



CANADIAN NAVAL REVIEW

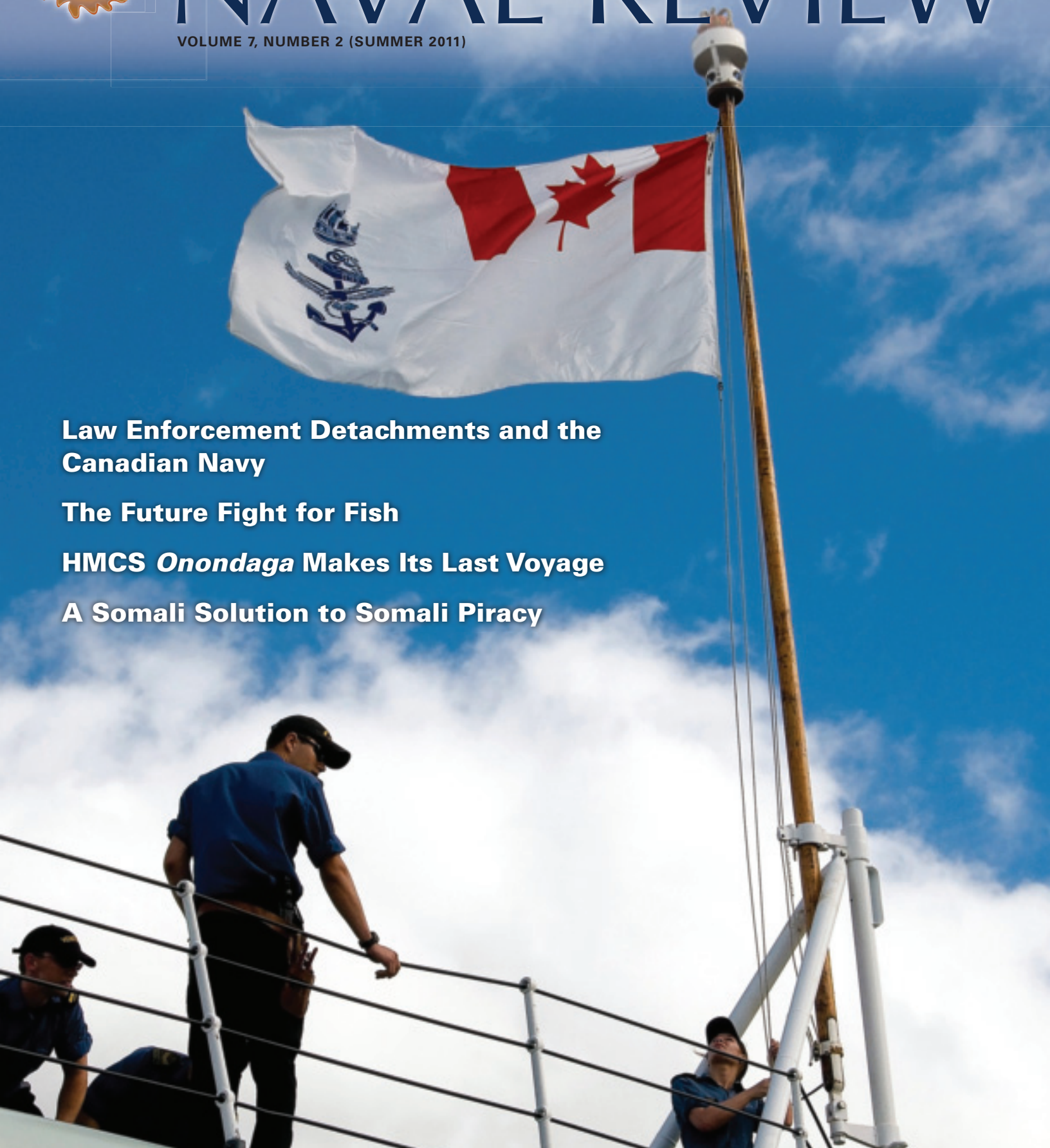
VOLUME 7, NUMBER 2 (SUMMER 2011)

**Law Enforcement Detachments and the
Canadian Navy**

The Future Fight for Fish

HMCS *Onondaga* Makes Its Last Voyage

A Somali Solution to Somali Piracy



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VOLUME 7, NUMBER 2 (SUMMER 2011)

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A sailor aboard the *Iroquois*-class destroyer HMCS *Algonquin* raises the ship's colours as the ship arrives at Joint Base Pearl Harbor-Hickam for Rim of the Pacific exercise (RIMPAC) 2010.

Contents

EDITORIAL: THE FALKLANDS WAR: LESSONS LEARNED AND NOT LEARNED PETER HAYDON	2
LAW ENFORCEMENT DETACHMENTS AND THE CANADIAN NAVY: A NEW COUNTER-DRUG CAPABILITY COMMANDER PAUL W. FORGET	4
THE FUTURE FIGHT FOR FISH LIEUTENANT-COMMANDER RAY SNOOK	10
HMCS <i>ONONDAGA</i> MAKES ITS LAST VOYAGE ANNEMARIE BOURASSA	16
A SOMALI SOLUTION TO SOMALI PIRACY DAVE MUGRIDGE	22
PROJECTING SHIPBUILDING SUCCESS JANET THORSTEINSON	28
MAKING WAVES OF CARTS AND HORSES AMPHION	30
COMMENTS ON 'CHEAP AND NASTY' SHIPS LIEUTENANT-COMMANDER (RET'D) IAN YEATES	31
METHINKS THEY DOTH PROTEST TOO MUCH, MY CANADIAN LORDS OF THE ADMIRALTY DAVE MUGRIDGE	32
PLAIN TALK: PROCUREMENT PIPEDREAMS AND POLITICAL REALITIES SHARON HOBSON	35
THE VIEW FROM THE WEST: TIGHTENING THE NOOSE: TIME FOR A NEW APPROACH AGAINST SOMALI PIRATES? CHRISTIAN BEDFORD	37
WARSHIP DEVELOPMENTS: SEEKING A NEW SEA KING DOUG THOMAS	39
BOOK REVIEWS	44

Editorial

The Falklands War: Lessons Learned and Not Learned

Admiral of the Fleet Sir Henry Leach died in April this year. He was First Sea Lord in the early 1980s during the 1982 Falklands War and at the time of Britain's controversial defence cuts that threatened to undermine the Royal Navy's global capability. His role in that war was much more important than generally recognized, and his contribution deserves more recognition especially because it still holds lessons that we can apply today.

Most accounts of the Falklands War focus on the deployment of the task force, the encounters with the Argentine naval and air forces, and the bold amphibious assault to recapture the islands. Unfortunately, the brief but intense political discussion in London that set the British joint operation in motion is often overlooked. As historians often proclaim, battles are the real stuff of naval history, and so the political prelude to battle all too often falls into the shadows.

The political backdrop to the Falklands War has two parts: first, the bureaucratic mismanagement of the unique situation of the Falkland Islands; and, second, the 1981 defence cuts. From a military point of view, the pre-war situation was a familiar one; the defence budget was not large enough to meet the demands for new equipment, and new money was not available. In this case, the Royal Navy bore the brunt of the defence cuts because it was

deemed to be of a lower strategic priority than the army and air force commitments to NATO.

The decision not to replace the carrier *Ark Royal* and to pay off the light aircraft carriers and some of the amphibious support ships severely curtailed the navy's ability to operate outside the NATO area. It also meant that Britain's ability to defend its remote territories, such as the Falkland Islands, was limited. To many this was dangerously myopic strategic thinking but public dissent was not tolerated politically, and so Admiral Leach had to work from within. The 1982 invasion of the Falkland Islands and the government's initial reaction were seen by the critics of the 1981 defence cuts as proof of the wrong-headedness of the policy.

In late April 1982, as the Falkland crisis (as it then was) unfolded and an Argentine invasion of the islands seemed inevitable, a distinctly gloomy mood prevailed in London. The first response to intelligence that the Argentines intended to invade the islands was a mix of diplomatic bluff and tokenism. The Antarctic patrol vessel *Endurance* would remain in the south Atlantic and be re-supplied and three nuclear-powered submarines would deploy to the area at maximum speed. This was a purely political decision made without Leach's input. A couple of days later, by chance rather than by invitation,

Leach became part of the follow-on meeting where options for a more comprehensive response were discussed. Initially, the Prime Minister, Margaret Thatcher, the Defence Minister, John Nott, and a couple of junior Ministers planned to review an options paper prepared by Nott's military staff. But this was not to be. Leach saw the paper written for Nott, which advocated not taking decisive military action, and went to the House of Commons to advise Nott that it was a bad option. To Leach's surprise he soon found himself in a meeting with the Prime Minister where he wasted no time in advising her that a naval task force could be sailed in 48 hours. He did not go behind his Minister's back, he stepped out in front of him boldly.

Admiral Leach held strong convictions. He believed that there was no point in having a navy if the government was not prepared to



Photo: PA Wire

Admiral Sir Henry Leach outside the Royal Naval College, Greenwich, London, in June 2007.

use it. He was also convinced that Britain's interests were best served by having an effective and versatile navy. And he believed that Britain had an obligation to defend the citizens of all British territory no matter where located. To Leach, not recapturing the islands was simply unthinkable, regardless of the risks. Thatcher agreed quickly; they were of the same mindset on the need to take back the islands. As she later explained, "John [Nott] gave the MOD's [Ministry of Defence] view that the Falklands could not be retaken once they were seized. This was terrible, and totally unacceptable. I could not believe it: these were our people, our islands. I said instantly: 'if they invaded, we have got to get them back.'"¹ And Leach had the authority to prepare and send the task force. The defeatist attitude that previously prevailed in the Ministry of Defence vanished overnight and the task force was made ready for the south Atlantic.

Unfortunately, many of the details of the war have faded from memory – far too many in fact because some valuable lessons from that experience still have the potential to guide future naval operations. Theorists are still not quite sure what to make of the Falklands War. Some dismiss it as just a minor engagement while others see it as an example of Sir Julian Corbett's classic thinking on the importance of being able to gain and hold control (command) of a specific ocean area to achieve a strategic objective. Perhaps a more realistic assessment is that the war is a good example of Sir James Cable's more contemporary views on the political utility of navies. According to Cable:

Maritime conflict is easier to limit and control than it is on land or in the air. It also inflicts less collateral damage. Warships, even if with more difficulty and at greater distance than formerly, can pose a threat and sustain it without a single warlike act. They can deploy on the high seas without commitment, wait, gain time for diplomacy. If prospects look poor, warships are easier to withdraw. Warships allow choice, naval force is a flexible instrument.²

With Admiral Leach's firm convictions and James Cable's wise philosophy in mind, some lasting lessons from the Falklands War come to mind.

1. Effective and flexible naval forces cannot be bought off the shelf when needed. They have to be in place and ready for use at short notice to meet those criteria.



HMS *Hermes*, flagship of British naval forces in the Falklands War, returns to Portsmouth in July 1982.

2. Those who advocate a navy comprised of lower-capability or niche forces, for whatever reason, do the country a great disservice because they deny politicians the ability to make a flexible naval first response to a crisis.
3. Because the life-span of a warship is now 30 to 35 years and a warship takes 10-15 years to design and build, decisions on new fleet concepts made today need to ensure that the operational concepts used will remain valid for the next 50 years.
4. Admirals, and generals too, need to be absolutely honest when asked what their forces can and cannot do. They should not hesitate to tell politicians the truth and should not try to tell their political masters what they want to hear. Sound military advice should transcend partisan politics but needs to be given in a way that is not oblivious of the political issues.

Admiral of the Fleet Sir Henry Leach was an un-sung hero of the Falklands War. His commitment to his navy and ensuring its continuing utility will stand the test of time as guidance for those charged with the care and maintenance of navies. He should also be remembered for his courage in providing sound military advice in an adverse political situation. Had that advice not been given and the Falkland Islands not been recaptured, as some Ministers advocated, Britain's standing in the world might have been very different. 🇬🇧

Notes

1. Margaret Thatcher, *The Downing Street Years* (New York: HarperCollins, 1993), p. 179.
2. James Cable, *The Political Influence of Naval Force in History* (London: Palgrave Macmillan, 1998), p. 174.

Peter Haydon

Law Enforcement Detachments and the Canadian Navy: A New Counter-Drug Capability

Commander Paul W. Forget



US Coast Guard and Canadian Navy personnel onboard HMCS *Toronto* scan the horizon during *Operation Caribbe*.

Since 2006, the Canadian Forces have participated in an ongoing counter-narcotics mission in the waters of the Caribbean Sea and the eastern Pacific. For five years, Canadian warships and aircraft have acted as eyes and ears for the US-led Joint Interagency Task Force - South (JIATF-S) in its effort to inhibit criminal organizations from transporting illegal drugs and money by air and sea between South America, Central America, the Caribbean islands and North America. This mission took on a new dimension with the embarkation of US Coast Guard Law Enforcement Detachments (LEDETs) in Canadian warships starting in October 2010. These teams possess specialized boarding, search and seizure capabilities, and more importantly, a legal mandate with authority to enforce US and international counter-narcotic laws on the high seas.

Canadian warships provide logistical, engineering and navigation assistance to the law enforcement personnel in support of their drug-interdiction operations. With LEDETs embarked in its warships, the Canadian Navy has taken a more active role in stemming the flow of drugs into

North America and Canada. The deployment of a team in HMCS *Toronto* in January and February 2011 led to the interdiction of 68 bales of cocaine worth approximately \$33 million. More importantly, these counter-narcotics operations enhance Canada's efforts to promote stability in Latin America and the Caribbean – a region increasingly important to Canadian trade and security.

Law Enforcement Detachments and the Canadian Navy

Between 2006 and 2010, Canadian warships and aircraft were regularly deployed on *Operation Caribbe* to assist JIATF-S in the detection, tracking and monitoring of vessels and aircraft suspected of transporting narcotics across the Caribbean Sea and eastern Pacific. The electronic and acoustic sensors of *Halifax*-class frigates and CP-140 Aurora patrol aircraft made an effective contribution to intelligence differentiating illegal drug-carrying vessels from bona fide seafarers peacefully plying their trade throughout the region. However, Canadian Forces vessels or aircraft were not authorized to stop or board vessels suspected of smuggling drugs.

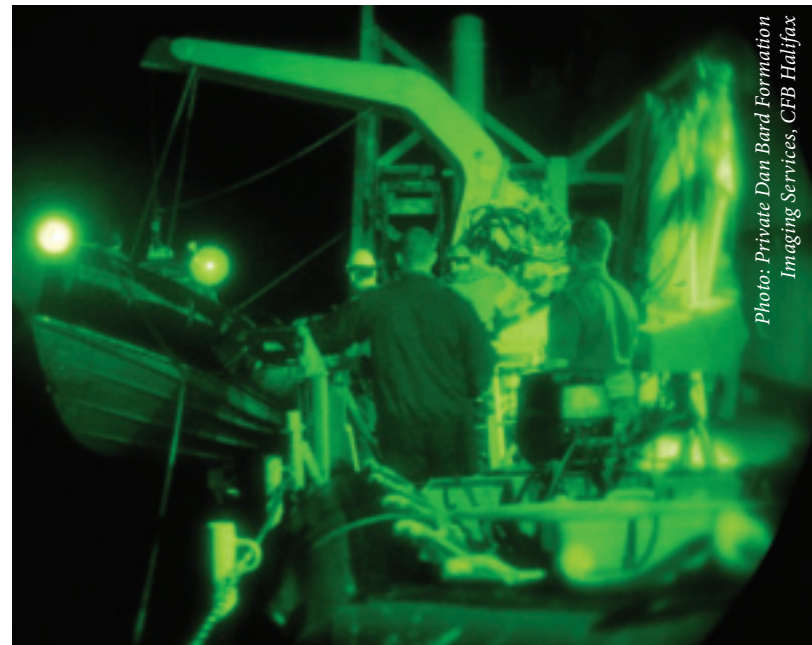
In October 2010 the Canadian Forces and US Coast Guard (USCG) commenced the integration of LEDETs in Canadian warships deployed by Canada Command to support JIATF-S. Canadian warships may now transport and support embarked American law enforcement units as they carry out law enforcement activities directed by JIATF-S. These activities include a spectrum of drug-interdiction operations, such as evaluating vessels suspected of transporting illegal drugs and money for possible follow-on action and stopping suspected traffickers in accordance with instructions from the vessel's flag state. Activities could also include boarding and, if necessary, searching the vessel for contraband, seizing illicit drugs and detaining suspected traffickers for disposition in the vessel's flag state or in the United States depending on the situation and the nationality of the people involved. However, actual search and seizure of illegal drugs, money and personnel from a vessel can only be conducted by LEDET members who are authorized by US law to enforce counter-narcotic laws on the high seas.

Legislation governing the USCG authorizes certain coast guard personnel to enforce American domestic law "upon the high seas and waters over which the United States has jurisdiction" by means of "inquiries, examinations, inspections, searches, seizures, and arrests."¹ In addition to enforcing US drug laws within the territorial waters of Puerto Rico, the US Virgin Islands and other American territories in the Caribbean, USCG personnel may also enforce domestic law on US-flagged vessels stopped and boarded on the high seas. US-flagged vessels could conceivably be boarded by law enforcement detachment teams embarked in Canadian warships.

The framework for the work of the counter-narcotic cooperation and patrols is the 1988 United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (often referred to as the Vienna Convention) which came into force in November 1990.² Approximately 170 states are party to the treaty. Its articles define the narcotics of concern and emphasize, among other things, the importance of countering the pernicious effects of these drugs by setting up agreed processes relating to extradition, jurisdiction, confiscation of narcotics, disruption of financing and other state obligations to counter the illicit trade in drugs. This convention forms the legal basis for embarking American law enforcement detachments in Canadian warships. As well, the United States has entered into numerous other bilateral agreements with flag states in the Caribbean, Central America and South America. The teams embarked in Canadian warships could conceivably board vessels registered in a flag state that has authorized

the USCG to board by diplomatic channels or a bilateral agreement governed by the 1988 Vienna Convention.

