered waters and the Arctic Ocean could replicate Canada's tough laws on marine ecology, but do it in a multilateral context.

- The International Shipping and Port Facility Security (ISPS) Code, which is a post-9/11 amendment to SOLAS (chapter XI-2), and the Convention on the Suppression of Unlawful Acts at Sea against the Safety of Maritime Navigation (SUA). The main purpose of the SUA Convention is to ensure that appropriate action is taken against persons committing unlawful acts against ships. At a diplomatic conference in 2005 the IMO adopted two Protocols to the SUA Convention, with one focusing on the safety of vessels and the other on the safety of fixed platforms on the continental shelf. Among the unlawful acts covered in Article 3 of the SUA Convention are the seizure of ships by force, acts of violence against persons on board ships, and the placing of devices on board a ship which are likely to destroy or damage it. The 2005 Protocols criminalize activities such as use of explosives, radioactive material or biological, chemical, nuclear weapons or dual use material against a ship, or the use of a ship in a manner that causes death or serious injury or damage.

The IMO can be an effective institution for strengthening appropriate sovereignty, security, marine safety and environmental protection. Through a process called the 'Cooperative Mechanism,' for example, the IMO helped the littoral states of the Straits of Malacca and Singapore – Indonesia, Malaysia and Singapore – develop a governance framework to manage the world's busiest straits.

About one-third of the world's trade and half its oil traverse the Straits of Malacca and Singapore each year, so resolving management plans and regulations to address safety, security and environmental protection was incredibly complex. But the IMO and the littoral states began meeting with about 30 other states beginning in 2005 to develop a comprehensive regime. After discussions in Jakarta, Kuala Lumpur and Singapore, the straits states and the user states reached a groundbreaking agreement for cooperation among stakeholders. The agreement, the

Cooperative Mechanism, represents the first time ever that user states and states bordering a strait have come together in fulfillment of Article 43 of UNCLOS to manage cooperatively safety and environmental protection in a strait used for international navigation.

The littoral and user states of Southeast Asia now have a forum for regular dialogue to exchange views, a committee to coordinate and manage specific projects and a new fund to receive and manage financial contributions to build greater capacity to maintain aids to navigation. The multilateral approach for the Straits of Malacca and Singapore, which is supported by all the major maritime powers including Canada, Japan, the United Kingdom and the United States, is a model for the Northwest Passage, the longest and perhaps most environmentally sensitive international strait.

In the era of globalization, the IMO's success on the Equator provides the ideal framework for promoting Canada's goals of preserving the fragile Arctic environment, maintaining maritime domain awareness in Arctic waters and exercising appropriate security jurisdiction and regulatory oversight over the strait. This approach would open the door to widespread international recognition of Canada's status as a strait state and attract support for appropriate measures to protect the Arctic ecosystem, ensure Canadian security and affirm Canadian sovereignty, and promote safe navigation through designated routes. Doing so would achieve a major diplomatic success for Ottawa and offers the best means for Canada to achieve its goal of obtaining widespread international acceptance of Canadian prerogatives in the maritime Arctic. And that will keep all of us safer. 🇨🇦

Notes

* The views presented do not represent the official policy or position of the US government.

1. See Section 2, "Transit," in particular Article 37, UN Convention on the Law of the Sea, 1982, available at www.un.org/Depts/los/.../texts/unclos/UNCLOS-TOC.htm.
2. See 26 February 1986, State Department File No. P86 0019-8641.
3. Article 7(1), Law of the Sea Convention.
4. *Ibid.*
5. Juridical Regime of Historic Waters, Including Historic Bays, UN Doc A/CN.4/143 (1962), p. 56.
6. See Donat Pharand, "The Arctic Waters and the Northwest Passage: A Final Revisit," *Ocean Development and International Law*, Vol. 38 (January 2007), pp. 3, 13; and European Commission, British High Commission Note No. 90/86 of 9 July 1986.
7. Article 8(2), Law of the Sea Convention.
8. Article 34(1), Law of the Sea Convention.

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Considerations for a Strategy of Future Canadian Sea Power*

Stanley B. Weeks



Photo: DND

HMCS Iroquois conducting international operations.

My ties and admiration for the Canadian Navy go back almost three decades and have included collaboration in the areas of naval operations in NATO's Standing Naval Force Atlantic, diplomatic and peace-making negotiations in the Middle East Peace Process multilateral maritime area (mentored by Canada, with the support of the Canadian Navy and Canadian Coast Guard and Department of Foreign Affairs and International Trade), and many stimulating academic interchanges.

Throughout these experiences, I have come to appreciate more and more President John F. Kennedy's words to the Canadian Parliament, "Geography has made us neighbors. History has made us friends. And necessity has made us allies."

A Perspective on the Future of Canadian Sea Power

Against this geostrategic background, my goal is to provide one US friend's perspective on the future of Canadian sea power. I do this as Canada's navy considers its future strategy on the eve of its centennial celebration of the past. My focus will be on Canada's future sea power strategy, and its implications for the relations between the navies of our two countries (and other maritime forces).

I have written elsewhere about the traditional and increasingly close operational relationship between Canadian and US maritime forces, and much has been written in both countries about such elements as interoperability, information sharing, homeland defence and maritime domain awareness cooperation. There has also been significant discussion of Canadian contributions to operations and command globally – from *Operation Desert Storm*, integration of Canadian frigates into US strike groups, Canada's *Operation Apollo* contributions to countering global violent extremism, to Canada's command of the multinational CTF 150 naval forces in the Arabian Sea, and Canadian disaster relief contributions to the United States following Hurricane Katrina. So I will not repeat here the good work done by many, especially over the past decade, regarding the relationship and tactical/operational elements of the relationship of our navies. (In any case I could not match the characteristic clarity and eloquence of some of the recent work.¹)

Rather I will focus on how Canada's maritime strategy can help ensure that the future of Canadian sea power is bright – and appropriately appreciated by Canada's allies. First, we must consider why a strategy for national sea power is necessary. Simply put, as I tell my US Naval War College





graduate students, strategy is the link between where we are today and where we want to be in the future. Key to this is knowing where you're going because 'if you don't know where you're going, any road will get you there.' Thus, the obvious requirements for strategy development include a good assessment of where you are and where you need and want to be in the future. I will, from a US perspective, make some observations about this subject.

Existing Foundations of Canadian Sea Power Strategy

As the Canadian Navy crafts a new maritime strategy for the future, it has a strong existing foundation in two documents. The first is *Leadmark: The Navy's Strategy for 2020*. (As most of you know, a leadmark means a fixed navigational point of reference.) *Leadmark* was issued by the Canadian Navy in June 2001 with the stated aim of articulating "the principles of naval strategy essential for a medium power such as Canada." The second document is *Securing Canada's Ocean Frontiers* which was issued in May 2005 with the post-9/11 goal of supplementing the original 2001 *Leadmark* document and addressing "the few shortfalls in *Leadmark*."



HMCS *Regina* along with warships from the United States, Australia and South Korea steam in formation during Rimpac 2008 off the Hawaiian Islands.

A new maritime strategy for Canada – or new leadmark – can use these two existing documents by reflecting *Leadmark*'s basic perspective of sea power for a medium power, integrated with the renewed emphasis on maritime homeland defence in *Securing Canada's Ocean Frontiers*. But a new Canadian maritime strategy if it is to get its message across to various audiences, including the Canadian public, must also be relatively short and clearly articulate its basic points.

Crafting a New Canadian Maritime Strategy

Substantively, Canada's new maritime strategy must reflect the navy's future contributions to the three longstanding pillars of Canadian defence policy – defend Canada, assist in the defence of North America and contribute to inter-

national peace and security. These three pillars have been the essence of every Canadian defence policy since World War II and are reflected most recently in the current government's Canada First Defence Strategy.²

The real issue in crafting Canada's new maritime strategy, then, is not what its goals are, but rather how best to contribute maritime power in the context of evolving national, joint, allied and international security environments. These environments have different characteristics and different emphases. Domestically, the environment is characterized by the enhanced importance of seaborne trade to the economic prosperity of Canadians, the enhanced emphasis of sea borders in homeland defence, and Arctic sovereignty and disaster relief capabilities. On the North American continent, the characteristics are an enhanced emphasis on cross-border maritime security cooperation. And the global environment is characterized by an increased emphasis on forward defence against global threats to peace and security – including terrorism, threats to seaborne trade, humanitarian assistance/disaster relief, etc.

While the Canadian Navy's structure and capabilities must gradually evolve to deal with these evolving security environments, the basic 2001 *Leadmark* explanation of the various "Canadian naval roles and functions for the 21st century" remains valid for the new strategy, as do the fundamental principles and capabilities (in the document's terminology, basic and force multiplier "competency components").

With this baseline of the aims and context, what follows below are a few observations and recommendations about factors affecting a new Canadian maritime strategy.

Factors to consider in a New Canadian Maritime Strategy

The first factor to consider is *aim and audiences*. The new Canadian maritime strategy must resonate with five audiences. The first audience is, of course, the Canadian Navy. The new strategy must reflect accurately the internal consensus of what the Canadian Navy does, how it does it, and sketch the desired future force evolution plans. The second audience is the joint leadership (military and civilian) of the Canadian Forces. The new strategy must explain how the Canadian Navy provides unique capabilities and options, and also how it complements (and enables) the other services. The third audience is Canada's political leadership. The strategy must carefully reflect key guidance in the current government's Canada First Defence Strategy, but it would also be wise to acknowledge continuities from previous governments' defence policies.



Photo: Formation Integrities Atlantic

HMCS Athabaskan alongside the USNS John Lenenthal.

The fourth audience is Canada's attentive public. Any new maritime strategy should be given trial runs in discussions with the Canadian public, and then have a firm strategic communications plan for rollout. The final audience is the US Navy and US defence leadership. The keyword and storyline in this context should be 'contribution' – how the Canadian Navy has been, and will continue to be, a contributing and relevant value-added ally.