Article 17 of the 1988 Vienna Convention addresses "illicit traffic by sea." Article 17(1) directs its signatory parties to "co-operate to the fullest extent possible to suppress illicit traffic by sea, in conformity with the international law of the sea."³ A flag state which suspects that one of its registered vessels is engaging in illicit drug traffic may request and/or authorize a third party state to board and search the vessel (Article 17(2)). If the third party state finds evidence of involvement in illicit trafficking, the flag state may authorize the intervening third party state to "take appropriate action with respect to the vessel, persons and cargo on board." Article 17(10) states that this action "shall be carried out only by warships or military aircraft," or other obviously marked government vessels.⁴



Members of the US Coast Guard law enforcement team conduct a night training operation with the crew of HMCS *Toronto*.

The majority of vessels that transport illegal drugs throughout the Caribbean and eastern Pacific do not fly a US or third state flag, nor are they registered in any state. These 'stateless' vessels are often small 'go-fast' boats possessing several outboard engines, plenty of fuel supplies for long trips and, of course, a cache of cocaine or marijuana. Their high speed and tiny size make them difficult to detect by visual means or radar.

Another type of stateless vessel is the self-propelled semi-submersible (SPSS) vessel or the self-propelled fully-submersible (SPFS) vessel. Both these vessels are designed with increasing sophistication and are even harder to detect than the high-speed surface boats. According to the USCG, stateless 'go-fast' and SPSS vessels accounted

respectively for 50% and 30% of the maritime-based drug flow towards the United States in 2009.⁵

The law enforcement teams employ capabilities specially designed for their drug-interdiction mission in the Caribbean and eastern Pacific. Once aboard a suspected drug-trafficking vessel, they may utilize ion scan detection devices and fibre-optic cameras to search inaccessible spaces of the vessel, such as fuel tanks. A unique asset is fuel neutralization cartridges which could, based on a boat carrying excessive amounts of fuel over and above the legal requirements, render drums of surplus gasoline unusable for refueling drug-smuggling boats or their support vessels.⁶ These capabilities allow the law enforcement officials to conduct sophisticated interdiction operations that go far beyond simple board-search-and-seize tactics.



Sub-Lieutenant Amanda Jayne takes a compass bearing as HMCS Toronto patrols in the Caribbean Basin. Canadian naval personnel support embarked American law enforcement teams with specialized skills in logistics, engineering and navigation.

Fundamentally, an embarked LEDET is a force multiplier for Canadian warships conducting counter-narcotic operations in the Caribbean and eastern Pacific. As recently as a year ago, CF ships and aircraft could only contribute air and surface contact tracking to JIATF-S. This assisted the task force in building the recognized maritime picture of its operating area, as well as adding to the integrated intelligence regarding drug-trafficking patterns throughout the region. It was, however, a less direct form of interdiction

than supporting LEDET boarding operations against actual drug-trafficking platforms.

The law enforcement teams not only make the Canadian ships more effective, they are a force multiplier for the broader drug-interdiction operations. There are usually more trained teams available to deploy than there are USCG and US Navy ships assigned to JIATF-S, so embarking the teams on Canadian ships adds to the law enforcement presence in the area. A Canadian warship is equipped with a variety of sensors for detection, both on the surface and below, and this coupled with an embarked LEDET can be used to great effect in order to interdict vessels transporting narcotics across the maritime areas. Canadian warships also have assets that add to the effectiveness of law enforcement team boarding operations, including space for equipment, large rigid-hull inflatable boats driven by skilled boat coxswains, a sophisticated communications suite, and air surveillance support in the form of an embarked Sea King helicopter. Most importantly, a Canadian warship possesses a pool of naval personnel who could provide support with their specialized skills if required. The provision of logistical, engineering and navigation support allows law enforcement personnel to focus solely on carrying out activities against drug trafficking.

This is an important mission that contributes to Canadian domestic security as well as countering a hemispheric threat that is growing in scope and complexity. Some of the narcotics trafficked through the Caribbean and eastern Pacific are specifically designated to be sold for consumption in Canada. In 2007, the RCMP identified Colombia and Peru as the top two sources of cocaine entering Canada, and identified Mexico as “a transit country for cocaine destined for Canada ... not only by way of the Mexico-US-Canada highway corridor but also by direct shipments via air and marine modes.”⁷ Narcotics are also transported from other countries. In June 2007, for example, a sailboat travelling from the Dominican Republic to Canada was seized in the Bahamas with 226 kilograms of cocaine on board. Two months later, 88 kilograms of cocaine were seized from a shipping container in Venezuela bound for Quebec via the Port of Halifax. In addition to narcotics that are transported over the oceans and then over land to Canada, cocaine is also smuggled into Canada on passenger airline flights originating in Mexico, the Dominican Republic and Trinidad and Tobago.⁸

In all these examples of cocaine trafficking into Canada, the common thread is the original transport of the drugs through the waters and airspace in which JIATF-S

conducts drug-interdiction operations. According to the United Nations Office on Drugs and Crime (UNODC), 70% of all cocaine bound for North America leaves Colombia via eastern Pacific air and sea routes, 20% leaves Colombia via Atlantic air and sea routes, and the remaining 10% is smuggled through Venezuela and the Caribbean. UNODC estimates that 309 metric tons (mt) of pure cocaine were exported from South America to North American markets in 2008, of which approximately 120 mt (39%) were seized in transit in the JIATF-S operating area and 14 mt (4.5%) were consumed by Canadians. USCG law enforcement boarding operations supported by Canadian warships mean a more direct role for Canada in hindering the flow of cocaine that feeds a Canadian market estimated to be worth \$2.4 billion.⁹

Aside from its immediate contribution to domestic Canadian security, Canadian Navy support to counter-drug operations also combats the drug-trafficking organizations that are destabilizing Caribbean and Latin American societies. In 2008 the director of UNODC, Antonio Maria Costa, declared that “in the Americas, the biggest threat to public safety comes from drug trafficking and the violence perpetuated by organized crime.”¹⁰ This hemispheric security issue encompasses the actual trafficking of drugs between North and South America (including cocaine, marijuana and methamphetamines), the violence that organized crime groups employ, and the

illicit proceeds from trafficking that funds corruption and undermines good governance in developing states throughout the Americas. While the drug war violence in Mexico has drawn the most attention in recent years, UNODC research reveals that the murder rate has increased significantly throughout Central America, South America and the Caribbean in the last decade. The 2010 *World Drug Report* states that “of the countries with the highest murder rates in the world today, almost all lie along the key cocaine trafficking routes.”¹¹

More worrisome to hemispheric stability are recent efforts by cash-flush drug-trafficking organizations to challenge the governments of states in which they operate by means of organized violence or extensive corruption. Their goal is not necessarily to replace the government but to secure a certain degree of freedom in which to reap profits from their illicit trafficking. Organized violence spreads fear amongst the populace and in some places has highlighted the inadequacy of the state security apparatus. High-level corruption undermines public support for governments that might seek to resist and dismantle drug-trafficking activities. When combined, both threats can paralyse a government and prevent it from taking action. There is evidence that this phenomenon was occurring in Mexico before the government of President Felipe Calderon launched its campaign against drug-trafficking organizations in 2006.¹²



Photo: Private Dan Bard Formation Imaging Services, CFB Halifax

Canadian sailors conduct routine small arms training on the flight deck of HMCS *Toronto* during *Operation Caribbe*.



Photo: DND

The author, Commander Paul W. Forget, pictured on the bridge of HMCS Toronto.

So why should Canadians care if their warships support US Coast Guard drug interdiction in the Caribbean and eastern Pacific, far from Canadian shores and Canadian eyes? First, a hemisphere in which violence is prevalent and governments are challenged by criminal organizations is an increasingly dangerous place for travelling Canadians. If the illicit activity continues, and if other government attempts to end the activity result in confrontation and violence as has happened in Mexico, this could result in the spread of violence throughout the Caribbean and Latin America. This would mean that thousands of Canadian tourists who travel south to avoid winter could be at risk in the future. Canadian tourists have already been targeted by or caught in the crossfire between drug organizations in Mexico.

Second, the Caribbean and Pacific waters traditionally plied by Canadian freighters and sailboats could also become increasingly unsafe. This could have both economic and personal effects. A deadly attack by Honduran criminals on a Canadian sailboat in November 2010, referred to as a “pirate attack” in the Canadian media, is an example of the dangers faced by mariners travelling in the vicinity of drug-related violence and lawlessness.¹³ The presence of Canadian warships supporting USCG drug-interdiction operations signals to both drug traffickers and governments in the region Canada’s intent to protect freedom of navigation in these ocean commons.

Third, there is the direct impact these operations will have upon the flow of drugs to the growing Canadian market. Canadians consumed 15% more cocaine in 2008 than they did a decade earlier.¹⁴ Most of the cocaine consumed by Canadians is transported from South America through the JIATF-S operating area. This has an impact not only upon Canadian drug consumption, but upon the safety of

Canadian streets. The struggle between drug-trafficking organizations in Mexico for share of the routes into Canada was reported to be a contributory cause of the outbreak of gang violence in the British Columbia lower mainland in 2009.¹⁵ Cocaine trafficked into Canada is traded for marijuana and methamphetamines produced by Canadian organized crime groups, further enriching gangs and syndicates that pose a threat to Canadian public safety.

Fourth, Canadians are beginning to recognize the comprehensive threat drug trafficking poses to the hemisphere. A December 2010 editorial in *The Globe*

and *Mail* opined that “[o]rganized criminal drug networks are a serious and growing threat to the stability of the Americas. Canada is an integral part of the problem – and the region – and must play a greater role in the solution.”¹⁶ By supporting LEDET drug-interdiction operations, Canadian Forces warships, aircraft and crews are taking a direct role in combating drug trafficking in Latin America and the Caribbean. In February 2011, Lieutenant-General Walter Semianiw, the Commander of Canada Command, stated that “[o]ur ability to work closely together with the U.S. Coast Guard has enhanced our contribution to the fight against trans-national criminal organizations that threaten our society.”¹⁷

Fifth, supporting law enforcement operations is an effective contribution to Canada’s policy of renewed engagement with neighbours in the Americas. The 2007 Speech from the Throne declared that Canada would play an “active role” in the hemisphere. The Minister for Foreign Affairs elaborated on this by stating that Canada “will work together to strengthen hemispheric security, and build a safer and more secure neighbourhood.”¹⁸ Operations by the Canadian Forces are an important part of this effort. In 2010, General Walter Natynczyk, the Chief of Defence Staff, wrote that “our engagement and cooperation in the Americas must focus upon activities and arrangements that are effective, tangible, and enduring.”¹⁹ He identified continued deployments of Canadian warships and aircraft to JIATF-S as one of these activities, in addition to ongoing bilateral and multilateral defence-related discussions, training and peace-support operations.

Conclusions

In October 2010, HMCS *Toronto* integrated a USCG law enforcement detachment into the ship’s company, conducted extensive small boat training and familiarized

Canadian sailors with law enforcement operations while deployed as part of *Operation Caribe*. In January 2011 *Toronto* deployed once again on *Operation Caribe* and embarked a USCG team for the second time. During five weeks of counter-narcotic operations, *Toronto* detected and chased a boat that was later seized by local naval authorities, disrupting a shipment of cash and drugs. A few days later, *Toronto* intercepted a boat transporting 68 bales of cocaine off the east coast of Nicaragua. When cornered by *Toronto*, the ship's helicopter and the law enforcement team embarked in *Toronto*'s small boat, the boat jettisoned approximately 1,650 kilograms of cocaine with an estimated pier-side value of \$33 million. The crew was later detained by the Nicaraguan Navy. Members of the LEDET had high praise for their fellow Canadian sailors. According to the Assistant Officer in Charge of the LEDET, "*Toronto* is single-handedly responsible for [this] disruption of 68 bales of cocaine."²⁰

Toronto's support to drug-interdiction operations marks a major evolution for the Canadian Navy's participation in JIATF-S. As recently as a year ago, Canadian warship contributions in the area were restricted to monitoring and reporting suspected drug traffickers to JIATF-S. Now they support boarding of suspected drug-trafficking vessels by a USCG law enforcement detachment. Canadian-supported USCG drug-interdiction operations will be a more effective means of combating drug trafficking

in the region, and will undoubtedly result in a tangible benefit to security in Canada and on the seas over which drugs transit. They also have the potential to contribute to security and Canadian engagement in the Americas. As *Toronto*'s successful interdiction in January 2011 demonstrated, supporting such operations disrupts the flow of drugs trafficked into Canada and denies drug-trafficking organizations the proceeds from their illicit activities. And most importantly, it emphasizes Canada's efforts to strengthen hemispheric security against the violence and corruption perpetuated by drug trafficking, in concert with its neighbours in the Americas. 🇺🇸

Notes

1. United States, "Regular Coast Guard Functions and Powers – Law Enforcement," 14 U.S. Code 89, available at www.law.cornell.edu/uscode/14/uscode_sec_14_00000089-000-.html. Jurisdiction for the enforcement of US drug laws over US-flagged, foreign-flagged and 'stateless' vessels is outlined by *Maritime Drug Law Enforcement Act (MDLEA)*, 1980, 46 USC Chapter 705.
2. United Nations, "United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, December 1988," available at http://www.unodc.org/pdf/convention_1988_en.pdf.
3. *Ibid.*, Article 17.1.
4. *Ibid.*, Article 17.4 and 17.10.
5. Rear-Admiral Wayne E. Justice, "Overview of Coast Guard Drug and Migrant Interdiction," Testimony Before the (US) House Committee on Transportation and Infrastructure, Subcommittee on Coast Guard and Maritime Transportation, 11 March 2009, available at www.dhs.gov/ynews/testimony/testimony_1237405074399.shtm.
6. *Ibid.*
7. Royal Canadian Mounted Police, *The Drug Situation in Canada in 2007* (Ottawa: RCMP Criminal Intelligence Program, 2007), p. 9.
8. *Ibid.*, p. 10.
9. United Nations Office on Drugs and Crime (UNODC), *World Drug Report 2010* (New York: United Nations Publications, 2010), pp. 76-77.
10. UNODC, "UNODC Warns of Hemispheric Threat of Drugs to the Americas," Press Release, 9 October 2008, available at www.unodc.org/unodc/en/press/releases/2008-10-09.html.
11. UNODC, *World Drug Report 2010*, p. 233.
12. June S. Beittel, *Mexico's Drug-Related Violence* (Washington DC: Congressional Research Service, 27 May 2009), pp. 1-9.
13. Mike Whitehouse, "Canadian Recounts Escape from Pirates," *The Toronto Sun*, 11 December 2010.
14. UNODC, *World Drug Report 2010*, p. 233.
15. Wendy Stueck and Josh Wingrove, "Mexican Drug Wars Behind Vancouver Gang Violence: Police," *The Globe and Mail*, 3 March 2009.
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US Coast Guard personnel prepare to deploy from a rigid-hull inflatable boat as they approach a vessel of interest.

Commander Paul Forget assumed command of HMCS *Toronto* in December 2010 and led *Toronto* during its deployment to *Operation Caribe* in January and February 2011.

The Future Fight for Fish

Lieutenant-Commander
Ray Snook

Be fruitful and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea. Genesis 1:28

When the Chief of Naval Operations of the US Navy starts rattling off global fishing statistics without notes, it should attract attention – after all, what does the world’s most powerful navy care about fish. Yet, with barely a ripple of acknowledgement, that’s exactly what Admiral Gary Roughead did in a meeting with the *Boston Globe* editorial board last year. Noting the explosive growth of China’s fishing operations running in parallel with the growth of its navy, he also stated that the potential for conflict over commercial fishing is growing, with fishing fleets of many states now sailing around the world to plunder distant waters after depleting stocks at home.

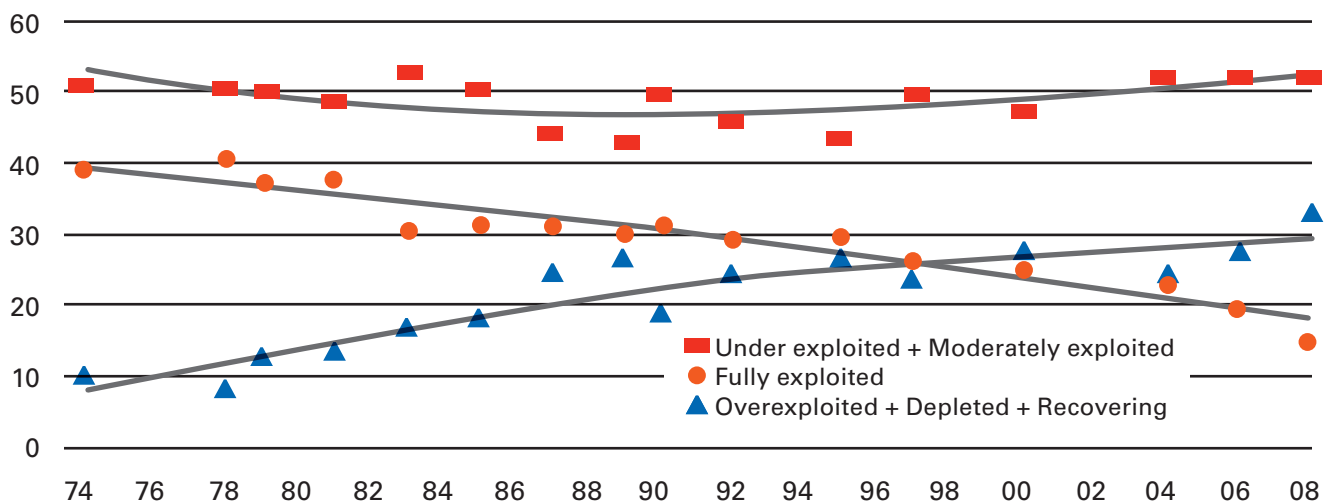
Canada has one of the world’s most valuable commercial fishing industries, worth more than \$5 billion a year and providing more than 120,000 jobs to Canadians. It is the economic mainstay of approximately 1,500 communities in rural and coastal Canada. With fishing a significant contributor to Canada’s economy, should we be paying more attention to Admiral Roughead’s statistics and the implications for Canada – a country all too aware of the consequences of a catastrophic collapse in fisheries – of competition for fish?