The second factor to consider is *linking strategy with concepts of operations*. Leadmark's categorization of the Canadian Navy as a "Medium Power Global Force Projection Navy" is well crafted. As well, casting Canadian Navy roles and functions in terms of the Booth/Grove trinity of function (diplomatic, constabulary and military) is very helpful as a framework for a (perhaps somewhat expanded) explicit explanation of Canadian Navy general concepts of operations in all three contexts. In this regard, the new internal Canadian Navy Maritime Force Employment Strategy under development will be important, both as a baseline for implementation of concepts of operation

and as a future operational planning framework.

The third factor to consider is *linking strategy with resources*. Perhaps the most important impact of the Canada First Defence Strategy is that it lays out a predictable funding baseline over a 20-year period and sets forth major "core equipment" including "15 ships to replace existing destroyers and frigates" and "10 to 12 maritime patrol aircraft." This force structure, plus earlier commitments to three Joint Support Ships (JSS) and six to eight Arctic Offshore Patrol Ships, establishes some clear baselines. Additionally, and of great importance to Canadian maritime strategy, the Canada First Defence Strategy requires the Canadian Forces to have the capacity to "[l]ead and/or conduct a major international operation for an extended period" – which can be easily translated by the Canadian Navy as "maintain the Canadian Task Group and other forward presence capabilities" (including command-capable combat ships with appropriate command and control capabilities, and advanced air defence, and their essential replenishment ships).

The new internal Canadian Navy Maritime Force Development Guidance (MFDG) will be key to ensuring clear linkage of Canadian Navy strategy and operational concepts, and linkage to future maritime force development. Brief basic elements of the MFDG should be reflected in a new maritime strategy to show how the Canadian Navy plans to maintain essential capabilities in the future.

Factors Complicating a Future Canadian Maritime Strategy

There are number of factors that will complicate any future maritime strategy. The first is that the overall Canadian Forces/government procurement and contracting system seems broken and must be addressed. The Joint Support

Photo: U.S. Navy Released



The aircraft carrier USS Kitty Hawk (CVN 63) in formation with Australian, Canadian, South Korean and American warships during Rimpac 2008 off the coast of Hawaii.





Ship fiasco and several commercial no-bids for the Canadian Patrol Frigate Modernization Program show that even agreed critical force plans all too often fail in execution. Unfortunately, the plans for procuring Arctic Offshore Patrol Ships could be the next to fail. The history of the Sea King helicopter replacement indicates that the procurement problem is not new. Addressing this problem might begin by frankly considering capabilities/resources tradeoffs. Simply put, either requirements or budgets (or both) must change. (By the way, Canada is not alone in having naval acquisition problems – in the United States, we have recently had the Zumwalt DDG-1000, Littoral Combat Ship, and Deepwater acquisition failures.) But, aside from the procurement process, ultimately, the real Canadian problem is the low level of budgets for defence.

A second complicating factor is the question of amphibious/expeditionary capability. The confusing half-mentions in the current Canadian Navy strategy documents of “expeditionary capabilities” need to be re-thought, especially in light of the failure of the Standing Contingency Task Force and a dedicated big amphibious ship, and, frankly, the unlikelihood of obtaining any additional defence resources to create a new capability area. In any overall national defence strategy which is written after the current fight in Afghanistan, it is likely that there will be little public support for prolonged irregular ground

warfare ashore. The Canadian Navy should instead point out to the political leadership and the public how offshore naval power maximizes options and minimizes casualties (and still enables the other services in land interventions if they are needed), as a possible basis for a broader post-Afghanistan national security strategy.

A third complicating factor is the issue of advanced air/missile defence capability. Here, too, a decision must be made by the Canadian Navy and clearly reflected in the new Canadian maritime strategy. Is the Canadian Navy finally going to develop (as other middle power navies are doing) advanced Aegis-like air and missile defence capabilities to enable its task groups to be truly globally deployable? Or is this just too expensive for Canadian defence budgets?

The fourth complicating factor is the issue of submarines. Although the case for Canadian Navy submarines has been well made elsewhere, the justification in the current *Leadmark* strategy documents of why Canada needs this capability is weak. This capability must be better explained and justified, particularly since Canadian politicians and the public have mostly been exposed to the sensational problems (and, to this foreign observer at least, puzzling delays) in operationalizing these submarines.

The fifth complicating factor is the roles and missions



Photo: Formation Imaging Atlantic

HMCS Toronto.





of the Canadian Navy in the Arctic and in homeland defence. The current *Securing Canada's Ocean Frontiers* strategy document rightly notes the navy lead in maritime domain awareness, and acknowledges the Arctic and other homeland defence roles, but more clarity is needed. This will not be easy since the real problem is the nature of the existing Canadian Coast Guard, the essential non-military civilian status of which should be re-considered at the national level.

The final complicating factor is what I call 'mind the gap.' Over the next decade, up to half of Canada's current naval force will not be deployable due to the frigate modernization work. Canada's naval leadership is keenly aware of this, and seems to be planning well for this situation, but it will also be important to ensure that naval and defence leaders in Washington and NATO are briefed and understand this situation.

Photo: Warrant Officer
Randolph Rice, Combat
Camera



Royal 22e Regiment soldiers in LAV 111 approach shore in a USN Landing Craft, Utility (LCU) during the Standing Contingency Force Integrated Tactical Effects Experiment, November 2006.

Conclusions

In conclusion, here are some sympathetic observations, from my US perspective, as the Canadian Navy prepares for its second century of sea power and develops an updated maritime strategy to guide it into the future.

My first observation is that the US Navy has too many tasks and too few numbers. The Canadian Navy will have a sympathetic friend in the US Navy as it continues to acquire more effective maritime capabilities, particularly in the areas of North American maritime defence and global deployments. But it will be important to address with US naval leaders the upcoming gap in deployable Canadian ships, and especially to preserve in the long run the overall numbers of Canadian ships – these numbers are already at a minimum to maintain a globally deployable Canadian naval force.

My second observation is that as the Canadian Navy embarks on development of its new maritime strategy,

there is understandable interest in potentially relevant lessons from the development of the US joint maritime services strategy, *Cooperative Strategy for 21st Century Seapower*.³ My personal view is that a 'conversation with the country' can be a useful part of the strategy development process, but unlike the US approach, it would be better to defer that conversation until the Canadian Navy has developed a draft of what the new maritime strategy should say. At that point, the public conversation can usefully focus on vetting and refining that draft.

Third, I would recommend that the new Canadian maritime strategy be a stand-alone document which integrates a clear unclassified overview of naval operating concepts and an outline of future planned force structure and the risk assessment behind that structure. There will undoubtedly be the requirement internal to the Canadian Forces and the Canadian Navy for elaborating documents (e.g., force development, naval doctrine), but the goal should be to integrate strategy, basic operational concepts and force structure, thereby avoiding problems in the recent US experience, where the new maritime strategy left as separate documents the naval operations concept and navy strategic plan, leading to Congressional and media criticism of an apparent lack of strategy-force structure linkage.

My final observation is that developers of the new Canadian maritime strategy should remember that sea power can be a compelling story for all of the audiences identified above. An active strategic communication plan by the Canadian Navy should focus on communicating the new strategy to all those audiences simply, with clear lines and minimum jargon. With this compelling story in hand, the final key to success for the new Canadian maritime strategy will be consistent and constant repetition at every opportunity. 🍷

Notes

* This article is based on a paper presented at the conference "Preparing for the Next Century of Canadian Sea Power," held at the University of Calgary, 8-10 September 2008.

1. I am thinking in particular here of: James Boutillier, "Grey on Grey: The Critical Partnership Between the Canadian and U.S. Navies," *Newport Paper: Perspectives on Maritime Strategy*, US Naval War College, 2008, Chapter 16; and Commander MARLANT Speaking Notes for March 2008 Sea/Air Expo Seminar, Washington, DC, "A Canadian's Perspective on the Maritime Strategy"; and Captain (N) Serge Bertrand, "A Canadian Perspective on the Cooperative Strategy," in *Canadian Naval Review*, Vol. 4, No. 2 (Summer 2008), pp. 18-21.
2. Canada First Defence Strategy, Department of National Defence, Ottawa, 2008, p. 7.
3. Chief of Naval Operations, Commandants of the US Marine Corps and US Coast Guard, *A Cooperative Strategy for 21st Century Seapower*, Washington, DC, October 2007.

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The Seeds of Success: Naval Shipbuilding and Global Communities

Janet Thorsteinson

Two important events for the Canadian shipbuilding industry were scheduled for September 2009. The first was the deadline for interested parties to respond to the government's call for input to the development of a long-term, sustainable Canadian shipbuilding strategy. The second event – the 14th International Ship Control Systems (ISCS) Symposium in Ottawa – was less publicized than the first, but both dealt with the same issue: how Canada can maximize the impact of its spending on government ships.

Typically held every three years, and made up of Canada, the Netherlands, the United Kingdom and the United States, the symposium focuses scientific and engineering disciplines on the challenge of ship control. Canada's place as a charter member of this international community has helped it to keep abreast in many areas of ship control and take the lead in others. Without a national commitment to naval shipbuilding in the past, Canada would not hold a place in this group. Without naval shipbuilding in the future, Canada will lose its place and the competitive advantages it has earned.

If and when Canada launches another round of naval shipbuilding (and the involvement of no less than four federal cabinet ministers in this summer's announcement of the shipbuilding consultations makes it certain that *something* will happen), there will be an opportunity for Canadian companies to participate, providing a wide range of products and services. In ship-control systems, there is no doubt that Canada is competitive and its capability is both deep and wide.