The 1982 United Nations Convention on the Law of the Sea (UNCLOS) establishes a general framework for the conservation and management of all living marine resources. Even though it has been strengthened by an additional agreement on straddling and highly migratory fish stocks, this general framework has not, however, prevented the precipitous decline of several key fisheries which, in turn, has threatened the stability of marine ecosystems. The Food and Agriculture Organization (FAO), an agency of the United Nations, says that 53% of the world’s fish stocks are already fully exploited and another 32% are either over-exploited or depleted.¹ Over-fishing is the foremost problem facing the world’s oceans. There has also been significant environmental degradation as a result of a toxic mix of pollutants, acidification and excessive noise caused by combinations of coastal development, farming practices, offshore drilling and the like, but it is illegal, unregulated and unreported fishing that is at the root of the decline of fish stocks. (Figure 1 illustrates the trends in marine fish stocks.)

Oceans are literally the source of life on earth. Alongside the rain forests, they shape the climate, cleanse the air that we breathe and feed the billions of people who rely on protein-rich seafood for their diet. The world’s seas have always been farmed for these resources, but as the bounty

Figure 1. Global Trends in the State of the World Marine Stocks since 1974

Percentage of stocks assessed



Source: Food and Agriculture Organization, United Nations, “The State of World Fisheries and Aquaculture 2010,” Rome, 2010, available at <http://www.fao.org/docrep/013/i1820e/i1820e.pdf>.



A trawler fishes off the coast of Gabon. Illegal fishing can threaten the livelihood of coastal communities.

of coastal waters has dropped, in large part due to unsustainable oceans management policies and the influence of a powerful alliance of corporate fishing fleets, technology has permitted the appetite of the world population to remain satisfied – at least until now. Humanity nowadays has the ability to harvest at will; we can fish anywhere, at any depth, for any species. As a result, unchecked, unrestrained and destructive methods, like the extensive use of large driftnets, have been calamitous for many fish stocks and their very existence is now severely threatened. Writing in the journal *Science*, an international team of researchers says that there will be virtually nothing left to fish from the seas by the middle of the century if current trends continue.² One of the scientists on the project, Steve Palumbi, from Stanford University in California, added “[u]nless we fundamentally change the way we manage all the ocean species together, as working ecosystems, then this century is the last century of wild seafood.” This is a prospect that is truly frightening.

UNCLOS establishes the right of states bordering the seas (coastal states) to create an exclusive economic zone (EEZ) extending up to 200 nautical miles from their shores. Within its EEZ, each coastal state enjoys full authority over fisheries, subject to general obligations to prevent over-fishing and to allocate surplus fish to other states. Beyond the EEZ are the high seas, where each state has the right for its nationals to fish, subject to certain important limitations, including the duty to conserve. By custom and convention, the high sea and its resources are considered to be governed by *res communis*, law of the commons. The sea belongs to everyone and the freedom to travel on and to use it is a sentiment still pervasive in our global cultural consciousness.

Principles of the high sea include:

- the sea cannot be misappropriated, possessed and ruled by any private person/entity or state; and
- the use of the high sea and its resources by any state must not impede the same usage by other states.

The 1995 Code of Conduct for Responsible Fisheries established by the FAO states that “[t]he right to fish carries with it the obligation to do so in a responsible manner so as to ensure effective conservation and management of the living aquatic resources.”³ However, there have been corporations and independent operators within the industry who have not lived up to this code of conduct and have successfully exploited loopholes and oversights, particularly where enforcement mechanisms do not match policies.

With controversial and wasteful shark finning – the process of cutting a fin off a shark to meet Asian demand for shark fin soup and traditional medicines – on the rise and a steady decline in plankton being observed,⁴ the marine food chain is under unrelenting assault from both ends and virtually all points in between. The full consequences to the finely balanced marine ecosystem remain unknown but it is doubtful it will result in any good news least of all for those who are reliant on the sea as a food source. Indeed, a recent study by the University of British Columbia concludes that the inexorable expansion into new fishing grounds during the last several decades has left only the relatively inaccessible waters in the Arctic and Antarctic remaining as commercial fishing’s final frontiers.⁵



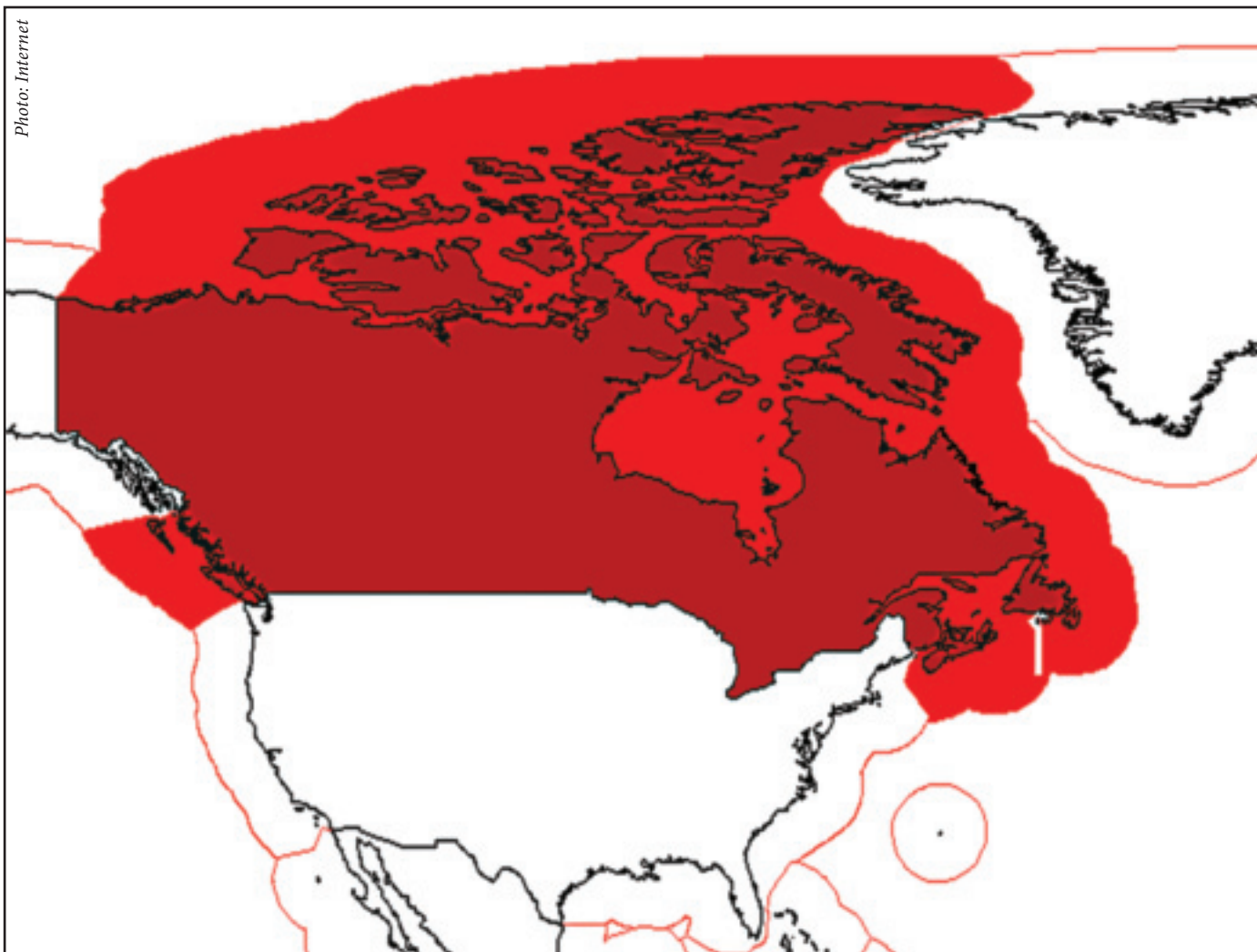
Photo: Wolcott Henry/Marine Photobank

A finned shark lies at the edge of a dock on Komodo Island, Indonesia.

Inevitably, therefore, Canada's north, which makes up over half of the total Canadian EEZ, and the waters adjacent to it will become not only the focus for new sources of energy products but also for the other maritime resource – fish. With equal certainty, the opportunities presented by the presence of fish in quantity will appear on the radar scopes (or sonar sets) of many interested parties, some legitimate and others more nefarious. History tells us that if we do not look after and protect what we have then others will come and take it. As the novelist Pearl S. Buck once wrote, “[h]unger makes a thief of any man.” Will Canada have both the capability and capacity to look after its interests, in this case fish stocks?

High sea fish stocks are managed by regional fisheries management organizations (RFMOs) composed of members from different fishing states. These regional regimes are responsible for the conservation and protection of fish stocks. RFMOs set and allocate quotas for the fish stocks under their management within the boundaries set out in their conventions. They are also responsible for enforcing their quotas through control, monitoring and surveillance activities. Canada belongs to several RFMOs and through the Department of Fisheries and Oceans Canada (DFO) it manages fisheries to provide Canadians with an economically viable and sustainable fishery resource. Historically, Canada's track record is not spotless in this regard – there are still only pitiful amounts of cod in the North Atlantic – but protection and conservation of fisheries resources are now a key focus of DFO. This is not just in Canadian waters, but also in international waters as the main international priorities of DFO are to stop over-fishing and to improve how the world manages high sea fish stocks.

Canada has taken a number of steps to indicate its seriousness about protecting and conserving fish stocks, and these steps affect a variety of federal departments from DFO (including the Canadian Coast Guard) to the Department of National Defence and Public Safety Canada (including the Royal Canadian Mounted Police). Thus, for example, in its 2004 National Security Policy the government of Canada pledged to strengthen marine security through the implementation of a six-point plan that included direction to “increase the Canadian Forces, RCMP, and Canadian Coast Guard on-water presence and Department of Fisheries and Oceans aerial surveillance.”⁶ In March 2005 DFO published Canada's National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing that laid out plans, programs and projects to address the problem. Complementing this, DFO also signed a Memorandum of Understanding (MOU) with DND to help with the task of monitoring, protecting and conserving fish stocks, and receives help from the Canadian Forces to execute it. In addition, the Canada First Defence Strategy (CFDS) states that “the Forces must be available to assist other government departments in addressing such security concerns as over-fishing,”⁷ and thus DND provides 90 sea days of support to DFO on an annual basis. Considerable success has been achieved in recent years; over-fishing by foreign vessels in the region has largely been halted and the Northwest Atlantic Fisheries Organization (NAFO) is becoming highly effective. Maritime forces also provide long-range air surveillance patrols – dubbed *Operation Driftnet* – to contribute to important multinational fisheries



Canada's Exclusive Economic Zone is depicted here, shaded in red.

enforcement activities in the north Pacific Ocean to protect high sea fish stocks from illegal fishing.

These measures have been introduced and formalized because, sprinkled over the last 30 years or so, there has been a string of fishing disputes, from many different quarters, that have tested Canadian resolve. Perhaps the so-called 'Turbot Crisis' in 1995 brought the issue of over-fishing most strikingly into focus, with images of the fishing vessel *Estai*, taken from a Canadian submarine, making headlines. Nonetheless, before this Canada had spats with the French via St. Pierre-et-Miquelon and a 'war' with the United States over fishing rights in the Georges Bank area, off Massachusetts. Since the Turbot Crisis there has been another dispute between American and Canadian fishermen over salmon fishing rights near the border between Washington state and British Columbia, and in 2010 Canada closed its ports to all fishing vessels from Greenland and the Faroe Islands in an escalation of a dispute concerning quotas for northern shrimp.

The navy's principal contribution, particularly that of maritime air, is a comprehensive surveillance capability, something for which maritime forces are ideally equipped.

Additionally, surveillance is a function that is conducted routinely anyway in building domain awareness. Naval forces also help establish a federal presence, which is coercive in stature, and a means to transport fisheries officers into areas of fishing activity where, if necessary, they will make arrests for violation of both domestic and international law. Legally, pursuant to the *Fisheries Act*, all officers and non-commissioned members of the Canadian Forces serving in Her Majesty's Canadian Ships and Submarines are designated as fishery officers. However, this authority is rarely used and the preference is for a DFO officer to be embarked. The process is well honed and coordinated but current capacity covers only the eastern north Atlantic and stretches of the Pacific. Canada's Arctic EEZ is some 3,232,544 km² and, by the admission of Chief of Defence Staff General Walt Natynczyk, logistically more difficult to operate in than even Afghanistan. Thus it is questionable whether a hard-pressed and budget-constrained DFO, even with assistance from its own Special Operating Agency, the Canadian Coast Guard, the Department of National Defence and a Provincial Airlines Limited (PAL) aerial surveillance contract, is equipped to monitor, control, survey and enforce such an area, in addition to

current commitments, without further enhancement.

As an example of why such vigilance is required, in 1999 the Chinese research icebreaker MV *Xue Long* arrived unannounced in Tuktoyaktuk with authorities unaware of its presence prior to that.⁸ In the 12 years since then, arguably, Canadian maritime domain awareness, assisted by space-based surveillance, mandatory reporting regulations and ship-tracking technologies such as Automatic Identification System (AIS) and the Vessel Monitoring System (VMS), has improved. Even with an enhanced monitoring capability, there will be those prepared to exploit the waters if the potential prize is sufficiently attractive. At the Tsukiji Central Fish Market in Tokyo in January 2011 a record \$396,000 was paid for a single tuna, up from the previous record of \$173,688 two years ago.⁹ This has alarmed conservationists and is indicative of the direction in which fisheries are heading; increased prices to match increased scarcity. With 240 different species of fish recorded in the Arctic and coupled with ever-diminishing ice, there is no doubt that the area will become a focus when other sources become exhausted and vessels go further afield to satisfy growing domestic demand. Enforcement is the key and a robust, highly adaptive and flexible response will be required in order to retain rights over Canada's indigenous fish.

Almost daily there are instances around the globe whereby fishermen come into conflict with authorities and the net result, pun intended, can be deadly. In mid-December 2010 a Chinese fisherman was killed in a clash with the South Korean Coast Guard. Of note is that China now accounts for nearly a quarter of the world's fishing, capturing 17 million tons annually, as much as the next three countries combined.¹⁰ In January 2011 an Indian fisherman was allegedly killed during a confrontation with the Sri Lankan Navy. In the summer of 2010 in a scenario reminiscent of the Cod Wars of the 1970s, tensions arose between the United Kingdom and Iceland over the latter's unilateral decision to increase its mackerel quota and a 'Mackerel War' was briefly on the cards.

It has been argued that the piracy off the Horn of Africa has its roots in the issue of over-fishing in Somali waters. When the government of Somalia collapsed in the 1990s, the combination of rich fishing opportunities and a complete inability of the government to police the country's waters drew fleets from countries far and near. This may have helped worsen the instability by depleting stocks and denying the local populace a source of livelihood. According to some accounts, Somali fishermen began capturing fishing boats in their home waters as an angry protest against the assault on their livelihood. This



Photo: DND

A CP-140 Aurora overflies a fishing vessel during *Operation Driftnet*.



HMS Bacchante was rammed by an Icelandic patrol vessel in the 1970s during the 'Cod War'.

soon mutated into the piracy we see today. Faced without an income-generating resource and going hungry in the process, local Somalis took the most convenient and lucrative recourse open to them. Although over-fishing was not the sole cause of Somali piracy, it is undeniable that the pillaging of local fish populations, largely by foreign vessels, played a key role.

The imperative to take action in the Arctic is not immediate – there are no fleets of foreign fishing vessels sailing into the Beaufort Sea. That does not mean, however, that we should not be preparing for the day we must take action. The answer to the question of whether Canada will have the capability and capacity to act lies with the Arctic/Offshore Patrol Ship (AOPS) that the navy has on the books to be ready for initial deployment by 2015. A non-combatant, constabulary ship, one of the primary tasks of the AOPS will be to assist other government departments, on a routine basis, in meeting various national mandates in such areas as fisheries protection, drug interdiction, illegal immigration and the support of oceans management by watching, detecting and reporting hazards to the marine environment and participating in environmental emergency response.¹¹ Undoubtedly an adjustment to the DFO/DND Memorandum of Understanding will be required in terms of number of sea days and aircraft hours committed. However, the ability of the AOPS to operate a helicopter and the capacity to embark additional personnel for mission-specific reasons will enable it to undertake the task, though servicemen will likely be called upon to act as fisheries officers. Furthermore, given its considerable experience in maritime interdiction operations, there is little doubt that the Canadian Navy could execute the role with aplomb. Let's not forget that the need for a force to protect Canada from American interests in Canadian waters a century ago was a factor in the creation of the Canadian Navy in the first place.

In summary, illegal fishing in Canadian waters is a threat to the country's livelihood and well-being and must be incorporated into inter-agency planning. A number of options exist for policy-makers considering future safeguards. With the predicted opening up of the Arctic, there will be a vast new maritime area which is, by all accounts, filled with fish that a hungry world will want. Once they are built, the Arctic/Offshore Patrol Ships will be valuable in supporting other government departments in the fulfilment of their law enforcement and regulatory mandates throughout the EEZ and will help ensure that national fish stocks are sustained. 🍷

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After 32 years service in the Royal Navy, Lieutenant-Commander Ray Snook is currently with the Directorate of Maritime Strategy, National Defence Headquarters, Ottawa, as a member of the Canadian Forces.

HMCS *Onondaga* Makes its Last Voyage

Annemarie Bourassa

Very few people are aware that Canada has been employing submarines for nearly 100 years (although we have not owned them continuously!). However it was only during the Cold War that Canada added a permanent submarine force to its navy. The Cold War, which divided the world into spheres of interest, was marked by an intensive arms race leading countries to invest in military technology and acquiring offensive and defensive weapons. Soviet submarines were cruising near (and sometimes *in*) Canadian waters and the country had to equip itself for its defence.

It was in this context that Canada acquired from the United States two submarines for service on the West Coast: HMCS *Grilse* from 1961 to 1969 followed by HMCS *Rainbow* from 1968 to 1974. Furthermore, the Canadian government contracted the construction of three *Oberon*-class submarines in Great Britain. When they arrived, the submarines were named *Ojibwa*, *Onondaga* and *Okanagan*, and their home port was Halifax, Nova Scotia.

HMCS *Onondaga*'s construction started in 1964. The submarine was launched on 25 September 1965 and was commissioned on 22 June 1967 during Canada's Confederation centennial celebrations. From this start, HMCS *Onondaga* went on to become the submarine with the longest active lifespan in the history of the Canadian Navy – it was in service for 33 years. *Onondaga* logged more than 500,000 nautical miles, the equivalent of circling the globe 23 times, half of it under water. It visited more than 53 ports in 12 countries and had 25 Commanding Officers throughout her career.

Like most Canadian ships, throughout the Cold War HMCS *Onondaga* carried out patrol missions and exercises at sea, exercises that could involve dozens of ships and aircraft from several NATO countries. During those exercises, submarines were tasked to 'sink' targets while avoiding detection by surface units. Even as it participated in exercises with a variety of Canadian and allied



HMCS Submarines *Ojibwa*, *Onondaga* and *Okanagan*.



Onondaga nears the end of a seven-day tow from Halifax to Rimouski in July 2008.

surface ships, it was clear that the career of a submarine is very different from that of a surface ship. In particular, a submarine requires much more maintenance and *Onondaga* was no exception. In fact over its 33 years of service, it spent more than 10 years undergoing refits and major work periods. A submarine is a very sturdy machine but it is also complex and sophisticated. It is therefore crucial to ensure a regular maintenance and repair schedule of all its components and structure. A submarine major refit – and *Onondaga* had three major refits over its lifetime – usually takes two years during which all components are taken apart, inspected and often replaced before being reintegrated during the reconstruction phase.

HMCS *Onondaga* was the last Canadian *Oberon*-class submarine in service. Its sister boats, *Ojibwa* and *Okanagan*, were decommissioned in 1998. You may wonder what happened to *Onondaga*. It was decommissioned in July 2000, and the new *Victoria*-class submarines were brought into service. In this article I will outline how *Onondaga* went from serving as a working submarine to its current position as an attraction at Site historique maritime de la Pointe-au-Père (SHMP) near Rimouski, Quebec. SHMP was founded in 1980 by divers who dove the wreck of *Empress of Ireland* which sank in the St. Lawrence River in May 1914 with a loss of over 1,000 lives. SHMP began with artefacts and stories from that wreck. Since that time, the site has added a focus on the Pointe-au-Père Lighthouse Station and *Onondaga*, and has become a major tourist attraction.

Birth of the Project

When *Onondaga* was decommissioned in 2000, Louis Hébert, a friend of SHMP, quipped that SHMP should get the submarine and bring it to Pointe-au-Père. The idea slowly took root among the members of the direct-

ing staff of the corporation. Following some enquiries we discovered that *Onondaga* was to be relocated near the future Canadian War Museum in Ottawa. A study about the cost and feasibility of relocating the submarine had been undertaken, and found that it was possible and not prohibitively costly. However, once the site for the museum was changed from Rockcliffe to LeBreton Flats, which was approximately 80 feet higher than the original location, the Canadian War Museum decided that the cost had at that point become prohibitive. In 2003 the War Museum gave up its rights on the submarine which was then placed under the responsibility of Crown Assets Distribution.

Following its own feasibility study and after confirming that various organizations which could potentially finance this type of project were interested, SHMP presented a purchase offer in the amount of four dollars! Why four dollars? Well, based on government rules, the submarine could not be given away for free, so some money had to be offered. As a result, the four permanent employees present at the office of SHMP that day agreed to invest the colossal amount of one dollar each. Surprisingly, the offer was accepted by Public Works and the news was officially announced at a press conference 15 November 2005 involving Commander Larry M. Hickey, one of *Onondaga*'s 25 Commanding Officers. Not surprisingly, when news of this got out, there was some attention to the fact that a submarine could be purchased for four dollars. A Halifax newspaper, for example, ran an article with the headline "A Canadian submarine bought for less than a 6-inch submarine sandwich at Subway." This marked the start of a great but difficult adventure.

Buying a submarine for four dollars sounds like a good deal but it cost much more to tow it from Halifax to Rimouski, set it up in Pointe-au-Père and transform it into the only

submarine museum in Canada. After having purchased the submarine, SHMP had to begin searching for funds to finance this three million dollar major regional project.

Following huge effort and the premature greying of some hair, one of the major potential sponsors finally decided to participate. On 16 May 2008, Jean-Pierre Blackburn the then Minister responsible for the Economic Development Agency of Canada, travelled to Pointe-au-Père to announce a contribution from the federal government of \$1.6 million into the project. The Quebec government soon followed with its own contribution. Work could now start on preparations to receive *Onondaga* at an old pier that had recently been strengthened.

Like all the stages of the project of getting *Onondaga* settled into its new home, towing the submarine proved to be difficult. After several delays, it finally began on 11 July 2008. It was not a good beginning as the tow line broke right after departure from Dartmouth. Then, weather conditions forced an unscheduled stop in the Strait of Canso. *Onondaga* finally made it to the Port of Rimouski on 17 July 2008 under the watchful eyes of a large crowd.

The next step involved getting the submarine ready for towing from Rimouski to Pointe-au-Père – a distance of about 10 kilometres – scheduled for the beginning of August 2008. This was to take place during a period of high tides as the towing slip had been designed to use the



Photo: Jean Albert

Crews work in heavy fog to prepare *Onondaga* for the final leg of its journey.

In the meantime *Onondaga*, which was still alongside in Dartmouth across the harbour from Halifax, had been maintained by the Department of National Defence (DND) to prevent its deterioration during this long period of inactivity. Following the official announcement by Minister Blackburn, a team from SHMP went to Halifax to plan the 1,000 kilometre tow to Rimouski. By chance, and as luck would have it, British-based Windfall Films Production Company started filming an episode of the series “Monster Moves” to be aired later on Discovery Channel. This meant that the move, in all its troubles, was recorded for posterity.

tidal effect to reduce the weight of the ship (1,400 t) as much as possible. On 31 July an unusually strong wind and rain storm forced the operation to be delayed. To gain more leeway and to increase the opportunities to carry on the operation, the towing slip was modified in order to make use of the 14-foot high tides instead of waiting for the higher but less frequent 15-foot tides. The new target date was now the end of August.

On 29 August *Onondaga*, with the tow boat *Épinette II* leading the way, left its berth in Rimouski for Pointe-au-Père. However, the sudden rupture of the tow line led

to some cold sweat for the team aboard the submarine. Happily that was fixed, and the towing operation soon recommenced. Again, a large crowd was on the shore at Pointe-au-Père to await the submarine. On arrival, the boat was temporarily anchored and positioned to be hauled out of the water that night at high tide. Watching this massive submarine of nearly 1,400 t being hauled on to the shore by giant tow trucks was quite a spectacular show. In spite of the boat's imposing size, the operation required the utmost precision. As happens frequently in this part of the country, a fog bank suddenly rolled in complicating further an already complex operation.

Very soon the outgoing tide forced a recess until the following day. After the second night the boat had advanced 37 metres or one-third of the total distance. Having made this much progress, however, the work abruptly came to a halt. The following morning daylight uncovered a disheartening scene. While everyone was resting after two nights of intense work, the submarine had slowly keeled over on to its starboard side. The sole witness, the "Monster Moves" camera which had been left on site, recorded every second of the drama. The problem originated with an error of alignment of the boat on to the chariots of the towing slip when the fog set in on the first day. The misalignment precluded the proper positioning of the submarine on the fifth and last chariot. When the water receded with the outgoing tide, the weight distribution caused the boat to lose its balance.

This was a problem that had to be corrected quickly. Time was short, fall was approaching and, with it, the perspective of high tides combined with winter storms! Before the boat could reach its new home, it had to be straightened up. A first tentative attempt failed in mid-September but it was decided to give it another try. Unfortunately a second attempt at the beginning of October also failed. Winter and ice formation were now looming on the horizon. There were two periods of high tides left in October and November, but the return of the submarine to Rimouski for winter was becoming more and more probable. The security of the boat, the conditions of its wintering where it was in Pointe-au-Père and, above all, the safety of the workers, everything had to be taken into account.

Even returning the submarine to Rimouski first required it to be returned to an upright position. Work recommenced and in mid-October the boat was finally set right. The tow boat *Épinette II* was waiting to pull *Onondaga* out to sea and take it under tow back to Rimouski. It was a heartbreaking decision for the team members because it meant they would have to postpone the opening of the submarine to the public to the 2010 season. Having made the decision to move *Onondaga* back to Rimouski, however, the boat, which at first was reluctant to come out of the water was now refusing to budge to go back into the water. While trying to pull the boat back into the water, the tow line broke and the submarine again fell on to its starboard side in front of a crowd of spectators.



Photo: Jean Albert

Hauling *Onondaga* ashore in Pointe-au-Père proved a long and arduous task.

It is difficult to forget the feelings of frustration and helplessness of that day, 17 October 2008.

The following day, at low tide, the team went on to the slip to check the extent of the damages but quite a surprise was awaiting them. While trying several times to pull *Onondaga*, the tow boat had caused the submarine to shift position on the rail, now making possible what had been impossible until then. The boat was now lying across the hauling ramp. It was therefore feasible to straighten it up, reposition it and resume hauling, this time on to dry land!

By this time, numerous repairs had to be carried out on the towing slip in order to get the job done. The season's worsening weather made the job more difficult. Finally, notwithstanding many obstacles, the hauling operation restarted at the end of November. On 30 November after three strenuous but successful days, the submarine had progressed close to 30 metres. Victory at last! At the end of the third day, one of the chariots carrying the boat fell off its rollers but luckily remained on the rail. The boat was still a few dozen metres short of the original objective, but it was decided that perhaps the objective could

be changed. The submarine was resting in a good position, at a correct angle and demanding to be left alone! It was therefore much safer to leave it where it was even if it meant making some adjustments to the layout of the site. At last, this great adventure had almost reached its closure.

Another chapter was about to begin! Soon, the first visitors would cross the gangway leading them to the wonderful and mysterious submarine world! But there was still a lot to be done! Over the next months much work was done to make *Onondaga* at home. The boat was opened to the public on 13 June 2009. Visiting a submarine is not a very common event. The SHMP team did its best to give visitors the opportunity to discover the exceptional way of life of an exceptional group of people, the submariners.

As far as the physical layout is concerned, the submarine is fully fitted, all of its equipment is onboard and several pieces of equipment are working, based on simulated models created by Multi-Électronique Inc. of Rimouski. Visitors can explore a control room that is similar to what it was throughout the submarine's operational life. Some



A visitor listens to an audio-guide in *Onondaga*'s engine compartment.



Photo: Serge Guay

The *Onondaga* pavilion at Site historique maritime de la Pointe-au-Père.

modifications were made to ensure the safety and comfort of visitors, including gangways and doors for easier access. Five of the seven masts (including the two periscopes) remain in the hoisted position for an improved visual effect.

For the visit itself, each visitor is given an audio-guide. Throughout the tour of *Onondaga*, the individual listening device allows the visitor to hear crew members describing various aspects of the vessel, how it functioned, its technologies and the daily routines onboard a submarine. The content of the audio-guide is divided into 23 subjects related to numbered stations identified throughout the boat. Fortunately SHMP was assisted by several submariners without whom it would not have been possible to obtain the information necessary for the production of the audio-guide. Visitors enter the submarine through a gangway to the 'After Ends' compartment and go the length of the boat to the Forward Torpedo Room, along the way discovering HMCS *Onondaga*, the only submarine museum in Canada.

Success

In 2009, the first season that *Onondaga* was open for viewing, 92,000 visitors explored this warrior of the Cold War era. In 2010, the number was 80,000 visits. The

visitors originate from all walks of life and come from various areas. Their comments have been very positive. The tour of *Onondaga* is set up to convey the feeling of going through a functioning submarine!

At last, after several years of hard work, the SHMP team can be rightly proud of a job well done. Instead of being sold for scrap or sunk, we have saved a piece of Canadian history. The navy often claims that Canadians suffer from 'maritime blindness,' because they don't appreciate how Canada is affected by and relies on the oceans. The navy's work is undertaken at sea far from view – and, even more than surface ships, submarines are beyond public view for their working lives. Perhaps having *Onondaga* on display can help cure maritime blindness and allow a curtain to be drawn back on what the navy does. As well, the economic spin-off from the project means an entire region is benefiting. 🍷

Annemarie Bourassa is the Assistant Director at the Site historique maritime de la Pointe-au-Père near Rimouski, Quebec.

A Somali Solution to Somali Piracy

Dave Mugridge

In the decade since 9/11, the Western world has seen firsthand the limitations of its perceived military and technological dominance. Extended campaigns in Iraq and Afghanistan have not brought about victory. In a maritime environment, I would argue that Somali piracy is now a problem which similarly confounds international naval forces, defies Western politicians and costs the global economy some \$7-12 billion a year. So why haven't we learned from the Iraq and Afghanistan campaigns, from the lessons enshrined into doctrine by General David Petraeus – that we must support a local political and socio-economic solution to an otherwise intractable problem?



The Somali delegation to a Counter-Piracy Conference in the United Arab Emirates, 19 April 2011. Professor Muhyadin Ali Yusuf, Chairman of the National Anti-Piracy Task Force, is pictured at left.

Just like Iraq, Afghanistan, southern Lebanon, or the Ivory Coast, Somalia is not a place where an imposed foreign solution will create the conditions necessary to address a problem that is having international implications. Nor will an imposed solution foster sustainable development. Somalia is not a country which can be fixed only from the sea. The solution to the piracy born and bred in Somalia is on the land. So why aren't we focusing on local solutions that address the root of the piracy, like we have been forced to accept in both Iraq and Afghanistan?

I would argue that the answer is that nobody is prepared to support the Transitional Federal Government (TFG) of Somalia and its advisors, as they struggle with the very survival of their failed country.

The TFG was established in 2004 with support of the United Nations, the European Union, the African Union and the United States. It receives virtually all of its funding from the international community. It consists of a President and Prime Minister and a Transitional Federal Parliament. It is a *transitional* government as it is not in control of the country, indeed it is still attempting to gain control of the capital city of Mogadishu. The TFG has recognition outside the country as the official government, but is not yet accepted inside the country. The government has been criticized widely for both its ineffectiveness and its corruption. However, the Cabinet that was formed in November 2010 has been seen as an improvement over previous iterations, and there is some hope that it can function more effectively.

Despite problems of legitimacy and corruption, I would contend that TFG politicians deserve our support as they risk their lives daily to suppress piracy and subdue Islamic fundamentalism manifested in Al Shabab-based terrorism. If we do not support them, we are turning our backs on those who have stepped up to the plate and are prepared to challenge the forces of murder and terrorism in this failed country. If we turn our backs, it will be because of a North American aversion to another 'Black Hawk Down' – reference to the downing of several US helicopters and the killing of 19 American servicemen in Mogadishu in 1993.

Before I present an interview with two officials who are attempting to create local solutions to Somali piracy, I would like to provide some background to the relevant domestic Somali institutions.

The Domestic Background

We may think that the West is paying the most to counter the problem of piracy – costs measured in terms of ransoms paid, maintaining warships off the coast of Somalia, increased insurance on transport vessels and lost time in transit. But the cost of piracy disproportionately falls upon the struggling economies of central and east Africa. Some of the poorest countries in the world are dealing with the real costs associated with combating piracy. Somalia in particular is a poor country, with few



US Navy helicopters respond to a distress call in March 2011 from a vessel in the Arabian Sea indicating it had been boarded by pirates.

employment opportunities and a significant proportion of the population reliant on external food assistance. Piracy affects the ports of Mombasa (Kenya) and Dar es Salaam (Tanzania). It makes trade more difficult if ships are being pirated regularly in the area. This reduces the traffic at these ports, and a reduction of trade entering and leaving the ports has regional effects. The cargo that arrives in Mombasa and Dar es Salaam is not destined just for Kenya and Tanzania, but also for inland countries such as Uganda, Democratic Republic of Congo, southern Sudan, Rwanda and Burundi.¹ These ports account for approximately 20% of sub-Saharan Africa's container traffic.² And it is not just trade that is affected – even the region's telecommunication with the outside world is threatened by piracy because the fibre optic link that connects South Africa, Tanzania, Kenya, Uganda and Mozambique to Europe and Asia lies under Somalia's waters, making repair or refurbishment impossible.

UN Secretary-General Ban Ki-Moon called for the international community to support the government it had a hand in creating. In a statement issued on 4 May 2011, he said "[t]he international community must keep its end of the bargain." The international community must help the transitional government or it will fail. As Secretary Ban said, "[t]he Transitional Federal Government urgently needs assistance for Mogadishu's stabilization, recovery and reconstruction."³

Like the UN Secretary-General, I have begun to believe that local solutions must be given more attention.

My conversion to this belief came during a telephone interview on 1 May 2011 with Professor Muhyadin Ali Yusuf, Chairman of the National Anti-Piracy Task Force (NAPTF) of the TFG, and his chief advisor, Sam Mattock, of Halliday-Finch. This interview was conducted for *The National*, an English language newspaper published in the United Arab Emirates. In the course of my discussion with these men, I saw two men intent upon remedying a problem of global magnitude through the sparse local means at their disposal.