L-3 MAPPS, a Montreal-based defence contractor, for example, is an internationally recognized Canadian power in ship-control systems, building on the capability developed by CAE Marine Systems. With its global operations, skilled workforce and stable revenues, it can afford to create or purchase the research and development necessary to remain a leader. At the other end of the scale are smaller companies that can find a toehold in a field like ship controls to launch a product. Events like the symposium give small companies a place to focus their marketing and showcase their expertise to an international audience.

Beyond the Boom

The 'boom and bust' nature of the Canadian naval shipbuilding industry has long been criticized. In an ideal world, the conception, design, construction, upgrade and replacement of fleets would take place in a predictable flow. Governments and companies could construct facilities and assemble resources in the knowledge that ship construction would be taking place. That is not the reality.

The next round of shipbuilding will be another boom. Ship control is one area in which Canadian companies will be able to compete right away, not least because they have been sustained by international sales and an international community since the last round of construction. The boom will be affected by the 2008 Canada First Defence Strategy which said "the Government will revise the current industrial benefits policies attached to significant procurement projects with a view to encouraging industry to make long-term investment in Canada."¹ The government should consider the *quality* as well as the *quantity* of Industrial Regional Benefits (IRBs), perhaps including a program to give incentives to contractors to focus on critical technologies and knowledge-based jobs.

IRBs are an important policy instrument. However, the government should consider the *Intellectual Residual Benefits* that could accrue if human resource outcomes were designed into a shipbuilding program. If these resources were developed in a college or university, the stock of knowledge would be available to students and instructors as well as the program.

In the greater scheme of things, how important is it for Canada to hold its place in a niche like ship-control systems? Very. Every ship designer in the world is attempting to automate crew functions. The cost of training personnel for sea duty has increased and it is difficult to find qualified people who will leave home for months to work in such a difficult environment. Ship-control systems automation is expected to reduce crew size sharply with no loss of efficiency. There is no way to achieve that level of automation without current technology and expertise. Canada's membership in the international club was



earned with the efforts of Canadian companies but it was initially underwritten with a shipbuilding program. New shipbuilding programs could be the basis for a new wave of intellectual property development.

The intellectual resources developed within a technological field might attract investors or venture capitalists or be acquired and/or form partnerships with larger companies. Support for new businesses in particular is critically important because the odds are heavily stacked against start-ups in the defence field. The knowledge and the capability can only be developed in the context of either long-term projects or an active marketplace. Defence start-ups are pretty much locked out of traditional financing vehicles. 'Angel' investors, the first source of money after family and friends, know that defence procurement cycles are much longer than their civilian counterparts and want faster returns. Venture capitalists, the next source of financing, think the defence market is too small, and they would not be able to own and re-sell the resulting intellectual property.

Start-up companies that do break into defence are often one- or two-person shops with industry or military experience. If they go beyond selling professional services to develop products, they risk losing their investment because of long military procurement cycles. That is the point where a policy of developing Intellectual Residual Benefits might be able to sustain them.

When defence contracting creates jobs, the employers in the news are large corporations but there could be a tremendous impact on small and medium enterprises (SMEs). In Canada SMEs account for 45% of Gross Domestic Product, 60% of all jobs in the economy and 75% of net employment growth.² The government should consider policies that direct opportunity towards SMEs, including defence start-ups.

Computer, electronics and communications systems were already assuming a much greater role in naval operations during the last round of Canadian naval construction in the 1990s and the trend has continued. These systems carry the value the hull delivers. This equipment, and the computer code that supports it, is on increasingly short refresh cycles. This is an opportunity to support lasting, well-paid, knowledge-intensive employment. In software in particular, but in many other specialties as well, SMEs can compete.

The job creation effect of naval construction extends beyond the shipyards, and even beyond the systems and components that go into the vessels, to include a range of disciplines and businesses. The shipyard is the place where the products come together, but an increasingly



Photo: Internet

The Jiangnan Shipyard in China has made noteworthy gains in ship design and construction as well as production capacity in recent years.

large percentage of the value in a naval vessel – as much as 65% – is produced at a distance from the shipyard itself. An increasing proportion of that value is derived from intellectual property and human skill sets.

The assets produced in the yard – the ships themselves – immediately become depreciating assets that require continuing maintenance and refits to meet their purpose. The intangible assets that are produced away from the shipyard – the intellectual property, the skill sets and even the business models and partnerships – are bound neither by time nor space. They have the potential to generate more wealth in other fields and in other places.

Canada and Community

Canada has no choice but to be a maritime state, but it has the choice of what kind of maritime state it will be. It may not be feasible to compete internationally in propulsion or major weapons systems, but this country has been highly successful in niche markets.

Naval shipbuilding in Canada has launched winning companies and products on to the international marine industry marketplace. Through niche markets and through specialized contacts and collaborations like the ship-controls symposium, Canadian companies successfully sell to global markets, not because they are protected from international competition over the life of a single project but because they are exposed to it over the lives of careers, products and companies.

Canada was in on the ground floor and helped build the foundations of the ship-control industry. Intentionally or not, this created a national, multi-generational capability. Beyond the military market, the ship-control industry sells to the entire marine sector and to many other sectors. Its supporting cast of academics, software companies, consultants and researchers may not depend exclusively on ship controls, but this niche provides a market for their services and its challenges enrich their expertise. The investment paid off. Will there be more? 🍷

Notes

1. Canada First Defence Strategy, Department of National Defence, available at www.dnd.ca/site/focus/first-premier/index-eng.asp
2. "Importance of SMEs," Public Works and Government Services Canada, available at www.tpsgc-pwgsc.gc.ca/app-acq/pme-sme/importance-eng.html. 2009.

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



Making Waves

The Paradox of Universality of Service

Ken Hansen

Imagine the following scenario. It is the 1800s. As the English fleet continues its long, and to this point fruitless, pursuit of the French fleet commanded by Admiral Villeneuve, a frigate arrives from England with a letter for Admiral Nelson:

London

This fifteenth day of July 1805

From the Secretary to the Naval Board

To Admiral Lord Nelson,

On behalf of the Lords Commissioners of the Admiralty

Greetings,

Their Lordships have instructed that you should be recalled forthwith from the fleet to England and that your command be passed to Vice Admiral Collingwood, who will endeavour to accomplish the task of defeating the combined fleets of France and Spain.

Due to the dire threat of invasion by the armies of France and your inability to contain or defeat the enemy fleet that may place these forces upon our shores, a new policy of Universality of Service has been adopted that will provide the maximum number of combat capable men at arms wherever they may be required. In light of your personal infirmities suffered in the conduct of your naval duties, you will be pensioned at an appropriate rate reflective of your years of service and notable accomplishments....

The point of using Admiral Nelson as an example is to show that naval history can illustrate the great disservice the current policy of Universality of Service is to the present-day Canadian Navy. Nelson would have been one of those caught up by this policy if it existed in his day. After joining the Royal Navy in 1771 at the age of 12, he lost the use of his right eye during joint operations at Calvi on Corsica in 1794, his right arm at the Battle of Santa Cruz de Tenerife in the Canary Islands in 1797, and suffered brain damage at the Battle of the Nile in 1798. Any of these conditions would most likely have resulted in his discharge from the navy of this era. Despite these injuries, history shows that Nelson remained completely capable of performing his duties and achieving brilliant successes.



Photo: Army News

Master Corporal Jody Mitic, who lost both legs below the knee after stepping on a landmine while on duty in Afghanistan two-and-a-half years ago, trains alongside his coach, Phil Marsh for the 2009 Canada Army Run. Mitic completed the half marathon in 3:22:46.5 on 20 September in Ottawa.

In the past months, the Canadian Navy has been compelled to release hundreds of experienced and trained officers and enlisted personnel because they are unable to meet the medical standards prescribed under the policy of Universality of Service. Based on the concept that all service members should meet basic standards of fitness for operational duty, those who are unable to do so are released under Item 3B, a medical category, and are then pensioned off after a maximum three-year period of accommodation.

The problem with the Universality of Service policy is that the physical standards are written almost entirely from the perspective of the army. The fact that naval life and shipboard wartime duty are entirely different from the demands of land warfare is barely taken into account. The need for every 'able-bodied' person to 'fight on the beaches' to preserve the country from foreign occupation is a decidedly land-oriented combat scenario. But even this is flawed logic. With the survival of the country at stake, it is likely that every person able to hold a weapon of some sort would have been compelled to take up arms, not merely those who conformed to a universal standard



of fitness. Under those circumstances, Nelson would certainly have been among the first in line to do his duty.

The contradiction of a universal standard of fitness goes further. Again using the life of Nelson as an example, we know that his poor health and slight stature would have prevented his admission into the navy of today. Indeed, he only gained entry to the Royal Navy due to the influence of his maternal uncle, Captain Maurice Suckling. A recent research article by Keith Simonton and Anna Song concludes that among 282 historical geniuses in 10 achievement categories (including military commanders) superior intelligence and accomplishment were linked to inferior health during youth.¹ Nelson, who was included in the study, was a classic example of the inverse relationship between IQ and physical health in youth.

By adopting standards of fitness that are designed primarily to select and retain the best *physical* specimens for the *army*, the navy not only loses hundreds of entirely employable members, but potentially eliminates candidates who are brilliant or innovative thinkers and could go on to distinguished careers. Both history and modern research show that simplistic policies that are drawn from the notion that 'one size fits all' can be detrimental and have the potential to be destructive if they are not considered in the proper context.

The flaw in the Universality of Service policy is that it confuses the concept of *jointness* with *uniformity*. It is entirely possible to meet the requirements of joint operations without compelling the air and sea services to adopt standards that are foreign to their normal and traditional modes of operation. Somehow, the unification of the Canadian Forces has caused the senior leadership to think that this approach to jointness should be pursued to the ridiculous extreme of driving capable and willing members from the navy. This is both contrary to the history of the naval service and detrimental to the navy's most pressing current need for skilled sailors.