The TFG is acutely aware of its presentation in the Western media as corrupt and ineffectual but given the appalling state of the country it inherited, it isn't surprising that there is work to be done. And, indeed, is the Somali TFG any worse than the fledgling regimes supported in the transition to democracy in both Iraq and Afghanistan? And as history would suggest, in times of crisis you can't always choose your bedfellows. Most of the people who make up the TFG and their advisors are Somalis who realize that unless they act, the situation in their home country will continue to be hopeless. They are predominantly former members of the diaspora who have returned to Somalia to assume a role in the leadership of their country.

Established by the Office of the Prime Minister on 13 April 2011, the National Anti-Piracy Task Force is an attempt to create a comprehensive, cross-government response to the maritime crisis that continues to frustrate the international community response. Its mandate is to eliminate piracy from Somalia, both on land and at sea,

Table 1. Some Numbers About Somalia and Piracy

Total population in need of emergency assistance in 2011	2 million people
Internally displaced population in Somalia	1.47 million people
Somali refugees in east Africa and Yemen	658,773 people
Total USAID humanitarian assistance to Somalia	\$31,667,075 (US FY 2010)
EU's contribution from 10 th European Development Fund	EUR 215.8 (approximately \$306 million USD)
Deployed operating costs of frigate/destroyer off Somalia	\$125,000-\$150,000 per day per platform

Source: USAID Factsheet 1, 11 January 2011; European Union Naval Force Somalia (EUNAVFOR), 11 March 2011.

in cooperation with national and international agencies.⁴ Like all arms of the Somali government, it is dependent upon international aid for financial support. The TFG has requested financial assistance from a variety of international organizations, including NATO, the UN Office on Drugs and Crime (UNODC), the UN Development Program (UNDP), the European Union, the International Maritime Organization (IMO), and the Intergovernmental Authority on Development (IGAD). The budget of the task force would be start-up and first-year costs of \$52 million and then \$27 million annually thereafter. This money, however, has yet to appear and without it any possibility of delivering a land and littoral-based local solution is on hold.

The purpose of the task force – assuming it opens its doors – is, among other things:

- to achieve alignment and give a clear role to the different ministries which play a part in counter-piracy for the country;
- to achieve alignment between the TFG and Somali stakeholders to combat piracy;

- to coordinate and organize all anti-piracy activities at a local and international level;
- to mobilize religious groups, elders and other community groups to fight against piracy and sea robbery from the ground; and
- to assist in coordinating the international naval response with Somali maritime police operations (when they are established).

Given the enormity of the task of ending piracy, the task force has advisors provided from outside the country. Providing assistance in this venture is a security company called Halliday-Finch, which is based in Nairobi, Kenya. It is a risk management consultancy, which provides security services and training to businesses and government and non-government agencies anywhere in Africa. In Somalia, Halliday-Finch is trying to help the TFG to mitigate the political, security and financial risks inherent in tackling piracy. To the skeptical this is another private security company looking to make a quick buck, but in the absence of Western political and military assistance on the ground in Somalia, who else can the TFG turn to?



Photo: NATO

*The command staff of Standing NATO Maritime Group 1 welcomes officers of the Puntland (Somalia) Coast Guard aboard the Portuguese frigate, NRP *Alvares Cabral*.*

Interview

DAVE MUGRIDGE

Professor, what is your understanding of what the pirates are doing?

PROFESSOR MUHYADIN ALI YUSUF, CHAIRMAN OF NAPTF

Piracy is destroying the fabric of the rich Somali culture and our local way of life. Their actions are making our own people victims of their criminal activity and only a very small percentage of Somalis benefit from it. Initially they sailed to protect their traditional fishing grounds from over-fishing and toxic waste dumping, but now they are purely motivated by profit and furthering their illegal activities. This is now a fully-fledged criminal business. Illegal money has become the dominant force amongst the clans, which worsens the chances of stability in Somalia and is costing the global economy a huge sum of money and possibly Somalia its future. The pirates' actions have destroyed any foreign trust in our country, so it is now impossible to secure the aid we need to rebuild our country along our traditional cultural lines and beliefs.

DAVID MUGRIDGE

What is Halliday-Finch looking to do with the NAPTF?

SAM MATTOCK, HALLIDAY-FINCH

We have a five-year strategy with the TFG and the NAPTF to mentor a maritime police force as a first step of delivering a fully functioning and effective national coast guard. We will use our experience in military and security training to provide Somalia with an indigenous solution to its current maritime security malaise. Halliday-Finch is a proven ethical African partner in this venture and we believe in complete transparency when dealing with international backers to further this project. For example, KPMG International will provide overall management of all funds associated with this project. We have deliberately aligned our approach to that of the UN Development Program Somalia and will work with them and others to develop an initial 500 strong force to take the fight to the pirates. We are proud and fully supportive of the vision and comprehensive approach taken by the NAPTF, the TFG and it is wonderful to see all of Somalia's states supporting this initiative.

DAVID MUGRIDGE

What effect do you believe you can have on the pirates and what direction have you received from the TFG?

SAM MATTOCK

We have set ourselves an ambitious measure of success, which is to reduce the incidence of piracy off the Somali coast by 50% by October 2012. Our combined strategy is



Professor Muhyadin Ali Yusuf talks about piracy and the National Anti-Piracy Task Force.

to form a security blanket that acts like Somali 'chain-mail' around the coast. Inland, we will form a solid and trained informer network reporting into a central control room. From the coastline out to 12 nautical miles, our men will act upon information from the central control room – this will create a more robust maritime intercept capability. The final strategy is to link into the domain of the international naval coalition so as to choke off piracy at sea, while concurrently reducing illegal fishing, toxic waste dumping, illegal human trafficking and the use of the seas by terrorists to receive their weapons. We know that the pirates will try and circumvent our strategy but with proper levels of foreign assistance and well-trained and equipped Somali men and women we are confident that by the end of 2016 we will have control of Somalia's territorial waters and its exclusive economic zone.

DAVID MUGRIDGE

How can you best accomplish this task?

PROFESSOR MUHYADIN ALI YUSUF

By having trained Somali personnel at sea delivering security to their country, their people and protecting a sustainable fishery that will contribute to their national economy for years to come. We acknowledge we need external financial support but we are not alone in that as Greece, Ireland and Portugal have demonstrated these are tough times for small economies. Our Somali solution gives the international community the benefit of our local

knowledge of piracy and pirates, their tactics and deep understanding of their culture which allows us to tackle the pirates from within. This, I believe, is the most effective way to deal with this growing problem.

With early foreign financial support and a fully functioning licensed fishery we can start to rebuild Somalia and ensure it can re-join the international community as a success, not a languishing failure. Establishing a fully functioning fishing industry is a critical component of our overall vision as it not only provides employment but also much-needed revenue. Once we can control the fishing we believe there will be annual revenues of between \$300-750 million for Somalia.⁵ This would go a long way to support sustainable and secure development of our country.

DAVID MUGRIDGE

What resources do you need and when do you need them?

SAM MATTOCK

Our campaign plan calls for just under \$52 million of initial funding. This will support the start-up costs, buy the necessary assets and have the funds readily available to ensure consistent payment to our people. Future assets, assuming that external funds allow this, would include the following platforms:

- 3 aircraft for coastal spotting purposes;
- 2 forward operating base (FOB) ships for deployment/area sea patrol;

- 20 rapid intercept boats deployed from the FOB ships;
- 3 bases ashore with communication centres; and
- 1,500 uniformed and highly trained personnel with support equipment and vehicles.

In years two to five we would see the operating costs drop to \$27 million per annum and become financed from the fishery licensing, in a similar manner to how the fishery off the Falkland Islands is managed for sustainability.

DAVID MUGRIDGE

What rules and regulations will you operate under?

PROFESSOR MUHYADIN ALI YUSUF

The only effective way to counter piracy is to act before they leave the shore, whilst they are preparing for their illegal expeditions. Countering piracy will also include tracking down the financiers of piracy and stopping ransom payments. The TFG believes that any meaningful intervention should be a holistic, systematic partnership based on engagement with all relevant stakeholders while respecting human rights and also being aware that children are being utilized in acts of piracy so our judicial system must cater for this as well. The existing Somali institutions will have to play equal and comparable roles to that of the international community in combating piracy. We will do what it takes, such as get our anti-piracy legislation before the Parliament and supported by a special committee to ensure it becomes law. We also have to adapt our legal framework to the changing situation.



Photo: NATO

Somali fishermen off Mogadishu, with the Dutch frigate *De Ruyter* in the background. A functioning fishing industry is a critical component of a Somali solution to piracy, says Professor Muhyadin Ali Yusuf.



Officers of the Puntland Coast Guard leave the frigate *Alvares Cabral* after meeting with NATO officials.

The Somali Maritime Security Bill is currently being considered by the Prime Minister. This bill will ensure all matters of security at sea are addressed, such as piracy, toxic waste dumping, illegal arms, narcotic and human trafficking as well as illegal, unreported and unregulated fishing, port and ship security by adopting the ISPS [International Ships and Port Security] Code in its entirety. It is necessary for our maritime policemen to be able to enforce the laws of the state and that those laws are aligned with those of the international community standards as advocated by the UNODC [United Nations Office on Drugs and Crime] and INTERPOL [the International Criminal Police Organization].

SAM MATTOCK

We see it as essential that due process of law is followed and those Somalis suspected of piracy are detained, tried and if proven guilty incarcerated in Somalia rather than foreign countries. We would also like to investigate using a floating prison barge to act as a rehabilitation centre for those convicted, so that when they re-join their communities they have been equipped with worthwhile skills to contribute to nation-building rather than murder and pirating. Such a prison barge would contribute most effectively to our comprehensive strategy and allow for foreign oversight of the program as we move forward. We see this as an equivalent of Saudi Arabia's highly successful de-radicalization program which has successfully turned young men away from terrorist violence.

Conclusions

In conclusion, for less than half of the financial aid given to Somalia by the United States and European Union in 2009, we could perhaps turn a corner against piracy. Naval task forces have been stationed off the coast of Somalia for some time now, and yet the incidence of piracy is still worryingly high. Is it not time for a domestic on-land approach to be supported by the international community and receive the leg-up it needs to start providing a local solution to a problem that costs the world billions? If piracy costs \$7-12 *billion* to the global economy annually, funding the annual budget of the NAPTF (estimated at \$27 *million*) to stop it seems like a wise investment. The G8 and the international shipping community should support this venture as part of their contribution to countering piracy. But – and this is a big but – financial due diligence needs to be guaranteed. 🇺🇸

Notes

1. Christine Mungai, "Ransom, Naval Operations Push Piracy Costs to \$12 bn," *The East African*, Kenya Edition, 2 May 2011.
2. *Ibid.*
3. UN Secretary-General Ban Ki-Moon, statement, 4 May 2011, available at www.un.org/news/dh/pdf/english/2011/04052011.pdf.
4. Office of the Prime Minister, The Transitional Federal Government of the Somali Republic, 13 April 2011, Ref XRW/00000595/04/11. The office of the Anti-Piracy Task Force was opened in July 2010.
5. EU humanitarian assistance is still less than illegal fishing was costing Somalia.

Dave Mugridge is an independent maritime security consultant and holds a research fellowship at the Centre for Foreign Policy Studies at Dalhousie University.

Projecting Shipbuilding Success

Janet Thorsteinson

Like an aircraft in flight, a modern warship at sea is a set of systems all moving in the same direction. Those systems must work together to achieve their purpose, but that functionality depends on project management to create and sustain an integrated platform. Project management mediates among the sailors who will sail on these ships, the taxpayers who pay for them and the companies that build, equip and sustain them.

The National Shipbuilding Procurement Strategy (NSPS) calls for literally dozens of ships to be built over the next three decades in a program which has been estimated to cost between \$33 and \$50 billion. The construction of a new government fleet includes:

- Offshore Oceanographic vessels
- Fisheries Science vessels,
- a Polar Icebreaker,
- Joint Support Ships (JSS),
- Arctic/Offshore Patrol Ships (AOPS) and
- Canadian Surface Combatants.

This construction will call for unprecedented program management capability. The *Halifax*-class Modernization (HCM) project, a mid-life refit of the Canadian Navy's 12 frigates may be an early test of those skills. A senior defence official has said privately that HCM is the highest risk and most complex defence procurement Canada has ever undertaken. The first of the class to be launched and the first in the HCM program, HMCS *Halifax*, went into

the Halifax Shipyard October 2010. Lockheed Martin Canada will carry out \$2 billion worth of work on the combat system integration systems and in-service support of the command and control system. Five frigates will undergo modernization at Seaspan's Victoria Shipyards in British Columbia and seven will be done in Halifax Shipyards, with work to be completed by 2017.

The update project is extremely complex. In a modernization, whole sections will remain the same, so the project must work around or remove and re-install existing equipment, the so-called 'legacy systems.' This means that new systems and equipment must work and communicate with the old systems and equipment. In addition to Lockheed Martin Canada, other contractors will be working on other parts of the ship, like the hull and the propulsion system. As Tom Digan, President and General Manager of Lockheed Martin, noted "[y]ou can imagine that in the shipyard you have two different contractors trying to pull cables and put equipment in at the same time, as well as coordination with the fleet that is responsible for putting in legacy equipment and bringing it back to life again."¹

The inevitable technical, personnel, administrative and legal clashes all end up at the Project Management Office where they must be resolved. This means that you must have capable personnel, who are willing to make decisions that allow the project to proceed and not allow minor details to derail the project. The question is whether, given the long time since such a large project has been undertaken, the right project management capabilities still exist.

Building or modernizing a ship is not an easy process – and this is true for everyone, not just Canada – and even more so when the process is sporadic and personnel experienced in managing such projects have retired or moved to jobs in the private sector. In 2007, Martin Shadwick at the York University Centre for International and Security Studies, wrote,

All warships are exercises in compromise, but the very nature of the multi-role JSS and A/OPS will require some particularly challenging, and potentially divisive, design and cost-effectiveness trade-offs. HCM/FELEX will also demand some tough choices. These challenges will be rendered even more formidable by the fact that Canada's public and private sector project management, naval architecture, systems integration, shipbuilding, and related skill sets are now at comparatively low ebb. These skill sets can be resuscitated, but it will



HMCS *Halifax* enters Irving Shipbuilding's Halifax Shipyard for its *Halifax*-class modernization refit in September 2010.

require ingenuity, patience, sustained funding, and no small injection of foreign expertise.²

Today, he says, although the ship projects may have changed, he would stand by that assessment.

Vice-Admiral Dean McFadden, Chief of the Maritime Staff, said in 2010 that he was trying desperately to improve how Canada builds its military ships. The problem, as he describes it, is that “[w]e build them, we get out of the business for a generation, we try to get back into that business and that’s a tough uphill fight.”³

Many people thought the fight was over with the success of the Canadian Patrol Frigate (CPF) program. Launching a dozen frigates between 1988 and 1996, with a budget of \$10.4 billion, the program was Canada’s largest Canadian defence procurement.⁴ Big hopes were launched with the CPF project. It seemed to mark the beginning of a new era in Canadian naval capability, and a huge update and replenishment of the Canadian Navy’s surface fleet. But, perhaps more importantly, some people believed that the project established a tradition of ship design and construction excellence in Canada.⁵

In fact, one of the official goals of the CPF was the creation of a “Canadian Centre of Excellence’ for Ship Design and Systems Integration to address the developing gap between the Navy’s internal design capability and the increased cost of internal resourcing within the Navy.”⁶ The lack of shipbuilding programs in the years since the CPF, however, has meant that this goal has not been realized.

Last year, the issue of project management was raised in the Commons Standing Committee on National Defence and Veterans Affairs, where Dan Ross, Assistant Deputy Minister (Materiel), Department of National Defence, talked about the relative scarcity of project managers with experience in major projects like naval construction. According to Ross, “[w]e haven’t had very many large, complex programs in the past 15 years.”⁷ Nonetheless, Ross argued that DND is building and professionalizing its project management capability.

DND has adopted an international standard for complex program managers, and sent senior people on a one-year Master’s program in complex project management in Australia. As well, the department is looking to retired senior officers with the relevant engineering experience to staff procurement projects. This means that capable project managers are out there, but DND just has to find them, and retired military personnel are the best source. According to Ross, the retired officers “are the only ones who have the technical depth and experience needed....



A component of a Canadian Patrol Frigate rolls out at Saint John Shipbuilding.

You can’t go out and find them or hire them from private industry. Many of the best in private industry actually have been in the military and have that understanding of the context.” He notes that “if I didn’t have serving colonels, navy captains, and some retired officers performing as complex project managers, we would be much worse off than we are.”⁸

Project delay increases cost and drives operational and technical risk. This isn’t just a Canadian problem – there are examples outside Canada of cost overruns and project delays – but given the time lapse since the last major shipbuilding project, Canada has to re-build complex project management teams to make the process as smooth as possible. The project has to get done. The scope and duration of the NSPS make it certain that Canada will once again raise its game in project management. Whether it will retain managers, with or without a shipbuilding ‘centre of excellence’ is another matter. 🇨🇦

Notes

1. Interview with Tom Digan, 27 May 2011.
2. Martin Shadwick, “Commentary: Maritime Futures,” *Canadian Military Journal*, Vol. 8, No. 2 (Summer 2007), p. 81.
3. Paul McLeary, “Canada’s Naval Gap,” *Aviation Week*, posted 3 March 2010, available at <http://bit.ly/iKvUy8>.
4. Department of National Defence, “Interdepartmental Review of the Canadian Patrol Frigate Project, Report on Security,” 26 March 1999.
5. See P.E. Jaquith, “Canadian Patrol Frigate: Status Report,” *Canadian Defence Quarterly*, Special Issue (December 1985/January 1986), pp. 58-68.
6. Commander (Ret’d) Ken Bowering, “Military/Naval Procurement in Canada: A Flawed Process,” General Sir Arthur Currie Paper 1-08, The Conference of Defence Associations Institute, 19 November 2008.
7. Testimony of Dan Ross, Assistant Deputy Minister (Materiel), Department of National Defence, Standing Committee on National Defence, 40th Parliament, 3rd Session, 1 April 2010.
8. *Ibid.*

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

Of Carts and Horses

Amphion

As the Afghanistan combat role finally winds down it may be time for another defence review. It is not necessary to have one as intense or as public as the review of 1994, but certainly we need one that takes a long, hard look at future military requirements in what will almost certainly remain an unstable and unpredictable world. But can this be done realistically without a prior or even parallel review of foreign policy? That is highly unlikely if a really useful review is to take place. Why?