The author was released from the Canadian Forces effective 17 June 2009 under Category 3B after 32 years and 70 days of service in the Canadian Navy. 🇨🇦

Notes

1. Keith Simonton and Anna Song, "Eminence, IQ, Physical and Mental Health and Achieved Domain: Cox's 282 Geniuses," *Psychological Science*, Vol. 20, No. 4 (April 2009), pp. 429-434.

Drifting, Rudderless, or Just on the Wrong Course?

Corrie Adolph

In the Spring 2009 issue (Vol. 5, No. 1) of the *Canadian Naval Review*, Dan Middlemiss (Editorial) and Sharon Hobson ("Off Course and Rudderless?") articulated the navy's need for "clear language" and a "determined outreach strategy." From my perspective as the navy's strategic communications advisor from July 2008 to July 2009, there are other reasons for the navy's lack of communication success.

Most notable is the lack of communication expertise in key positions responsible for the navy's strategic communications, resulting in the development of communications strategies that are not grounded in communication theory. The strategic communications team was stood up to counter the reactive public affairs approach with a proactive communication strategy and ongoing dialogue with policy-makers. Unfortunately, the lack of expertise means little has improved despite the navy's commitment to the effort.

Communication in the 21st century presents many challenges. Political leaders address us in sound-bites and we are overwhelmed by volumes of information which demand instant judgements when the big picture is lacking. According to research, the news media are now the setters of the public agenda (what issues the public finds important) and a major influencer of public opinion. They have the ability to turn a complicated policy issue into a 30-second sound-bite, raising a minor issue into a major public outcry. The 24-hour news cycle puts horrendous pressure on journalists to produce new and provocative stories.

The Prime Minister's Office (PMO) in Canada relies heavily on opinion polls – balancing policy decisions between what is good for the country and what will be palatable. Every policy must pass through the lens of public opinion. This, plus the media's search for sensation, results in PMO management of information. In reaction to this, there has also been an increase in the number of access to information requests. All of this has had an immense influence on the control of communications.

The navy's communications strategy must be designed to



address these challenges and attempt to influence policy decisions in a way that facilitates the political process in an apolitical way. The role of the naval leadership is to provide professional insight and operational details enabling political leaders to make informed decisions. Unfortunately, naval staff members often lack an understanding of the implications of policy choices on public opinion, and thus on what makes politicians tick. Furthermore, they are reluctant to take advice on how to adapt their communications strategies in order to communicate more effectively to decision-makers.

While the rebuilding of Canada's naval fleet and the regeneration of our maritime force is incredibly important, new ships full of sailors is not the end state. Maritime forces are only useful as a tool of government. A government that exercises the options a navy provides for the implementation of its foreign policy is one that appreciates and understands a navy's flexibility. A government that puts into place a long-term procurement plan and ensures that it is adequately funded and ensures that the means within industry are in place to implement it, is one that appreciates and understands the complexities of shipbuilding and its importance to national security. So if the desired end state of the navy's strategic communications efforts is to have government understand and appreciate what the navy does, and have that reflected in policy, decision-making and investment, then the end state effectively defines who the centre of gravity should be – the government of Canada.

Government decisions are influenced by a number of sources. Internally, the Chief of Maritime Staff (CMS), through the Chief of Defence Staff (CDS), provides insight and details on potential naval deployments and on the maritime impact of policy decisions. The Deputy Minister provides advice on issues of policy as it relates to questions of resources, international defence relations and alternative methods of achieving government policies. Political advisors ensure policy choices are viewed through the ideological lens of the party they represent. Advice, however, is only as good as the information from which it is drawn, so there is also an important role for the broader naval community in providing information that more fully informs all sources of advice. External influencers of policy include the national media, because of their influence on public opinion, and industry lobbyists. It is critically important for the navy to engage each of these influencers to improve their understanding of what the navy does and what the navy needs.

In the long term, the solution is a much broader appreciation by the CF of communication as a strategic capability.

Globalization blurs the distinction between domestic and international communication, public affairs and information operations. A comprehensive communication strategy requires inter-cultural communication and an understanding of the impact of globalized communication on both domestic and foreign operations. The military's financial and human resources are connected to the problems in Afghanistan which have everything to do with globalized communication. Therefore, a strategic, comprehensive communications plan should include a broad audience both inside and outside Canada. Global attitudes and culture must be better understood so perceptions can be mapped and messages appropriately tailored and progress must be measured towards desired effects.



Photo: Cpl Dany Veillette, Canadian Forces Joint Imagery Centre, Ottawa

Prime Minister Stephen Harper, Minister of National Defence Peter Mackay and Chief of Defence Staff Walter Natynczyk with media embarked, in Frobisher Bay during *Operation Nanook*, 19 August 2009.

Competence in inter-cultural communication will also improve recruiting problems. Global migration has led to a diverse Canadian society with differing cultural and religious backgrounds and varied value sets. Communication requires greater social understanding and cultural sensitivity. In order to entice diverse young Canadians into the military workforce, meaning and value for them must be created. Currently, even though diversity is embraced within the Canadian Forces, they are failing at recruiting visible minorities; a needed focus in light of Canada's changing demographics.

Finally, the CDS needs to build a truly cohesive military that works together and does not just talk the integrated purple service talk. The reality is that the services are fighting for their lives to get the biggest piece of the defence spending pie, and they all do this by asserting their unique identity and value. Unfortunately, all this jostling slows down important procurements, mostly naval. 🍷



Australia's Defence White Paper: Whither the Navy?

Doug Thomas

In May 2009, the Australian government released its long-awaited Defence White Paper, *Defending Australia in the Asia Pacific Century: Force 2030*. This White Paper put forth a scenario of the strategic environment facing Australia over the next 20 years, juxtaposed against anticipated changes to other powers in the region. Principal among these powers is the United States, which should continue to be the main economic and military power in Asia. The United States, however, might be preoccupied elsewhere, and therefore Australia should possess strong defensive forces to respond to a regional military crisis.

The rise of China as a maritime power, the increasing capability of the Indian Navy, and the modernization of the militaries of other regional actors are noted as well. The Defence White Paper discusses a need for greater Australian involvement in the Indian Ocean. According to the White Paper, future Australian Defence Force (ADF) operations will extend across the entire Indian Ocean and into the Pacific as far as Polynesia, and from the Equator south to Antarctica. Within this huge geographical area, the first priority task for the ADF is “to deter and defeat armed attacks on Australia,” and the second is “contributing to the stability and security in the South Pacific and East Timor.” The third priority is “contributing to military contingencies in the Asia-Pacific region,” and the final priority is to “be prepared to contribute to military contingencies throughout the world.”

Commentators on defence issues have stated that the Royal Australian Navy (RAN) is the “big winner.” Is this really the case? Is there anything new here to indicate gains by the RAN in comparison with the other services?

There is a change from sea denial to sea control in recognition of the huge ocean areas which are expected to be the focus of future operations, and a renewal of interest in anti-submarine warfare. A significant item is the intention to build 12 larger and more capable submarines to replace the six *Collins*-class. This will be a very expensive project, and begs the question as to how they will be manned. At the moment only three of the *Collins*-class can be manned because many submariners as well as surface ship technicians have been lured away to lucrative jobs in mining and other industries.

The current surface combatant force is being modernized, and three new Aegis-equipped *Hobart*-class destroyers will join the fleet in the next decade. They will be equipped with the next-generation SM-6 missile with a range of up to 200 nautical miles, and the Cooperative Engagement Capability (CEC) which will permit missile engagement based on another ship's contact information. The White Paper also indicates that procurement of replacement anti-submarine warfare frigates will be on the future agenda.



HMAS Rankin during Rimpac 2006.

A major capability change is that the new destroyers – as well as future frigates and submarines – will be fitted with cruise missiles to provide a new strategic strike capability. (Until recently, the RAAF provided a strategic strike capability with its F-111 fighter-bombers.) The Fleet Air Arm currently comprises 16 Seahawk and six Sea King helicopters, and 24 naval combat helicopters will be purchased to provide at least eight deployed flights at sea. The amphibious capability will be rejuvenated with the addition of two Spanish-built 28,000 tonne *Canberra*-class LHDs and a large strategic lift ship.

If all of these plans, particularly the new submarines, come to fruition, it would seem that the RAN will truly have made gains. It certainly looks enviable from the perspective of a navalist in Canada. A big question remains, however. Will the money and the sailors be there to realize these new force levels, in some cases several elections into the future? 🍷

The View from the West: Securing Vancouver in 2010

Christian Bedford

With only months before the world descends upon Vancouver and Whistler for the 2010 Olympic and Paralympic Winter Games, final preparations are now in full swing to ensure that this is the most successful Olympic experience ever. As thousands of staff from VANOC, the city of Vancouver, the province of British Columbia and beyond complete the venues that will host the events of the 21st Winter Games, thousands of other security personnel are making final arrangements to secure the largest international event hosted by Canada in decades. As the world has changed considerably since the last time Canada hosted the Winter Olympics, it is easy to understand the importance of providing a secure environment for the events. It is with an eye to this 21st century security environment that the Canadian Navy will be participating as an integral part of the Vancouver 2010 security effort.

The Royal Canadian Mounted Police (RCMP) is the lead agency responsible for the security, but the effort to secure the Games will truly be a multi-agency affair with over 100 participating organizations. As with past Olympics and other high-profile events held in Canada, the Canadian Forces (CF) are being called upon to provide capabilities to the RCMP from the country's army, navy and air forces. For 2010, the CF contribution to Olympic security is being organized under Joint Task Force Games, commanded by Rear-Admiral Tyrone Pile who also commands Maritime Forces Pacific and Joint Task Force Pacific.

As this is the first Olympics to be held in Canada on one of our coasts, maritime security becomes increasingly important. Not only is Vancouver a bustling maritime city with numerous large and high-profile venues within

a kilometre of the ocean, the Port of Vancouver, which sits astride the downtown core, is Canada's largest port and critical to the economic livelihood of the entire country, and especially western Canada. The Canadian Navy is therefore supporting the RCMP not only by ensuring the safety and security of Canadians and foreign visitors during the Games, but also by ensuring that the waterways in and around the country's second largest city are free from any threats or disruptions that could hamper trade through the West Coast.

Naval Contributions at Sea, on Land and in the Air

Over 800 Canadian naval personnel from across the country, both regular force and reservists, will have several important tasks to perform during the 2010 Olympic and Paralympic Games, which run 12-28 February and 12-21 March respectively. Navy personnel will operate various vessels and shore-based naval assets that will bring unique capabilities to the RCMP-led security effort. They will be required to conduct vessel tracking throughout the joint area of operations, perform coastal patrols throughout British Columbia's southwest corner, carry out port security operations in and around Vancouver, and ensure underwater security through sweeps of Olympic venues and key locations throughout the lower mainland.

This large-scale operation will include an *Iroquois*-class destroyer, *Halifax*-class frigates, *Kingston*-class maritime coastal defence vessels and *Orca*-class patrol vessels which will be prepared to support the RCMP in security requirements as needed. Maritime security operations will also be supported by US Navy and US Coast Guard vessels that will be conducting security patrols in US waters along the southern edge of the Juan de Fuca Strait and the Strait of Georgia.

From the air, aircraft such as CH-124 Sea King, CH-149 Cormorant and CH-146 Griffon helicopters, as well as CC-138 Twin Otters and CP-140 Auroras will conduct surveillance, logistical, transport and casualty evacuation missions in support of the RCMP. In addition, aircraft and personnel from the North American Aerospace Defence Command (NORAD) will be on standby to provide air defence. In order to collect, analyse and act on incoming information from these various platforms, naval personnel will be manning, along with staff from other government departments, the RCMP-led Olympic Marine Operations Centre (OMOC) located at HMCS *Discovery* at Deadman



Navy personnel, including clearance and port inspection divers, exercise in February 2009 in the Port of Vancouver in preparation for the 2010 Winter Olympics.



Island in Vancouver's Stanley Park.

With so many diverse agencies and ministries working together for the first time on such an immense security operation, training and preparation have become increasingly important. For this reason, the government of Canada's 2010 Integrated Exercise Program (IEP) was designed to ensure the federal-provincial security team was prepared to respond in a coordinated manner to any potential emergency that may occur during the 2010 Games. The IEP was based on a series of exercises, the largest being Bronze, Silver and Gold, which dealt with a variety of scenarios from suspicious packages left in crowded spaces to hijacked airliners heading for Vancouver. Exercises Bronze, Silver and Gold progressed from tabletop overviews to full-scale operational trials with multiple simulated threats, allowing personnel from the RCMP, Canadian Forces, provincial agencies and local law enforcement to interact with other government departments such as the Department of Fisheries and Oceans and Public Safety Canada, as well as private stakeholders such as transit operators and port officials. The CF conducted their validation exercise, Spartan Rings, just prior to Exercise Gold, which confirmed the CF ready to deploy for *Operation Podium*, the CF designation for the support to Olympic security.

The Requirement for Security

With the security tab for the Games estimated to come in at around one billion dollars, some groups have questioned whether the elaborate security blanket is necessary, or whether it is overkill. In reality, due to the changing nature of security threats and the ever-increasing size of Olympic spectacles, security tabs for major events such as these are likely to increase each time an Olympics is held. When one thinks of the Olympics and terrorism, the 1972 Munich Games, where 11 Israeli athletes and coaches were killed, or the 1996 Games in Atlanta, where two were killed in an Olympic park by a pipe bomb, come to mind.

A common view is that the Winter Olympics is a less-tempting target than the Summer Olympics or the World Cup due to smaller numbers of competitors and fewer countries participating. This would be a misconception. In 1998, just days before the opening ceremonies of the Nagano Olympics, three rockets were fired into a cargo area at Tokyo's Narita International Airport, injuring one airport worker. The attack was later claimed by a leftist radical group opposed to the Japanese government and its military relationship with the United States. In 2006, Italian authorities reported that they received several credible threats against the Turin Olympics, allegedly over Italy's involvement in both the Iraq and Afghanistan conflicts.

Officials there also worried that leftist anarchists would attempt to mix in with other protest groups such as environmentalists in order to keep a lower profile.

In Canada, the threat against the Games cannot be discounted. Having had troops deployed in Afghanistan since 2001, Canada could be considered a credible target by Islamist radicals, not only because of its NATO connections, but also because of the status that would be achieved by any group launching an attack inside North America post-9/11. Even local groups could want to interfere with the Games, such as the perpetrators of the gas pipeline bombings that have hit the area near Dawson Creek since October 2008. Vancouver and Whistler would also be of particular interest due to their symbolic value – Vancouver is a busy multi-cultural city and a vital logistics hub for the Canadian economy, and Whistler is a picturesque tourist haven, representative of both the affluence and serenity of Canada.

It will fall on the RCMP-led Integrated Security Unit (ISU) to provide the safest possible environment to allow the athletes to concentrate on what they do best: perform and bring home the gold. Through *Operation Podium*, the Canadian Navy will play a vital role in maritime security, providing personnel, equipment and most importantly its unique capabilities to this joint security effort. As an example, navy ships, manned by sailors from across Canada, provide a standby maritime interdiction capability to the RCMP-led ISU. A Port Security Unit (PSU), will provide force protection for the accommodation vessels berthed in downtown Vancouver, physical security of Deadman Island, home to the joint OMOC, and a surge capability to the RCMP if required. As well, navy clearance divers from Fleet Diving Unit Atlantic and Pacific will provide the ISU with a maritime explosive ordnance disposal capability.

Anyone who has visited the city's inner waterways, particularly Burrard Inlet that separates downtown Vancouver with North and West Vancouver, knows of the dizzying mix of ferries, seaplanes, container ships, helicopters, yachts and other vehicles that all operate in a finely-tuned choreography of activity among bridges, roadways, harbours and marinas. Monitoring the waterborne traffic in these areas will be a challenging task for the RCMP and the Canadian Navy, and it will be up to all participating agencies to ensure that Vancouver's waterways are monitored and allow for the unimpeded flow of people during what promises to be a hectic but exciting month in BC's lower mainland. Let the Games begin! 🏆

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Plain Talk: Canadians are Frozen Out

Sharon Hobson

Why is the government so reluctant to share information about its intentions in the Arctic with the Canadian public? Sure, the government is keen to talk about the north while showcasing the military's northern capabilities during annual exercises which have increased in size and complexity since 2005. The news releases, media trips, visits by Cabinet Ministers and senior military officers, and especially the trek north by Prime Minister Stephen Harper, are all well coordinated to bring maximum exposure to what the government is doing in the Arctic region. Various officials and Ministers proclaim the importance of Canada's north, echo the Prime Minister's sentiment that Canada must either "use it or lose it," and announce or re-announce some investment in new facilities or programs. Then everyone returns to the south and shuts up.

It would be easy to assume that nothing much is happening during the other 11 months of the year, but the truth is that the government is only willing to talk about certain aspects of the Arctic, the rest they treat as none of the public's business. That's not unusual for a government – it rarely bares all to the electorate and occasionally has a good reason for not doing so. While it's not clear what the reason for secrecy is when it comes to the Arctic, it is clear that such secrecy raises some fundamental questions about the government's honesty and intentions.

For example, Michael Byers and Ron Macnab, investigators with ArcticNet, point out that the government is refusing to release information gleaned from a joint US-Canada scientific expedition. In an op-ed piece for the *Ottawa Citizen* this past May, Byers and Macnab say "[l]ast summer's partnership between Canada's *Louis S. St. Laurent* and the United States' *Healy* was a showcase for scientific co-operation – but only up to a point. In a strange difference of approach, the information obtained by Canada has been kept secret, while the U.S. data are posted on the Internet."¹

The two heavy icebreakers, working in an area of the Beaufort Sea, were mapping the sediments and shape of the ocean floor, to obtain data for the US and Canadian submissions to the UN Commission on the Limits of the Continental Shelf in support of their respective claims to the seabed beyond 200 nautical miles. The ships worked cooperatively, one breaking the ice while the other used its sensors to gather the data it wanted.

The United States has a policy of promptly releasing its seabed data and Canada also used to release such material. But not any more. According to Byers and Macnab, "a mantle of secrecy has recently descended upon Canada's seabed mapping – both from equipment on the sea-ice and from the *Louis S. St. Laurent*." They call the change in policy "nonsensical" and they warn that "[c]oncealing the data will not change the sediments and shape of the seabed, but it might engender suspicion about Canada's methods and motives."

Then there was the strange occurrence of a foreign submarine sighting in Canada's Arctic in August 2008. According to an article by Steven Chase in *The Globe and Mail*, the sighting by Inuit hunters occurred near the location of a mysterious explosion that had been reported to authorities 10 days previously.² The hunters reported the submarine to the Canadian Rangers, and the military scrambled an investigative team to the area but now refuses to discuss what it found there. According to Chase, DND documents show that the Canadian Forces fielded questions on the explosion, but kept separate any mention of the later submarine sighting. Military spokespeople were instructed to be in a "reactive" mode, only talking about the submarine sighting if they were asked directly about it.

Photo: USCG



The US Coast Guard Cutter *Healy* (foreground) and Canadian Coast Guard Ship *Louis S. St. Laurent* pulled up alongside in the Beaufort Sea during a scientific expedition to map the Arctic Ocean sea floor in September 2008.