Foreign policy has become almost entirely reactive in responding to international security situations, and international economic matters may well be headed in the same direction. On the world stage, 'Pearsonian' peacekeeping has been replaced by the need for a careful mix of economic, military and humanitarian intervention actions. In the new system, Canada has become one of the 'first responders.' This is not a bad thing; Canada is wealthy enough to afford the necessary capabilities and can easily pay for significant economic and humanitarian aid. Yet, there are those who will argue, endlessly it seems, that any military role other than a traditional peacekeeping mission is un-Canadian. This makes little sense today. The world has changed, and we have found out to our cost that pouring aid into a troubled country makes little sense if instability and lawlessness prevail. Moreover, peace cannot be kept if there is no peace to keep.

Canada needs to avoid future entrapment in long, drawn-out operations such as Afghanistan. The return on the investment is questionable – the costs of the logistic support to that operation alone raise valid questions on the practicality of the mission. Even though Canada is one of the wealthiest countries in the world and can afford to play a major role in helping maintain international stability, there should be some realistic limits to the extent of Canada's international role. There must be some concept of reasonable cost applied to such operations. The question is, though, how does one establish sensible guidelines for the commitment of military capabilities to international security situations?

Accepting that Canada will remain a first responder, it is necessary to set some limits on future military deployments to promote international security. Without such limitations force planning becomes a nightmare under a scenario whereby everybody becomes a loser. Scarce defence funds need to be allocated to the maintenance of those military capabilities that have the greatest likeli-

hood of being used most often. As a point of departure for a new look at Canadian international security priorities let me suggest some ideas for a slightly different mix of capabilities.

Is there a need to maintain army capabilities for operations at the level of the Afghanistan mission? Assuming that Canada will not commit to such operations again, an alternative army structure for overseas missions could be based on two or three commandos (for want of a better term) of special forces. This would be enough to provide an effective first response on the ground or a response from the sea where restoring local stability was the first objective. Obviously, Canada would not do this alone, other countries would take part in the operation, but Canada would be able to offer effective forces that could deploy quickly. Also, the existing Disaster Assistance Response Team (DART) organization could be re-cast in a broader humanitarian assistance configuration but with emphasis on rapid response.



Photo: US Navy

HSV-2 Swift is one example of a fast sea-lift vessel.

These organizations need deployment transportation, including long-haul strategic air lift as well as short-haul tactical air lift in theatre. As well they need some form of fast sea-lift vessel able to be loaded and sailed quickly – far more quickly than the 30 days usually allowed in army planning. Can this be the same vessel as the fleet under-way support ship? Yes, but only if the sea-lift mission does not interfere with the continuing requirement to be able to deploy a combat-capable, naval task group.

The continuation of the task group concept, complete with its integral helicopter support, as the highest level of naval commitment is a given. The proven success of that capability over the past decades as a very flexible response to crisis warrants its continuation. The question is how many ships are needed to maintain that capability.

Are submarines useful? Despite problems with the *Victoria*-class, the operational flexibility of the modern submarine working independently or as part of a task group makes its retention logical. The surveillance capability of a submarine, especially working with autonomous vehicles, should not be overlooked. For instance, a submarine deployed quickly can provide a huge amount of vital information about a developing situation to help both diplomatic initiatives and later the deployment of stability forces.

Does Canada need a fighter-bomber to replace the F-18s? Unfortunately, the essence of this question has been lost in the over-heated debate on the acquisition costs of the F-35. The recent F-18 mission in Libya makes the case that such capabilities are useful. A case can also be made that a high performance aircraft is needed to intercept unidentified aircraft venturing into Canadian airspace. This, simply, is a function of asserting sovereignty – something Canada should do itself and not ask the Americans to do for it.

Taking this capability mix as the basis of a force structure, two things happen. First, politicians have a range of effective military options with which to respond to international crises without automatically being caught in open-ended commitments that lack clear exit strategies. Second, those capabilities form the nucleus around which the necessary training, logistic and engineering support systems can be built. To some this makes sense, but a prerequisite is that Canadian foreign policy adopt the concept of Canada being a first responder.

In short, it is time to put the foreign policy horse in front

of the force structure cart. It is also time to ask what is the most useful military contribution to international stability Canada can make. 🇨🇦

Comments on ‘Cheap and Nasty’ Ships **Lieutenant-Commander (Ret’d) Ian Yeates**

I would like to offer additional comments on the article “Cheap and Nasty” by Dave Mugridge (CNR, Vol. 6, No. 4 (Winter 2011)), and the points raised in response to the article by Eric Lerhe and Peter Haydon (CNR, Vol. 7, No. 1 (Spring 2011)).

It seems to me that one needs to acknowledge that the cost of military equipment is approaching the absurd – too expensive to own, operate, let alone lose. Fundamentally, this is what the point of the ‘cheap and nasty’ thesis is all about. The ‘all singing, all dancing,’ top of the line, best that money can buy pieces of military hardware are becoming unaffordable, even for our spendthrift neighbours to the south. Great Britain is making savage cuts to its armed services because it cannot afford them. Can Canada – *will* Canada – pony up the dough in an era of budget cuts to pay for rebuilding and re-equipping the Canadian Navy? It is doubtful in the extreme. Citizens apparently won’t pay more taxes for health care, roads or schools, let alone something as esoteric as the Canadian Forces.

We are entering an interesting world and things are changing, not necessarily to the advantage of the Western point of view. Empires fall due to finance. Examples are legion – Roman, Spanish, Dutch, French, British and, soon,



Photo: Internet

HMS Ark Royal was recently decommissioned as part of extensive reductions to defence spending in the United Kingdom.

American. While the latter will chug along for a goodly while yet, the signs of decline – entirely due to public finances – are fairly evident, along with the complete lack of will to do anything about it. What this implies is an erosion of military power and the consequent withdrawal from the ‘Rhine fortresses’ with the vacuum being filled with the current ill-assorted crop of ‘barbarians.’ As was noted in Brian Wentzell’s article (“Sir Julian Corbett’s New Royal Navy: An Opportunity for Canada?”) in the Spring 2011 issue, this is not just a problem in Canada, taxpayers are declining to pay more taxes, particularly taxes for the armed forces in the United Kingdom. The consequences for Great Britain are no doubt sobering for that country, witnessing its reduction to a very modest European power, with local capacities, but little more. A century ago Great Britain was the world’s pre-eminent power, without equal in naval forces. What a stunning change.

Taxpayers everywhere are not particularly keen on the costs of imperial adventures as the very low level of support for our own Afghan expedition demonstrates. Support for the troops themselves is an entirely different matter as is the evident national pride Canadians feel for what they’ve attempted to do. But this particular example of the effectiveness and utility of the costs – both blood and treasure – impresses few as wise or effective. We will be leaving the combat zone this year with few lasting accomplishments, notwithstanding the courage of our troops. And, it seems to me, the interest of doing it again is nil as the current hands-off approach to the Libyan mess makes clear.

This is all to say that when dealing with the costs of military equipment, the need to find ‘good enough’ for the job is becoming critical. Mugridge has asked the right question, in my view, no matter the gaps in the analysis as noted by Haydon and Lerhe.

I might add that one thing that has always struck me, in relation to the issue in question, is the complete inability of the various cash-strapped states to get together and build to a common design along the lines of the Airbus enterprise. This economically sensible view always founders on parochial interests with, in my view, utterly bogus ‘national requirements’ assertions that make cooperation in this arena ‘impossible.’ What they mean to say by *impossible* is that industrial vested interests need to be accommodated and that no state worth its salt could contemplate having someone else build its ships, or be held hostage to the parochial interests of Great Britain/France/Germany/Netherlands/Insert Country Here. The weakness of this argument is readily apparent by looking

at Canada’s air force (totally foreign), and by looking at the engines, sensors and weapons on our ships (totally foreign). I guess we bash the steel and glue it all together (not a minor matter, of course, and well done us). Otherwise it is case closed. Seeing as the list of countries I just rattled off are all in varying degrees of financial pain you’d think it conceivable that a joint project just might be able to work with a little bit of will and compromise. The savings in dollars would be phenomenal.

Last point on this – our shipyards are not viable in any event. They are on constant life support from one level of government or another. Hence our costs are much higher than they need be. The investment in the Saint John and Quebec City yards for the Canadian Patrol Frigate program simply proves the point. They received staggering sums, which paid for precisely what? Once the contracts were done, the yards were done. This was not a smart investment. I see we’re contemplating another go at it. What is that definition of insanity again – doing the same thing again and again and expecting a different result?

To conclude, and to underline my point, I perceive a prolonged period (of some decades) in which the unwillingness of Western societies to pay the price of managing their public finances, let alone for equipping their militaries, will lead to a sharply reduced world presence, with a narrower, parochial, less generous and open focus. Cheap and nasty might permit an extension of this time line. I very much doubt it will reverse it. 🍷

***Methinks They Doth Protest Too Much,
My Canadian Lords of the Admiralty***
Dave Mugridge

I feel honoured that my commentary “Cheap and Nasty” (CNR, Vol. 6, No. 4 (Winter 2011)) should illicit such considered response from two naval stalwarts, Eric Lerhe and Peter Haydon. I apologise unreservedly for the lack of detailed analysis in my opinion piece – unfortunately word length restrictions are rigorously enforced by CNR – but my evident failure to convince these veterans could in part be blamed on their taking my comments out of context in order to justify the status quo. I hope this response will allow me to explain and defend my case.

I stated in my commentary that the Canadian Navy engages in propaganda – defined as the organized dissemination of information to convey the case of a government policy/process. The Canadian Navy rightly engages in

propaganda to ensure its message is heard in an appropriate manner at the optimum time. It is naïve of Lerhe to think the navy isn't trying to manage its public relations in a time of dwindling defence budgets, a sea-blind population and a PR-savvy army.



Photo: US Navy

Sailors onboard USS *Carl Vinson* load a helicopter with food destined for Port-au-Prince, Haiti, after the 2010 earthquake.

I'll stand by my comment about Canada providing an 'intermittent drip' of aid to Haiti because one should consider my full point. I said, "Captain MacDonald describes *Operation Hestia* in Haiti as a tsunami of Canadian relief. In reality, the lack of amphibious capability and support helicopters meant an intermittent drip, rather than a tidal wave until such assets could be poached from the United States." There is no question that Canadian personnel had to be ferried ashore using other states' helicopters and landing craft. I will leave it up to the reader if the word 'tsunami' is appropriate when compared to the aid contributed by other countries in Haiti. The USS *Carl Vinson*, for example, had 19 helicopters embarked, provided approximately 500,000 litres of water a day and provided over a million pounds of emergency humanitarian aid.¹

I am guilty of proposing a moderate amphibious capability for Canada. This reflects my professional experience in campaigns in Sierra Leone, Afghanistan and Iraq. In places such as these an amphibious capability isn't just a game changer, it is the most cost-effective, flexible and enduring way of influencing events. I am not suggesting Canada invests in a "Saving Private Ryan" capability – not even the Royal Marines do that any more. I am surprised that Lerhe introduces the poor taxpayer into his argument for not considering an amphibious capability. The

National Shipbuilding Procurement Strategy (NSPS) allocates \$2.6 billion to building two to three Joint Support Ships, with little or no amphibious capability.² If Lerhe is suggesting this purchase represents value for money, then I must disagree. Certainly any support/supply ship can discharge a limited humanitarian mission but a platform which is designed from the outset with the flexibility to carry landing craft and has hangar facilities to operate a pair of CH-47 helicopters is something that would deliver Canadian aid in the time, quantity and manner required. Surely this is more flexible than another venerable oiler? Australia has just purchased RFA *Largs Bay* for \$105 million, a new Landing Ship Dock Auxiliary (LSDA) only costs 30% of a new USN/RN destroyer so the costs are not astronomical. How many F-35s will Canada get for \$105 million? And would this money be better spent on a fighter jet that – if experience over the past decades is indicative – will rarely be used rather than investing in a type of ship that would be among the most heavily utilized assets in the CF?

I would still argue that today's Canadian Navy is more optimized for battle in blue water than it is for brown waters.³ Its frigates lack weaponry and sensors that can realistically contribute to land campaigns, unless in so doing they are committed very close inshore (based on the maximum range of their guns), which would expose them to threats from ashore.⁴ The *Cheonan* torpedoing is a strange example given that there are few warships that could deal with a surprise attack from a well-handled mini-submarine in congested littoral waters. Unless Canada invests some serious money in a sonar system and then devotes some time in developing the Cyclone helicopter to operate with it, the Canadian Surface Combatant won't be among them. Leaving the unforgiving littoral environment to 'cheap and nasty' platforms seems a more sensible option.

The choice of HMCS *Charlottetown* and her Libyan adventure is equally puzzling given that it illustrates the following timeline:

20-21 February	Libyan government forces attack civil population
22-28 February	HMS <i>Cumberland</i> evacuates European Union and Commonwealth civilians from Libya
2 March	HMCS <i>Charlottetown</i> deploys from Halifax
22-23 March	HMCS <i>Charlottetown</i> arrives off Libya.

Charlottetown's deployment seems to support the high-low mix I suggest, whereby the 'cheap and nasties' are forward deployed to areas such as the Mediterranean. They would provide immediate military response and if additional units are required they can be despatched individually or in a task group. HMS *Cumberland* was able to extract a sizeable British, Commonwealth and EU contingent from Libya, deliver UK Special Forces and have a run ashore in Malta before *Charlottetown* had even sailed from Halifax.



An artist's depiction of the future UK Global Combat Ship.

Little I have read from traditionalist 'task-groupies' suggests I am going in the wrong direction. I simply had the temerity to suggest a rebalancing of naval forces – not the abolition of the task group. However, I do think Haydon is stretching things when he argues that three operational deployments since 1991 constitute a successful model.⁵

To answer Lerhe's point about the mythical modular ship, let me refer to the UK Global Combat Ship (GCS) program – a project in which Canada decided not to participate. GCS seeks to deliver an adaptable and affordable surface combatant for the cash-strapped Royal Navy from 2021. The ship is designed to meet the strategic maritime environment of the next 30 years, rather than the needs of the Cold War. GCS has been designed as a modular multi-role warship capable of being deployed globally to discharge those missions that cannot be undertaken by today's RN given a paucity of platform numbers. This probably explains why so many modular frigates/corvettes are being built around the world.⁶

To conclude, why shouldn't we discuss the future shape and capabilities of the Canadian Navy? The real issue

is the navy's diminishing share of the defence budget. Those like Haydon who steadfastly believe that the "task group concept is, in fact, ideally linked to a Canadian foreign policy of active internationalism," should note that a foreign policy of active internationalism costs money, money which Canada isn't prepared to spend. In 2010 Canada spent less than half on defence of any other member of the G8.⁷

So perhaps this debate should be taken up by a wider audience to ensure the future Canadian Navy isn't just what the past navy was. Today's strategic environment suggests that the future of navies *could* be bright. As US Secretary of Defense Robert Gates recently observed, "[l]ooking ahead, though, in the competition for tight defense dollars within and between the services, the Army also must confront the reality that the most plausible, high-end scenarios for the U.S. military are primarily naval and air engagements – whether in Asia, the Persian Gulf, or elsewhere."⁸ If that assessment is correct then the Canadian Navy of Haydon, Lerhe and *Leadmark* has a long way to go to pick up the operational baton and match other navies which have embraced change – in particular Spain, Australia, Turkey and the Netherlands.

Libya, Somali and the Ivory Coast are not even close to the trans-Atlantic focus Lerhe and Haydon remember with fondness. If we are going to maintain the task group as a hallowed concept, let's build one that can deliver on a multitude of operations rather than just area sea control, as a constituent part of better balanced navy. Wouldn't that give the Canadian taxpayers real value for money and a navy that matches an active internationalist security policy? 🍷

Notes

1. US Southern Command, "USS Carl Vinson Departs Haiti: Carrier Rendered Critical First Response," Press Release, 10 February 2010, available at http://www.navy.mil/search/display.asp?story_id=50988.
2. Canadian Association of Defence and Security Industries (CADSI), "Marine Industries Working Group Report," Ottawa, May 2009.
3. Based upon *Halifax*-class weapons and sensor fits.
4. And could easily suffer the same fate as the Israeli *Saar*-class corvette which was sunk in 2006, for an account of this see Andre Denesera, "Conflict in Southern Lebanon Continues Unabated," *Global Security* online, July 2006, available at www.globalsecurity.org/military/library/news/2006/07/mil-060727-voa12.htm.
5. For a discussion of an alternative fleet mix for the Canadian Navy in 2030 see David R. Mugridge, "The Alternative Canadian Navy of 2030," *Seaways Magazine*, The Nautical Institute, December 2009, pp. 28-29.
6. For example, the Turkish Navy Milli Gem project, a joint collaboration for both coast guard and navy.
7. International Institute for Strategic Studies, *The Military Balance* (London: Routledge, 2011), pp. 33, 53.
8. Robert Gates, Speech to Cadets at West Point Military Academy, 25 February 2011, for an account of the speech see, "Gates Warns Against Iraq, Afghanistan-style Wars," available at www.google.com/hosted-news/afp/article/ALeqM5jtluBG_dTG9kO5uwePGJ-HOWOrcw?docId=CNG.1de3d3e808bdef630857a5569202a6df.1b.