But if the government is sincerely concerned about foreign intrusions into Canada's north, why wouldn't it disclose information about this sighting? Surely that supports its claim of a northern threat. Of course, if it's an allied submarine that was spotted, the government may not wish to embarrass a friendly government. But then again, shouldn't a friendly government be willing to abide by the territorial laws of an allied country? Perhaps a little embarrassment would be a good thing. And if it's an unfriendly government, shouldn't Canadians know that?

This raises further questions about Canada's surveillance capabilities in the Arctic and its ability to act if an intruder is found. Which brings us to a third example of government secrecy – the Polar Breeze project.

The government has talked loudly about the need to know what is going on in Canada's Arctic, and it has announced plans (*plans*, not necessarily *funds*) for a heavy icebreaker, six Arctic Offshore Patrol Ships and a sub-surface surveillance system. When the *Globe's* Chase asked DND about another project which looked Arctic related, the Polar Breeze project, the military's first response – which took five days – was that the project did not exist. "No such project exists in DND ... called Polar Breeze project or anything close to that," Captain Isabelle Riché told Chase on 14 April 2009. But then the NDP obtained documents under the *Access to Information Act* which showed not only that the project did indeed exist but that its \$134 million price tag had increased by 30% to over \$170 million.³ The heavily censored documents suggest that the project is an intelligence-gathering satellite, sponsored by the Chief of Defence Intelligence.

Confronted with the information obtained by the NDP, DND did an about-face and acknowledged the existence of the Polar Breeze project but refused to answer any questions about it. The initial lie, of course, leads to questions about the honesty of the military's responses to other questions put to it by the media, the politicians and the general public.

Finally, in September 2009, we have the Chief of the Defence Staff, General Walt Natynczyk, meeting with his Danish counterpart, Admiral Tim Sloth Jorgensen, to discuss military cooperation in the Arctic, and the only reason we know about this is because Denmark issued a news release. Nothing came out of our DND. A spokesperson for Natynczyk, Major Cindy Tessier, told Canadian Press reporter Murray Brewster that discussions among military leaders are not unusual and do not garner much interest or attention by the news media.⁴ Here's a novel concept: why doesn't DND let the media decide if an event is worth coverage or not?



Members of the 1st Canadian Ranger Patrol Group disembarked at a radar station near Eureka, Nunavut, during *Operation Nunaliut 08*.

So what does this all mean? On the one hand, we have a government that is talking tough about defending Arctic sovereignty, using it or losing it, being an Arctic power, and having everyone play by Canada's rules. On the other hand, the same government clams up when queried about what exactly is going on in the north.

It can't have it both ways. If the north is important and Canadians need to pay more attention to it, both in terms of understanding and committed resources, then the government needs to come clean. So far all we're being told is that the Arctic is home to untold riches that others may covet, that foreign vessels may seek to transit the area, and that there could be a threat in the form of organized crime, illegal fishing and even military incursions.

While the threats to the north may be real, the government's refusal to provide information to back up its alarmist rhetoric could arguably be seen as even more of a threat to the lives of Canadians. It is evidence of an obsession with secrecy that is unhealthy in a democracy. 🇨🇦

Notes

1. Michael Byers and Ron Macnab, "Show Us What lies on the Arctic Seabed," *Ottawa Citizen*, 1 May 2009.
2. Steven Chase, "Military Scrambled over Foreign Sub Sighting," *The Globe & Mail*, 20 March 2009.
3. Steven Chase, "Military's 'Polar Breeze' Cloaked in Secrecy," *The Globe & Mail*, 27 April 2009.
4. Murray Brewster, "Canadian, Danish Military Discuss Far North," *The Globe & Mail*, 1 September 2009.

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Warship Developments: Offshore Patrol Vessels

Doug Thomas

During the past several years, piracy – the act of seizing ships and ransoming them and their crews – off the Somali coast, has led to operations by NATO and individual states to protect merchant ship traffic in the approaches to the Horn of Africa. Modern destroyers and frigates equipped with sophisticated command and control systems and expensive offensive and defensive weapons, capable of speeds in excess of 30 knots and conducting complex maritime combat operations, have been escorting merchant ships through these threatened waters.

Fifteen states now provide 30 warships to watch an area nearly the size of the continental USA. In addition, maritime patrol aircraft have deployed to nearby military bases to report and shadow pirate vessels so that they may be intercepted by surface vessels. To complicate matters, these pirates are conducting increasingly sophisticated operations, including employing motherships from which high-speed small craft can operate, thus permitting sustained operations hundreds of miles offshore.



NATO states, plus China, Russia, India and other countries deploy warships which can cost as much as \$1 billion each, manned by large, well-trained crews, to counter a threat posed by a few thousand lightly armed thieves in small boats. Is it necessary to employ such expensive ships? Is there an alternative? What is really required to do the job? What is the minimum capability required for this job, and how useful would such ships be for national roles?

A Statement of Requirements for this type of ship would likely specify a smaller, less expensive vessel to replace at least some of the destroyers and frigates now deployed off Somalia. Such a vessel could be perhaps 80-90% as capable as most destroyers and frigates at performing this anti-piracy role, for perhaps 10-20% of the cost of procurement and operating. If it could deploy and conduct this task, it would also be capable of performing anti-smuggling, EEZ and fishery patrols in national waters. Indeed there are such ships throughout the world in many navies and coast guards – they are often called Offshore Patrol Vessels (OPVs). The Canadian Navy does not have OPVs, probably because there are a few Coast Guard and Department of Fisheries and Oceans patrol vessels performing national constabulary roles. The recent announcement of a contract to build nine Mid-Shore Patrol Vessels (43 metres long, 25 knots, endurance of up to two weeks, crew of eight plus up to six RCMP or Fisheries Protection Officers) for operations off the Atlantic and Pacific coasts and on the Great Lakes will certainly increase Canada's coastal maritime security, but they are much too small for blue-water or deployed operations such as to Somali waters.

Frequently the navy's *Kingston*-class Maritime Coastal Defence Vessels (MCDVs) are assigned to augment fishery patrol resources. However, MCDVs are limited in speed, endurance and sea-keeping abilities, and certainly would be unsuitable for heavy weather off our coasts or deployment to distant waters. Their reserve crews deserve a lot of credit for the work they do but a more capable ship is needed. Frigates also support fisheries patrol and law enforcement, but this is overkill – far more capability than is necessary. An intermediary vessel between a Maritime Coastal Defence Vessel and a Canadian Patrol Frigate is needed, and I suggest an OPV is the correct platform.

Let us look at a theoretical Statement of Requirements. The area under threat from Somali pirates extends out to sea at least 500 nautical miles, therefore excellent sea-keeping capabilities and long endurance (ability to remain at sea on operations for an extended period, say 3-4 weeks) are essential. What other features are necessary?

- a speed of 20-25 knots in order escort merchant ships and intercept pirate vessels;
- diesel propulsion for extended patrol operations;
- an ability to replenish fuel and food at sea from naval supply ships;



- anti-ship and anti-personnel weapons to include one or more remote-controlled and stabilized 25-40 mm guns to fire warning shots as necessary and provide a stand-off distance from rocket-propelled grenade launchers and other offensive weapons (pirates have recently commenced firing at warships and helicopters);
- sensors such as surface warning radar and radio intercept devices for the early detection of pirates;
- sufficient accommodation for a core crew and additional specialist teams such as boarding parties (perhaps a total of 60-80 personnel);
- suitable radios and command and control systems to permit the compilation of a common operating picture with supporting forces;
- embarked high-speed boats to pursue pirate vessels and transport boarding parties and inspection teams; and
- a light to medium radar-fitted armed helicopter capable of 24/7 operations.

The Canadian Arctic Offshore Patrol Ship (AOPS), due to commence entering naval service starting in 2014, might be able to take on this type of role, but it will be optimized for northern and Arctic operations, and there is no intent to deploy AOPs to areas such as Somalia.



Chilean OPV *Piloto Pardo*.



HMS Clyde in Antarctic Waters.

Let us look at a typical non-ice strengthened OPV, such as the Chilean *Piloto Pardo*. This ship is 264 feet long, has a maximum sustained speed of 20 knots, has a crew of 35 plus accommodation for another 30 passengers, and is armed with a Bofors 40-mm gun and additional .50 calibre heavy machine guns. It is designed to have good sea-keeping capabilities for the extreme weather that can be encountered in the southeast Pacific and southern oceans, and it is fitted with a flight deck and hangar for a light helicopter such as the BO 105.



Artist's rendering of Dutch *Holland*-class OPV.

Another interesting OPV is the British *River*-class. Three ships were constructed by Vosper Thornycroft and leased to the Royal Navy with a Contractor Logistic Support arrangement for a five-year period (recently renewed). This appears to have been such a satisfactory agreement that a fourth ship, *HMS Clyde* has been similarly leased for duties as the Falklands Islands Guard Ship. These vessels are roughly similar in size and capability to *Piloto Pardo* and were built to commercial standards with some military features.

Finally, there are the 'Cadillacs' of the OPV type, such as the four Netherlands vessels of the *Holland*-class. The *HN1MS Holland* and her sister ships will be nearly twice the tonnage of those OPVs previously described, with a much heavier armament, will be faster and will embark a larger, more capable helicopter. Their ships' companies are one-third the size of the frigates they replace, but space has been provided for an additional 40 people should that be necessary to accommodate boarding parties, law enforcement personnel, or survivors of some disaster at sea.

In conclusion, a perusal of *Jane's Fighting Ships* will demonstrate that OPVs are becoming a popular choice in the fleets of Argentina, Chile, India, Japan, Malaysia, Spain and Turkey, and many other navies and coast guards as well. They are very flexible platforms for a broad range of constabulary and low-intensity maritime operations such as anti-piracy and anti-smuggling patrols. Perhaps Canada needs to look into them. 🇨🇦



The 20th Annual Maritime Security Conference

Sarah Hucsko

This year marked the 20th Annual Maritime Security Conference organized by the Centre for Foreign Policy Studies at Dalhousie University. The conference was titled “Interoperability: Achieving Maritime Security under the North American Free Trade Agreement.” This event on 11-12 June 2009 was attended by over 100 participants including academics and practitioners from a wide variety of Canadian, American and Mexican institutions such as universities, NORAD, Coast Guard and the private sector. The discussions explored common concerns and suggested alternatives to address regional security issues. This is a summary of the panels and discussions.

One of the main challenges in the current political and economic climate is developing practical policy solutions to maritime security issues. What may appear a practical initiative on paper may in fact cause tensions and disagreements when implemented. The challenge for maritime security in 2009 is establishing a workable relationship among Canada, the United States and Mexico, while realizing that each country has its own national interests. Finding the right balance to enable collective and collaborative working arrangements remains the key issue.

The goal of the conference was to investigate the prospects for interoperability by examining three themes:

- the differences in perspectives among the three NAFTA countries;
- where institutional alignment exists and where there are differences; and
- possible alternatives and best practices for achieving effective cooperative arrangements.

The North American Free Trade Agreement (NAFTA) is an economic agreement among the three countries but within an increasingly globalized world, it is not just trade that crosses and erodes borders. There are other less benign forces crossing borders, making collaborative approaches to security vital for international cooperation and trade. The need to establish a workable and comprehensive approach to security was iterated by all of the panellists. The issues were explored through seven thematic panels that covered borders, crime, transportation, security forces, technology, climate change and energy security.

Economic growth is the main determinant of the rise of new players in the international arena. As a result, a new transnational agenda is required to manage potential threats, including terrorism. One of the main recurring

themes of the conference related to the unpredictability of the strategic environment. With the increase in economic interdependence and potential conflicts emerging from religious and ethnic tensions, the competition for resources is both complicated and heightened. This has also been influenced by problems with information sharing between neighbouring states.

The security issues of the past have evolved into new areas including oceanic competition for resources made accessible by changing technologies, resource pressures and the effect of climate change. It was noted by the majority of panellists that all of these issues affect the three NAFTA countries. Generally, access to the oceans and ensuring maritime security is critical to the future development of all three North American economies. Increased interoperability is needed through a ‘comprehensive’ approach which includes the participation of many actors including governments, civil society and the private sector. Establishing greater prospects for multilateralism through a networked society will help to promote more workable and pragmatic security arrangements. It was noted, however, that multilateral approaches can sometimes actually impede the process since there are differing roles and functions between some agencies – for example, the Canadian and US Coast Guards. This is where greater institutional alignment is needed. In general, it became clear that a more universal approach to security of the continent is vital.

Border security was a topic of interest in that it affects all three countries simultaneously. Issues pertaining to illegal immigration and drug trafficking continue to be major security threats and, as a result, new biometric scanning is being developed and employed. With respect to cargo handling and shipping, the concern is containers being tampered with or used by terrorists. It was suggested that a more rigorous scanning system needs to be developed to deal with the vast number of containers entering North American ports. Other participants objected, noting that such scanning systems would not be productive. However, for security purposes it was stressed that some form of device is required and should be further researched.

Crime continues to be a driving force in maritime security. Because of the large North American landmass, moving illegal substances or persons is difficult to counter effectively. This directly affects trade since speed and efficiency in the movement of goods are the crux of the economic



Photo credit: US Navy



American Seabees assigned to Naval Mobile Construction Battalions build a 1,500-foot long concrete-lined drainage ditch and a 10-foot high wall to increase security along the US and Mexican border in Arizona in March 2009.

prosperity of any industrialized state. As such, establishing comprehensive regional and trans-jurisdictional approaches for corridor control are necessary to counter serious issues such as the illegal drug cartels. In addition, there needs to be a sustained dialogue on shared interests including air traffic, interior patrolling and the sharing of information and intelligence.

Transportation and security topics were linked to the tension between security and efficiency. Because trade is such a vital economic component – about 90% of global trade travels by sea – an approach that can account for different priorities of the partnering countries is essential for sustained cooperation. Problems associated with transportation and security are directly related to competing policy priorities of the various bureaucracies. Security planning must include all players and avoid a ‘top-down’ approach that is not reflective of the current realities on the ground. The Vancouver 2010 Olympics provide a good example of Canada and the United States working cooperatively. An example of competing policy priorities is the Great Lakes Region where one-sixth of the total trade between Canada and the USA occurs. Developing the institutional capacity to establish workable security arrangements is imperative for protecting this region. The introduction of bilateral agreements with respect to transportation and security is a possible alternative to unilateral decision-making. A very successful trial period for the ‘Ship Rider Agreement’ indicates that significant increases in the efficiency of the joint security system can be achieved without sacrificing national sovereignty.

New technological advances are opening opportunities for cooperative security solutions. This is particularly evident in the Arctic region. From the Canadian perspective, enabling an effective monitoring system is necessary for situational awareness. The Arctic presents major challenges due to the lack of collective decision-making capabilities by the involved actors. Technological initiatives – such as a Microspace program by COM DEV Canada called ‘Exact Earth’ which can collect data from

space – will have an impact on continental security. The program enhances communications with ships at sea and provides radar imaging that facilitates vessel detection more quickly than the current mechanisms. This will help to track vessels arriving at North American ports and enhance maritime defence. Solutions require blending technical and regulatory frameworks but this can only be accomplished with effective working groups that are empowered and motivated to ensure policy implementation and evaluation.

The two final topics of debate pertained to climate change and energy security. Climate change is most evident when examining the melting of the polar ice caps, but it also has profound effects on the rise in sea levels, changes in precipitation patterns, ocean circulation systems, and wildlife migratory patterns. The financial and social implications are high and a global approach to cope with these natural changes appears necessary. In terms of energy security, there were concerns about the inadequacy of the supply. The search for alternative energy sources has become a growing phenomenon, with the introduction of biofuels being only one example. Oil still remains the driver of the global economy and its volatile prices affect current consumption levels. It was suggested that a systematic approach would help diminish the demand for this important resource, and thus avoid conflict over oil with emerging economies such as China and India.

From the panels and the discussions, it is clear that the greatest challenge to achieving interoperability in the field of maritime security is information sharing among the three NAFTA countries. Even though we live in a globalized world that is supposed to be interconnected and interdependent, countries still hold their information close to their chests to ensure their national state security issues are protected and upheld. There is also a lack of institutional capacity to manage issues and ensure security in North America. Competing policy priorities continue to hamper progress on collaborative strategies – establishing cooperative and collaborative security agreements remains the most pressing challenge. However, it is unclear whether this will occur, even with countries like Canada, Mexico and the United States which share similar security agendas.

NAFTA was designed as a free trade agreement so pushing for a security dimension may not be the best way forward. Perhaps developing a new and pragmatic arrangement on security is what is needed. We seem, once again, to have arrived at an impasse between theory and practice. Ideas are only useful if they can be applied to establish cooperative agreements among the NAFTA partners. This will be the challenge in the future. 🍷



Book Reviews

Lessons Not Learned: The U.S. Navy's Status Quo Culture, by Roger Thompson, Annapolis, MD: Naval Institute Press, 2007, xvi + 252 pages, photographs, notes, bibliography, index, ISBN 978-1-59114-865-4

Reviewed by Ken Hansen

Roger Thompson, a Canadian with extensive experience as a defence analyst in the United States and currently a lecturer at Kyung Hee University in South Korea, argues passionately that the United States Navy (USN) is making errors of strategic proportions by maintaining a fleet optimized for fleet engagement against a non-existent peer opponent. The USN aircraft carriers and other major warships, the design evolution of which he traces back to the inter-war period, are not particularly useful in responding to the threats in the world's oceans today. Among these, he argues that rogue states armed with conventional submarines, terrorists and pirates are the most problematic.

Thompson explores a number of scenarios, some of which date back to the Cold War, to explode what he views as the myth of the unmatched combat skills and technological superiority of the USN. Weaknesses in anti-submarine warfare and mine warfare figure prominently in his list. While these may not be surprising to some, his characterization of American naval aviation skills as sub-par will certainly raise eyebrows among traditional supporters. His criticisms of the skills of the USN nuclear-attack submariners, especially against conventionally powered submarines, are equally aggressive.

Thompson goes much further and accuses the leadership of the USN of running inferior training systems, inadequate weapon systems testing and outdated personnel policies. In particular, he views the 'up or out' policy that compulsorily releases officers not selected for promotion as wasteful of skilled personnel in an era of chronic shortages.

The author's articulation of all these issues into one damming 'tell-all' exposé does make for a thought-provoking read. However, Thompson's style is so rough and stilted that it detracts significantly from his purpose. The introduction is a peculiar mix of ultra-inflammatory statements and hyper-defensive posturing. Rather than setting out his plan, he begins with a set of self-justifications that are quite simply odd. Faults in structure, logic and balance are rife throughout the text. The conclusion totals only two pages, most of which is taken up by 12 single-sentence

recommendations in bullet form. After such an extensive critique, the ending is abrupt and completely disappointing; no master plan is offered to shape a new course.

The main failure in Thompson's analysis is that it lacks a theoretical framework. Understanding the fundamental changes that have occurred in the conduct of naval fleet engagement since the First World War is essential to grasping why things have changed and what they mean. Wayne Hughes' seminal work *Fleet Tactics and Coastal Combat* (Naval Institute Press, 2000) explains the transition from slow gun engagements to the 'blink of an eye' type of missile warfare of the current era. Thompson comes close to developing his own theory on missile warfare in his sixth chapter that describes how the Soviets could have attacked and sunk three different USN carriers (*Kitty Hawk*, *Saratoga* and *Carl Vinson*) on separate occasions. The problem with his analysis, in these and other cases, is that the lessons are drawn from exercises or non-combat scenarios and the hypothetical outcomes are taken out of context. Without more detail, the accusations read more like tabloid revelations than analysis of enduring worth.