Plain Talk: Procurement Pipedreams and Political Realities

Sharon Hobson

Public Works and Government Services Minister Rona Ambrose made a lunchtime speech on 1 June 2011 at the annual CANSEC military exhibition. In this speech, she noted that lobbyists were not to be used by companies competing for work packages under the National Shipbuilding Procurement Strategy (NSPS), taking some people by surprise. It shouldn't have – that information was included in the initial briefing to industry about the program. Considering the profusion of 'consultants' at the exhibition, however, it raises the question of exactly how the government expects this process to play out.

"Companies involved in the NSPS implementation process have been asked not to engage lobbyists," Ambrose told the crowd. "It was our intention at the outset to ensure that the NSPS competition would be run through a process that is completely at arm's length of politics." This is interesting. But is it realistic?

What does the government consider a lobbyist? By definition a lobbyist is someone who is paid to persuade a person in authority to make a decision that favours the lobbyist's client. Canada's *Lobbying Act* notes that there are two kinds of lobbyists: consultant lobbyists who are paid to lobby on behalf of clients; and in-house lobbyists who are salaried employees who lobby on behalf of their employer.¹

The act requires that lobbyists working in Canada "must be registered if they are paid to communicate with federal public office holders regarding the making, development, or amendment of legislation, bills, regulations, policies and programs, or the awarding of federal grants and contributions."² A quick search of the registry reveals that eight companies and organizations have lobbyists who are registered specifically in connection with the NSPS. A broader search for lobbyists connected to 'shipbuilding' yields 32 results (as of 3 June 2011).³ As one lobbyist noted, the government request that industry not engage lobbyists was a 'voluntary thing' and almost everyone has ignored it.⁴

As well, let's not forget the provincial premiers who are involved in promoting their province's bid for one of the umbrella contracts. One shipyard will receive the contracts to build large combat vessels and another shipyard will receive the contracts to build large non-combat vessels. Although the provincial delegations trekking to Ottawa

are not, strictly speaking, lobbyists, they are attempting to sway the federal government's decision-making, and their payback, for the successful government, will likely come in the form of votes.

It's understandable that the federal government wants to be careful about how it is perceived to have made the shipbuilding decisions. The four shortlisted shipyards are based in four different regions of Canada. (A fifth yard which was shortlisted, Kiewit Offshore Services, dropped out apparently because it did not have the personnel resources to put together an appropriate bid.) All the regions are sensitive to any suggestion of favouritism, which means the selection of two winners (leaving two losers) is poised to become a major political problem.



A welder works in the wheelhouse of one of the Mid-Shore Patrol Vessels under construction for the Canadian Coast Guard.

The four shipyards in the competition are: Davie Yards Inc. in Levis, Quebec; Irving Shipbuilding Inc. of Saint John, New Brunswick (which owns Halifax Shipyard in Nova Scotia); Vancouver Shipyards Co. Ltd. of Vancouver, BC; and Seaway Marine and Industrial Inc. of St. Catharines, Ontario. That's Quebec, the Atlantic provinces, the West and Ontario. Only two can win.

This means the government will have to ensure at least the appearance of a scrupulously fair decision-making process. In her speech at the CANSEC lunch, Ambrose said, "[o]ur government's commitment to ensuring fairness and openness and transparency is clear. Whether shipyards are successful or not will depend 100 per cent on the merits of their proposals." Let's hope that is the case.

I am not privy to their proposals, but on the surface it would seem the likely winners will be Irving in the east and Vancouver Shipyards (part of Seaspan Shipyards, formerly Washington Marine Group) in the west. That would give the navy the support of a commercially viable East and West Coast shipyard. Both companies are already under contract with DND for major programs – Seaspan's Victoria Shipyards holds the contract for the *Victoria*-class in-service support and is also, with Irving's Halifax Shipyards, doing the shipyard work on the frigate update program. They are going all out to bid for construction of the \$29 billion⁵ worth of combat and \$5 billion worth of non-combat ships. Both companies had prominent booths at the CANSEC exhibition.



An artist's depiction of a Canadian Coast Guard science vessel. The science vessels will be the first built among projects in the non-combat package.

Davie in Quebec cannot, however, be counted out. When the government announced the shipyard shortlist in October 2010, Davie had already laid off most of its employees, was under court protection and was actively seeking a buyer. Despite this, the government included the company in its shortlist of five companies that were assessed to be capable of building the federal fleets. At the time of writing, Davie is on the cusp of being sold to Fincantieri. In order to accommodate these negotiations, the government lengthened the time the companies competing for the NSPS had to respond to the Request for Proposals. The responses are now due 7 July 2011. The government seems to be doing everything it can to make sure the Quebec competitor, Davie, is in the competition.

Seaway, although located further inland, on the shores of Lake Ontario – and overlooked in some media reports – is still in the competition. It's not clear, however, if the company intends to bid, and if it does, whether it will bid for the combat or non-combat ship package, or both. Company official John Dewar would only say "we are a shortlisted respondent and we are examining our options."⁶ Seaway would be an extreme long-shot, and is likely going to have to content itself with some of the

small ship contracts that the government is not including in the NSPS.

The government intends to select the winning shipyards by the end of the summer and then spend the fall negotiating umbrella agreements with the two yards. Contracts for the individual projects will be negotiated separately. The combat ship package, worth approximately \$29 billion, includes the six to eight Arctic/Offshore Patrol Ships and the 15 Canadian Surface Combatants (replacement for the three *Iroquois*-class destroyers and 12 *Halifax*-class frigates). The non-combat ship package, worth much less, about \$5 billion, includes the two (possibly three) Joint Support Ships, and the Canadian Coast Guard's Polar Icebreaker, Offshore Oceanographic Science Vessel, and three Offshore Fisheries Science vessels. Public Works and Government Services Canada says the first ships to be built by the shipyard winning the non-combat package will be the coast guard's science vessels. But "the relative timing of the JSS and Polar Icebreaker has not yet been determined."⁷

When the winners are announced later this summer, there will be some blowback on the government. The government wants the competition to appear fair and transparent – and certainly the levels of governance that Public Works and Government Services Canada has put in place will go a long way to achieving that – but it is difficult to believe that the government will be completely hands off. Its inclusion of Davie as an acceptable bidder raises questions. The use of lobbyists by companies hoping to get the contract, despite the government's request that they not be used, and the pilgrimage of premiers to Ottawa, also give rise to doubts about impartial, fact-based decision-making.

The reality is that, no matter what the government says, military contracting is never kept at arm's length from politics. 🍷

Notes

1. *Lobbying Act*, R.S.C., 1985, c. 44 (4th Supp.), Office of the Commissioner of Lobbying of Canada, available at <http://laws-lois.justice.gc.ca/eng/acts/L-12.4>.
2. *Ibid.*
3. Office of the Commissioner of Lobbying of Canada, "Registry of Lobbyists," as of 3 June 2011.
4. Telephone interview with author, 6 June 2011.
5. Canadian Association of Defence and Security Industries, "Sovereignty, Security and Prosperity," report of the CADSI Marine Industries Working Group, May 2009. CADSI estimates the 15 Canadian Surface Combatants will cost \$26 billion. The government has budgeted the 6-8 Arctic/Offshore Patrol Ships at \$2.9 billion.
6. John Dewar, telephone interview with author, 6 June 2011.
7. Email response to question from author, 2 June 2011.

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Tightening the Noose: Time for a New Approach against Somali Pirates?

Christian Bedford

The statistics speak for themselves. In 2010, there were 49 successful hijackings undertaken by Somali pirates, up from 45 in 2009. Somali pirates increased their operational range, spreading several hundred miles further east and south and now endanger the exclusive economic zones of India, Madagascar and Mozambique. Through the first five months of 2011 there were over 130 reported acts of violence against vessels by Somali pirates, and 21 ships were hijacked with a total of 362 hostages. There were 26 ships and 522 crew being held hostage by Somali pirates at the end of May 2011, according to the International Maritime Bureau.¹

An analysis of future trends in Somali piracy offers little hope that the situation will improve. A recent study conducted by Geopolicity, an economics consultancy, found that pirates earn between USD \$33,000 and \$79,000 per year, and that the next best alternative in Somalia would earn them roughly \$500 per year.² Based on trends and the financial incentives for pirates, the study estimated that the number of pirates in Somalia could double by 2016, increasing at a rate of between 200 and 400 new pirates per year. Annually, Geopolicity estimates that piracy has cost the global economy between \$5 and \$8 billion, and predicts that figure will increase to \$13-15 billion by 2015.

Beyond the number of ships and people, and the increasingly vast sums involved in this illegal activity, perhaps the most worrying trend has been the dramatic increase in violence that is being exhibited on both sides. In February 2011, four American sailors were killed by their Somali captors after an attempted raid on their vessel, the S/V *Quest*, and reports of hostages being roughed-up by their captors are increasingly common. Many analysts attribute this rise in violence on the part of the pirates to the fact that as their numbers grow, their ranks are being filled with fighters and militants instead of the fishermen who formed the original core of Somali pirates.

The rising violence, though, could also be explained by the fact that navies are becoming increasingly assertive when dealing with pirates. The gloves have come off in the past two years, with various navies now taking the fight directly to the pirates. Both India and Russia have



Photo: US Navy

*Navies are becoming increasingly assertive with pirates. Here, USS **Farragut** sinks a skiff after taking its pirate crew into custody in April 2010.*

engaged mother ships with their guns and have sunk several pirate dhows, and the United States has used force when American lives were in peril. In January 2011, South Korean naval commandos operating from the ROKS *Choi Young* launched a raid of the M/V *Samho Jewelry*, a South Korean-operated chemical tanker, in which eight pirates were killed. Less than a week later, Malaysian naval special forces, supported by an attack helicopter, freed an oil tanker after shooting three of the pirates onboard. Both pirates and international naval forces are clearly increasing the level of violence on the Indian Ocean.

The situation has thus changed from the fairly straightforward hijacking-hostage taking-ransom payment model that typified Somali piracy from 2007 to 2010. More countries are sending more ships to cover a larger area, and are in effect chasing pirates all over the Indian Ocean, with little to show for it. Clearly, current strategies at sea are not working. As if to underscore this point, in May 2011 the US Navy (USN), seeking new strategies to combat pirates, launched a massive multi-player online war game leveraging the internet (MMOWGLI). In a nutshell, the USN is looking to online gamers and amateur naval strategists to help craft a new response to Somali piracy, which appears to signify that the world's most powerful navy



The littoral combat ship USS Freedom at speed. Deploying vessels designed for littoral combat close to Somalia's coasts could free up high-end assets for use elsewhere.

can't come up with an adequate plan to deal with sandal-clad brigands armed with AK-47s and rocket-propelled grenade launchers.

Perhaps it is time to consider a new approach, one that leverages the naval assets operating in the various naval coalitions and independently, and brings them together to achieve better effect. It is time to re-consider a naval blockade of the Somali coast. This idea was proposed twice before, once in late 2008 by the head of Intertanko, a group that represents the owners and operators of three-quarters of the world's tanker fleet, and in 2010 by the African Union (AU). The AU's call for a naval blockade was not related to piracy, but rather to stop the infiltration of foreign fighters into Somalia. In the past NATO has rejected the idea of a naval blockade, citing the length of Somalia's coastline – Africa's longest – at over 3,000 kilometres. International naval vessels could in theory achieve the desired effect of reducing the number of pirate dhows and mother ships heading out to sea by focusing their efforts on Somalia's most active pirate ports. If navies enforced a blockade between Harardheere in the south to Bosaasso in the north – an area that encompasses other known pirate lairs such as Eyl and Hobyo – that coastline is reduced by roughly two-thirds, to just over 1,000 kilometres. With 20-odd ships operating as part of NATO, European Union (EU) and Combined Task Force (CTF) 150/151 task groups, this would leave roughly 50 km of coastline each to patrol and monitor. Ships from countries such as India, Japan and China that operate outside these formal coalitions could provide additional coverage.

Clearly, there are numerous complicating factors that exist in the littoral regions that do not exist out in the open ocean. Given the level of instability and militant activity

onshore in Somalia, the threat posed by small boats could be significant – the USS *Cole* bombing remains in sailors' minds. Also, rules of engagement would have to be modified, as would a determination on how to intercept pirate ships while allowing fishermen and other innocent seafarers passage to and from shore. Further, there would have to be a determination as to how to deal with pirated vessels that attempt to land hostages ashore. While these and other issues are no doubt daunting, they nonetheless should not discourage naval planners from at least seriously considering such an option.

The advantage of such a plan is that, instead of chasing pirates across a vast ocean space that international navies can never hope to police adequately, it focuses naval assets into a more compact geographic region, reducing response times and concentrating hulls to achieve greater effect. Such a strategy could also focus air assets that are increasingly being used to combat piracy. Instead of employing unmanned aerial vehicles (UAVs) to scan wide swathes of water, they could instead be used to monitor activity in and around pirate ports, so that vessels at sea could have better intelligence on the movements and plans of the pirates. Moving assets closer to coastlines could also open the door for other naval platforms, such as offshore patrol vessels and corvettes that are designed for littoral combat. These vessels could either steam to the region on their own, or could potentially be transported there by heavy-lift ships if they were coming from farther away. Such a plan would then free up larger ships that were designed for high-end warfare but are currently being employed in the fight against pirates.

Given the stakes, this approach should be given real consideration. If current trends continue, piracy will become more deadly, more costly and affect an ever-greater portion of the Indian Ocean. Naval vessels could still operate farther out at sea as part of a layered approach but it is logical that, in order to achieve some measure of success against highly capable Somali pirates, a new approach to fighting them must be undertaken. It is time to seriously consider a naval blockade of Somalia. 🇸🇴

Notes

1. International Maritime Bureau, Piracy Reporting Centre, "Piracy News and Figures," May 2011, available at www.icc-ccs.org/piracy-reporting-centre/piracynewsfigures.
2. Geopolicity, "The Economics of Piracy: Pirate Ransoms and Livelihoods off the Coast of Somalia," May 2011, available at www.geopolicity.com/upload/content/pub_1305229189_regular.pdf.

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Warship Developments: Seeking a New Sea King

Doug Thomas

Those interested in naval operations will know that the vast majority of current warships over 3,000 tons are equipped with at least one maritime helicopter. The Canadian Navy was one of the true pioneers in this field, with trials being conducted in 1956 from the frigate HMCS *Buckingham*. In the early 1960s the Canadian Navy began modifying *St. Laurent*-class destroyers with a large hangar, flight deck and helicopter haul-down and rapid-securing system to permit the operation of Sea King helicopters. Since that time, all of Canada's larger surface combatants and combat support ships have been helicopter-capable.

Modern naval helicopters are built and operated by many of Canada's allies in the North Atlantic Treaty Organization (NATO). The larger models include the EH-101, NH-90, Super Puma and Sea Hawk which were all considered for Canadian service and can also be found in many other navies. One can also still find Sea Kings in operation around the world, but most of them are much newer than those in the Canadian Forces. Some navies operate smaller helicopters, such as the Augusta Bell 212 or the larger Lynx and Super Lynx, which are less capable in payload and endurance but have the offsetting advantage of making fewer demands on the design of their parent ship platforms.

These helicopters are very specialized aircraft that can greatly expand the patrol area of their parent ship. A frigate of the *Halifax*-class is able to maintain continuous surveillance on, above and below the surface of an area of about 30,000 square kilometres – to put this in perspective, this area is equal to the size of Lake Erie. A modern helicopter, such as the new CH-148 Cyclone, when operating from its parent ship can cover a similar area. Thus the combination of the ship and its helicopter represents a very impressive ability to know what is going on in a country's national waters and airspace.

There is no disputing the fact that such helicopters are very specialized and expensive. For one thing they must be 'marinized' – that is their engines, undercarriage and many other components must be made from metals that will resist salt water corrosion. During the early 1990s, I had the opportunity to speak to the pilot of a Russian Helix anti-submarine warfare helicopter during a reception in Halifax. Our discussion led into whether the sea-going Helix was much modified over the original land-based variants. I was told that the only difference was in the electronics and sensors and that it was normal to replace these aircraft with new ones after 18 months of operations as by then they were corroded and undependable, because



A CH-124 Sea King conducts in-flight refueling over HMCS *Toronto*.



Photo: DND

An artist's depiction of a CH-148 Cyclone in flight.

they were not modified for operations at sea. The 'old' aircraft were dumped into the sea! I suspect this policy has changed as I believe there are no longer huge factories in Russia building the vast quantities of armaments produced during the Soviet era.

Such waste is difficult to understand, especially in a country like Canada which takes forever to replace its big-ticket equipment. For example, the Canadian Sea King first entered Royal Canadian Navy service in 1963, and 27 of the original 41 aircraft are still flying today. The manipulations, arguments and modifications which have characterized the procurement of its replacement – the CH-148 Cyclone – read like a case study of how *not* to acquire a maritime helicopter. The process has struggled on from the original announcement by the government of Prime Minister Brian Mulroney in 1987 that Canada would order 35 EH-101 anti-submarine warfare helicopters, to the program becoming a political football and its outright cancellation by the government of Prime Minister Jean Chretien in late 1993 (at an eventual cost of over \$500 million to break the contract), to the very convoluted

acquisition process that has occurred over the past decade – all well-documented in many available references.

After a process which started in the 1980s, on 13 May 2011 the first CH-148 Cyclone helicopter finally arrived at Shearwater, the home of Canadian naval aviation since the late 1940s. This first non-standard Cyclone will be used for testing and training, and the 28 'final configuration' aircraft are currently planned to start arriving, at a rate of one per month, in June 2012. At this rate, Sea Kings will still be flying until late 2014 – well past their 50th birthday.