This assessment does not mean that Thompson's book is unworthy. The question 'What line of argument is necessary to illicit strategic change from a conservative bureaucracy?' is well worth asking. However, the question of whether to specialize and develop superlative competencies in response to specific threats or to strive for general capabilities in an era of uncertainty is not adequately discussed. The uninformed will read this alarmist book and draw some very dire conclusions. Everyone is encouraged to do some preparatory reading before undertaking this work, or simply to take it with a very large grain of salt. 🍷

Papers in Australian Maritime Affairs: Australian Maritime Issues, No 21, edited by Andrew Forbes, 2008, 286 pages, ISBN 978-0-642-29678-8; *Freedom of Navigation in the Indo-Pacific Region*, No. 22, by Stuart Kaye, 2008, 56 pages, ISBN 978-0-642-29681-8; *Asian Energy Security (Regional Cooperation in the Malacca Straits)*, No. 23, edited by Andrew Forbes, 2008, 200 pages, ISBN 978-0-642-29700-6, Sea Power Centre, Australia

Reviewed by Dave Mugridge

These three associated publications illustrate the breadth and depth of the Australian Sea Power Centre's contribution to the development of recent maritime security doctrine and strategy. It should come as no surprise to readers that under the editorial control of Andrew Forbes Papers Number 21 and 23 combine into an insightful text



which contains many apposite and contemporary lessons for the development of Canadian maritime security. Stuart Kaye produces a short, readable yet comprehensive pamphlet on the freedom of navigation within the region. With its current rate of quality publications, the Sea Power Centre is fast becoming an international think tank of some note, pleasingly combining the work of both military and academic minds from across the region into an authoritative voice.

To put this review in context, I would like to set the stage by a short digest of the Australian Defence White Paper (2009) which outlined a dramatic transformation in the future force levels of the Australian Defence Force (ADF) and its security role on the global stage. This review came about from the realization that Australia's position in the world had changed and the new security context had catapulted the country from a benign back-water into a dangerous international multi-polar world. Many speculated that this more muscular Australia was a response to the rise of China but this observation only addresses one facet of the developing strategic environment.

The Royal Australian Navy (RAN) will be the main beneficiary of this re-aligned focus on defence but not to the exclusion of its army and air force siblings. The revised force structure will allow far greater integration and deliver truly joint effects both on the battlefield and in the management of peacetime security. Above all it recognizes that in a multi-polar world where the United States is no longer in a position of hegemony, the ADF needs to be capable of unilateral and independent deployment. The pertinence of this lesson is one that sits uncomfortably in Europe and Canada, where the culture of over-reliance has increased along with harvesting the peace dividend from the end of the Cold War.

The value of these publications is that while they are unashamedly regional in their focus on southeast Asia, the conclusions they draw are applicable elsewhere in the world and are worthy of very detailed study within the defence ministries of NATO members. The books identify and celebrate the value of comprehensive international collaboration, without forgetting the difficulty on the road to success. They acknowledge the complexity of new issues like organized crime and terrorism, dispassionately examining them with evidence-based analysis and delivering defensible conclusions. Even the shortest of the monographs graphically illustrates the potential exploitation of national boundaries by criminal and terrorist organizations.

The contributors are from predominantly military and academic backgrounds, which is slightly disappointing as

more could have been made by including those from fields such as law enforcement, border control, international development and foreign policy formulation. Yet this is a small distraction from their valuable contribution to the debate about how comprehensive an effective maritime security strategy actually should be if it is to be enforceable without being overly bureaucratic.

Their collective examination of regional security issues and concerns demonstrates conclusively why Australia has proactively responded as it has in its Defence White Paper. Strategically the rise of both China and India will be of concern to all in the region. The value of these publications is that they put meat on the bone so as to educate and inform those from outside of the region's unique dynamics and nuances. Australia is not looking to replace the United States as the regional power or to threaten the emerging powers but to defend itself more effectively, more dynamically and at greater range than it can do at this time. These publications also demonstrate the growing maturity of Antipodean self-awareness of the region's place in the Asian century.

The lessons learnt here are appropriate for the Canadian Navy as it faces the financial rigours associated with losing the relevance argument to an over-stretched army. Australia has chosen to look beyond today and its own campaigns in both Iraq and Afghanistan to recognize that international power projection is more sophisticated than simply boots on the ground. Real international clout comes from having a wide range of security options that can be employed individually or collectively to secure influence or support the tenets of foreign policy. Perhaps the early lessons from establishing a viable regional security apparatus have a multitude of applications for Canada as Arctic sovereignty begins to cause friction or the impact of organized crime within NAFTA begins to take hold? Australia and the Sea Power Centre have put these issues on the table for discussion and review. Will Ottawa?

In conclusion, these are good wide-ranging reads that represent a valuable contribution to the maritime security debate. They illustrate a country, a navy and its doctrinal heart moving forward with one voice. This voice should be listened to in Canada now and certainly beyond the date of withdrawing Canadian troops from combat roles in Afghanistan. Otherwise with stale doctrine the army-centric Department of National Defence will end up very well prepared for the last war and lose the next by having its head in the sand. Without clear strategy and vision for the years ahead very little of value will be achieved. 🍷





Roll Along Wavy Navy, Roll Along!

Jacqui Good

It's Canada Day, 2009, and there is hardly room to move on the Halifax waterfront. There are kids with maple leaves painted on their cheeks, moms and dads sporting red and white t-shirts and plenty of fluttering flags. HMCS *Sackville*, Canada's Naval Memorial, is anchored on the waterfront, close to the popular Maritime Museum of the Atlantic. On this day there is no charge to go aboard. Thousands of locals and tourists take the opportunity to visit the last of the corvettes that served in World War II.

They clamber up and down ladders, push buttons to hear descriptions of various areas of the ship, manoeuvre a gun or two and look at mannequins placed in the refurbished engine and boiler rooms. It's almost as if they are visiting the ship as it was in 1944. When the visitors enter the forward mess, the illusion is complete. Two of the mannequins seated at a table start to move. Another sits up in his hammock. He sings,

*They say that in the navy,
The beds are mighty fine,
But how the heck would I know,
I've never slept in mine.*

The visitors laugh heartily. And then the other sailors join in – in three-part harmony no less.

*Gee Ma, I wanna go,
West of Ontario,
Gee Ma, I wanna go home.*

The verses keep coming as the performers move around the crowded space where hammocks are slung over tables and benches. We can see why the sailors might have a few complaints. One picks up a coffee mug and makes a face.

*They say that in the navy,
The coffee's mighty fine,
It's good for cuts and bruises,
And tastes like turpentine.*

Members of the audience are taking photos and videos and, once the song is finished, pepper the performers with questions. "Why do you wanna go 'west of Ontario'?" The answer comes quickly. "Because most of the volunteers come from the prairies. They tell us guys from the East Coast are too smart to go to sea in a ship this small." "Are you guys really sailors or are you actors?" "Of course we're sailors. We're just back from our convoy run to Londonderry. It's great to be in port again after all those weeks on the North Atlantic. Let me tell you how we're winning this war."



Photo: Jacqui Good

The Wavy Navy Players, Cy Giacomini, Matt McKeown and Jordan Gracie re-enacting life on board a Second World War corvette in HMCS *Sackville*'s forward mess.

And for a few minutes, we are face to face with a trio of young guys, still in their teens, who are full of pride for the work they are doing in 1944. They tell us about the cold and the wet and the difficult living conditions, with only a hint of self-pity. One chap ruefully says, "I've almost forgotten what a girl looks like."

*They say that in the navy,
The girls are mighty fine
You ask for Betty Grable,
They give you Frankenstein.*

Okay, here's the truth. These chaps are singing actors, hired by the Canadian Naval Memorial Trust for the summer. They're called the Wavy Navy Players since the volunteers who once manned the corvettes were known as the Wavy Navy. Actors have been aboard for four of the past five summers.

This year Cy Giacomini, Matt McKeown and Jordan Gracie added some drama and comedy to the floating museum that is HMCS *Sackville*. On busy days like Canada Day or during the Tall Ships Festival, they use the forward mess as a sort of stage. On quieter days, they take visitors all over the ship, singing as they go.

Former chair of the Trust and retired Vice Admiral, Duncan 'Dusty' Miller is a great supporter of the Wavy Navy Players. As he says, "I regret that we don't have the funding to make this a full time program. Thus far we can only afford to have actors for limited hours on the weekend. It would be great to have them full time in 2010 for the 100th anniversary of the Canadian Navy." Then every visitor to *Sackville* could leave singing "Roll Along Wavy Navy, Roll Along!" 🍷

Jacqui Good is the director of the Wavy Navy Players.



Announcing the Winners of the 2009 Essay Competitions

Winner of the Canadian Naval Memorial Trust Essay Competition

Was the RCN Ever the Third Largest Navy?

Robert Stuart

First Prize Bruce S. Oland Essay Competition

"An Art of Its Own": Corporate Knowledge, the Canadian Navy and Arctic Operations

Richard Mayne

Second Prize Bruce S. Oland Essay Competition

A New Era or the Great White Norm? Comparing Perspectives on Canadian Arctic Sovereignty

Matthew Gillis

The *Canadian Naval Review* is saddened to note that Commodore Bruce S. Oland died on 6 August 2009 in Halifax. He had a long history of distinguished service in the Canadian Forces – from 1933 to 1971 – as well as a successful business career and years of support for a wide range of charitable organizations. We would like to extend our condolences to his family and friends.

Stay tuned for details of the 2010 Essay Competition.

Details will be posted on the CNR website (www.naval.review.cfps.dal.ca) and will appear in the Winter issue of CNR.