There have been many jokes about these elderly aircraft: they sometimes are referred to as '10,000 parts flying in close formation.' Years ago their air crews commissioned a badge which they wore on their flying suits, with the motto 'Flying Yesterday's Aircraft Tomorrow.' Nevertheless, the Sea King is a tough old bird with a proud history. Sikorsky certainly knows how to build very good helicopters, and if the Cyclone lasts as long as the Sea King you might see it patrolling the waters along the Canadian coast in 2064 – if *you* live that long. 🇨🇦

Book Reviews

Storm Below, by Hugh Garner, with Introduction by Paul Stuewe, Toronto: Dundurn Press (Voyager Classics), 2010, 261 pages, ISBN 978-1-55488-456-8

Reviewed by Peter Haydon

Storm Below is a reprint of a 1949 novel about a Second World War Canadian corvette escorting a convoy from Britain to St. John's, Newfoundland. It is the first maritime contribution to the *Voyager Classics* series the purpose of which is to re-examine the "Canadian experience in all its varieties." But why pick *Storm Below* as the first naval contribution to the series? Is it truly representative of the Canadian experience at sea in wartime?

The author, Hugh Garner, spent five years of the war in the Canadian Navy, much of it at sea in corvettes, and he uses this experience to create HMCS *Riverford* and its eclectic crew. As he cautions, the ship and the people are not typical; rather, they are "drawn up in the image of hundreds who made up the Royal Canadian Navy." He uses this literary device to explain the hardships of life at sea in those small ships and the unique character of a small ship's company. He also uses *Storm Below* as an expression of his concerns about the social system which evolved in the wartime navy, especially in the fleet of corvettes.

Although not typical, *Riverford* and its crew are credible. The WWII corvettes were manned by volunteers from all walks of life with only limited naval training and experience at sea. Expectations for their operational success, largely in terms of U-boat 'kills,' were unfairly high at first but the ships and their crews grew in capability as the war progressed. Yet, they were never traditional warships; there was always a slightly rough edge to the way they did their business.

Garner's small cast of characters represents all ranks and trades, and he uses them well to explain the comradeship, reliance and, occasionally, distrust that ebbs and flows through a small ship's company. Under stress and difficult living conditions like those of a corvette in mid-Atlantic during a war, molehills become mountains, and an unguarded remark can quickly lead to animosity. It is the daily interaction among the various characters that forms the heart of the book rather than the tension induced by anti-submarine operations. This may surprise some people but it is completely realistic: the war against the U-boats was, as one veteran described it, 90% boredom and 10% screaming hell.

But how realistic is the overall scenario? Unfortunately, we do not have a large body of published material to turn to in assessing the accuracy of Garner's setting. There are no compelling sagas such as the *Cruel Sea* or *HMS Ulysses* written about the Canadian contribution to the Battle of the Atlantic, and few of the participants have published their experiences. Of those, Alan Easton's *50 North* stands out. So, we must accept Garner's literary device of the ship and those who served in her, making our judgements of its realism on the basis of our own experiences and understanding.

The story begins with an accidental death of a young sailor which becomes the catalyst for the emotional collapse of his friend and an unexpected wave of fear associated with sea-going superstition because the body was not buried at sea immediately. The situation is made worse by a junior officer's lack of maturity and underlying discriminatory traits. Coupled with the day-to-day discomforts of truly awful food and abominable living and working conditions, it is hardly surprising that *Riverford* comes close to mutiny. Discipline certainly breaks down and is only restored once the ship arrives in St. John's with the promise of a much-needed rest period.

Through the series of incidents surrounding the sailor's death, Garner brings out the complex nature of a small ship's company especially the way it develops its own collective character which is as easily influenced by misperceptions and superstitions as it is by expectations of rewards at the end of the voyage. He also illustrates that people react to crises differently, and under extreme stress may say things that they regret later. Although the characteristics of a confined community are an important aspect of the story, especially the way baseless superstition can undermine confidence, Garner seems more troubled by the overt discrimination not only of French Canadians but also of others on racial and religious grounds, and more generally by inexperienced officers in their dealings with sailors. In this, one would expect an idealist like Garner to find fault in a social system that had changed little since the days of Nelson. He was not alone in those views.

Is *Storm Below* representative of the Canadian experience at sea in the Second World War? No, not completely, but it is a well-crafted insight into the unique naval world of what Marc Milner called the "Sheepdog Navy" that formed a large part of Canada's contribution to the war. 🐕

Modern Piracy, by David F. Marley, Santa Barbara: ABC-CLIO, 2011, 290 pages, \$55.00 (hardcover), ISBN 978-1-59884-433-7

Reviewed by Colonel P.J. Williams

To make its point, the cover of this handy book depicts a young Somali pirate kitted out in quasi-military garb with the ubiquitous AK-47 automatic rifle slung across his shoulders, and the kind of look that lets you know you're not dealing with Jack Sparrow of the film "Pirates of the Caribbean."

This book is part of ABC-CLIO's Contemporary World Issues series – it falls into the criminal justice category. I describe the book as 'handy' as it's very much written as a handbook or a textbook. There is nothing wrong with that as it's a very useful reference for an issue that challenges many of the world's navies, ours included, on a regular basis. Indeed, I'd call this book *Piracy 101*.

For many years in concert with like-minded allies, Canada has provided maritime forces on a periodic basis to counter-piracy missions off the Horn of Africa, an area which gets much attention in this book. The aim of the book is to provide a description of what the author calls the "surprising" resurgence of modern piracy around the world. Starting with a brief historical overview of piracy in the 16th and 17th centuries, Marley describes the underlying causes or preconditions for this scourge, the various national interests at play in combating piracy as well as the various legal challenges navies face when doing so. Veterans of counter-piracy missions in the Indian Ocean will no doubt be all too familiar with the so-called 'catch and release' policy for apprehending pirates on the high seas.

The book has a strong US flavour, and so there is an entire chapter devoted to "Special US Issues." It also contains substantial descriptions of various piracy and counter-piracy incidents and there are several pictures and biographies of many modern-day pirates. It also provides source documents – including various UN Security Council Resolutions, the UN Convention on the Law of the Sea, etc., and tables depicting statistics related to US holdings of merchant vessels as well as the "Piracy Boom" in several regions. The final two chapters contain directories of various organizations and resources for further research and study. I noted with some interest that not only is the mailing address of the headquarters of US Naval Forces Central Command in Bahrain listed, but also its telephone number (011-973-1785-4027 for readers who are curious) – I wonder who would answer the phone if I called!

I found the book a very fast read. Structured much like a textbook, in some cases it repeats information so as to reinforce a point, and the table of contents is detailed enough that readers can zero in on exactly what they want. That said, I would not put it in the category of scholarly work. I found that the space and analysis devoted to how to solve the problem of piracy is limited, though to be fair the author does list six basic elements for success. He also states that many of the conditions which gave rise to piracy in the first place remain unresolved. In addition, Marley states that piracy will only be solved on shore, not on the high seas, a view generally accepted by most military commentators on this issue.

References to Canada in the book are all but absent, which is somewhat disappointing given that Canada has provided ships and occasional task forces in the Horn of Africa region for many years. However, when discussing flags of convenience, the book uses former Prime Minister Paul Martin's Canadian Steamship Lines as an example. Marley notes that "Martin argued that shipping firms had no choice but to resort to such measures, in order to remain competitive in the international market."

This book is not for everyone, and I have found that most senior naval officers are well versed in the issues related to piracy. There are, however, certain audiences for whom it would be appropriate. First, it would be useful for young naval officers and NCOs so they are aware of the challenges they will face in this environment. Second, it would be useful for journalists who may embark aboard one of Her Majesty's Canadian Ships for a counter-piracy operation, so they can understand and report on the context and challenges faced in combating modern piracy. Finally, it would be useful for those like me whose subordinates deal with this issue regularly in the course of planning for and directing contemporary maritime operations. Recommended. 🍷

China Goes to Sea: Maritime Transformation in Comparative Historical Perspective, edited by Andrew S. Erickson, Lyle J. Goldstein and Carnes Lord, Annapolis: Naval Institute Press, 2009, 485 pages, ISBN 978-1-59114-326-0

Reviewed by Dave Mugridge

This book is a wonderful academic review not just of China's maritime power but of the history of sea command. The editors do a remarkable job of building a comprehensive picture of where China stands today in its pursuit of a maritime capability to match its economic ascendancy and continental military power. *China Goes*

to Sea does not provide all the answers, but it does introduce with clarity and objectiveness the complex issues that have dominated China's maritime development.

In answering why China needs a maritime power projection capability, this book clearly illustrates the links among economics, national security and strategic ambition. All too often the naval lobby forgets to link these factors. Perhaps this lesson should be allowed to reverberate around Western corridors of power, next time the naval lobby comes second in the debate over the division of meagre defence resources. Here the editors make clear that sea power is a medium for trade and national security, not a means in itself.

The introduction poses a list of 10 key questions. These questions are so pertinent they should be given to those charged with generating maritime strategy. These 10 simple questions illuminate the issue of strategy generation with clarity and vision. I would commend them to any student or serving officer when looking for a justification of the importance of maritime strategy within the realm of national security.

The first part of the book is devoted to pre-modern era maritime states, charting collectively the rise of Persia, Sparta, Rome and the Ottoman Turks. This succinct comparative review would serve as an excellent introduction to any student of naval power in the ancient world. The authors bring a fresh perspective to events that have traditionally caused narcolepsy to students.

The second part builds upon the foundations like an unfinished leaning tower of Pisa. While the work is scholarly and well presented, it lacks perspective and excuses its failure to discuss the rise of US maritime power in a footnote. To my mind not to discuss the United States within the realm of the modern maritime era is unacceptable. The footnoted editorial excuse is not enough.

After its trip at the second hurdle, the book regains its stride by examining the historic roots of contemporary Chinese maritime power. The commentary about the Ming and Qing dynasties enables comparison with the discussion in previous chapters of non-Chinese maritime states. There are enough differences to identify why China is not just a modern-day model of Persia or Imperial Germany. I would take issue, however, with the statement that China was a defensive power in the Cold War and this stunted its maritime ambitions – it is hard to justify this assertion given China's support of North Korea and its anti-American policies in southeast Asia. Perhaps instead we should argue that its use of proxy states and regional influence generated many of the characteristics of maritime power without the need for naval expansion.

There are questions that arise from this book – and the answers to these questions would further penetrate some of the shadows of modern China. For instance, how much of China's continental power is based upon its need to ensure social control of over one billion people? Has China's use of proxy states to assist with regional foreign policy reached an end? Will China's new maritime power assist with thorny regional issues like Taiwan and Japan? In my opinion, too few comparisons are made with Brazil, Russia and India (the other BRIC countries), as both Russia and India would be pertinent to the debate over the attraction of sea power in a multi-polar world.

China will continue to follow a middle path between continentalism and maritime power projection. The subtle nuances and the balance of these foreign policy instruments will keep the China lobby busy for years to come. Western analysis of Chinese Defence White Papers and Five Year Plans will continue. But I wonder how many countries will have the political resolve to join Australia and ensure they are ready when the dragon takes to the sea beyond its string of pearls. 🐉

Maritime Capacity Building in the Asia-Pacific Region, edited by Andrew Forbes, Papers in Australian Maritime Affairs No. 30, Canberra: Sea Power Centre - Australia, 2010, 262 pages, ISBN 978-0-642-29724-2

Reviewed by Dave Mugridge

This book is a great reminder that in today's world national security has to be comprised of deterrence, diplomacy and development if it is to address the challenges of conventional and asymmetric warfare delivered by any number of actors from states to organized criminals. The contributors expand upon the central theme with ease and as a result deliver a book of quality which should be of interest to any reader of maritime security literature. The choice of the Asia-Pacific region is a triumph because it shows that in the face of territorial disputes, failing states, terrorism and organized crime, it is still possible to deliver effective regional maritime security.

The lessons from each of the articles are useful for many in the Canadian Forces and transcend the divide among the components of land, maritime, air and special operations. In short, application of the tenets should be the goal of any Canadian Staff Officer involved with international efforts to curb Somali piracy, prevent narco-terrorism in the Caribbean or dismantle criminal empires in West Africa.

While reviewing this text I was given a copy of Thean Potgieter's excellent account of the Maritime Security in Southern African Waters conference held at Stellenbosch,

South Africa, 22-23 July 2008. This was a regionally focused conference which articulated so many of the same issues that it suggested to me that those lessons raised by the Asia-Pacific region were also applicable to southern Africa. The African conference shows the region is aware of the issues which surround it – Somali piracy and state failure in the Gulf of Guinea. Like *Maritime Capacity Building in the Asia-Pacific Region*, it provides clear insight to local views, an understanding of their problems and desire for resolution. For non-local readers these sorts of books bring a local perspective and add some meat on the academic bone when looking to tackle other maritime security issues.

Andrew Forbes is to be commended for his editorial work and his skill in bringing together so many contributors from a diverse array of backgrounds. Reading this book, one can see the value of a comprehensive approach to maritime security issues as well as the benefits of a co-ordinated international response which addresses more than just maritime surveillance or patrolling.

My recommendation would be to read *Maritime Capacity Building in the Asia-Pacific Region* and then tackle Potgieter's account of a region which is keen to embrace the same lessons. These gentlemen may share different academic backgrounds but together they provide readers with food for thought; particularly that we need to adopt a different approach to global maritime security. 🍷

Battleship v. Battleship: Task Force 34's Moment of Glory, by J. Lanham Pearson, Ann Arbor, Michigan: Nimble Books, 2008, 42 pages, ISBN 978-1-934840-40-5

Reviewed by Lieutenant-Commander Mark Condono

The largest naval battle in the Second World War occurred as Japan made a last attempt to turn the tide of defeat. The fall of the Philippines would sever the Japanese southern line and jeopardise Japan's war goals. The Battle of Leyte Gulf was between the US Navy and its allies (including a flotilla of the Royal Australian Navy attached to the two US fleets that were engaged) against the Imperial Japanese Navy. It would lead to the loss of four Japanese aircraft carriers, two battleships and a score of its heavy cruisers and escort craft, and mark the end of the Imperial Japanese Navy as a fighting force. It also paved the way for the liberation of the Philippine archipelago.

The battle has been a constant subject of exploration for various scholars, military historians and naval enthusi-

asts, resulting in articles, memoirs and books. Aside from the battle itself, there has been much analysis of the actions of Admiral William Halsey on taking ships to pursue the Japanese decoy force and Admiral Takeo Kurita's disengagement during actions against the American escort carriers when he had the advantage.

Sixty-four years after the battle after the battle, J. Lanham Pearson – a police commander with 30 years of service, amateur historian and author – provides a new approach and analysis of what might have happened on that fateful day of October 1944 in Surigao Strait. In *Battleship v. Battleship: Task Force 34's Moment of Glory*, Pearson speculates on what might have happened had Task Force 34 and the Japanese Center Force met in action on the battleship against battleship level, as well as that of their escort vessels.

Divided into eight chapters, the first two segments provide a brief compendium of discussion on the Japanese defence plan for the Philippines – known as the SHO-1 or Victory plan – the formation and composition of Task Force 34 and the Japanese Navy's Center Force. After this, he provides an analysis of the tonnage and weaponry of the opposing forces, specifically their torpedoes.

In the remaining chapters, the author focuses on the hypothetical battle between the two forces – first between the battleships and then the cruisers and destroyers. He bases his assumptions on the initial plans, character and possible reactions of the commanders of both sides. Added to this is the tactics implemented, ordnance, rate of fire and the structural integrity of the ships involved with regards to the hits they might have taken, citing examples from early naval engagements of the war such as in Guadalcanal.

In the two final segments, he focuses on the conclusion of the battle and its aftermath. Here he looks into the possible consequences various scenarios might provide with regard to the battleships, the effect of losses on both forces and the decisions made by the on-scene commanders.

Task Force 34's Moment of Glory is a welcome addition to the growing literature of naval battles in the alternate history genre category. The author's contentions are good. The book is supported by about 13 photos, one map and three table figures. A few further factors that could have been looked into is the role of land- and carrier-based air power that could have been called upon during the battle. Maps depicting the hypothetical movements and course taken would add an interesting element into the discussion. Nonetheless, the book would be of valuable help for planners, war gamers and historians in naval academies and universities. 🍷

The Admirals' Medal



Established in 1985 in conjunction with the 75th anniversary of the Canadian Navy, the Admirals' Medal has been bestowed upon individual Canadians in recognition of their achievements in the advancement of maritime affairs in Canada. Named for Rear-Admirals George Stephens and Victor Brodeur and Vice-Admiral Rollo Mainguy, the medal is awarded annually for outstanding achievements in the areas of maritime-related science, technology and academic studies, or for the application of practical maritime skills warranting special recognition.

The Admirals' Medal is presented on behalf of the Admirals' Medal Foundation, a charitable organization established by Rear-Admiral Nigel David Brodeur, Vice-Admiral Daniel Nicholas Mainguy and Vice-Admiral Robert St. George Stephens – all sons of the aforementioned Admirals. The Royal Canadian Navy Benevolent Fund administers the foundation while the Executive Secretary, The Director of Navy History and Heritage for the Canadian Navy, ensures that all arrangements are made regarding the competition for the medal, the selection of

the recipient and the presentation of the medal.

Peter Haydon, the founding Editor-in-Chief of *Maritime Affairs* and the *Canadian Naval Review*, prominent commentator, and author of numerous articles and books on Canadian Maritime Security issues, was awarded the 2009 Admirals' Medal.

The foundation invites nominations for the Admirals' Medal. Individuals and organizations who are in a position to identify outstanding achievement in the wide range of maritime affairs are urged to submit nominations. Nominees need not be members of any organization or a member of the nominating organization. Nominations and all correspondence related to the Admirals' Medal should be addressed to:

Chief of the Maritime Staff
National Defence Headquarters
101 Colonel By Drive
Ottawa Ontario K1A 0K2
Attn: SO Heritage



HMCS *Charlottetown*'s contributions to *Operation Mobile*

HMCS *Charlottetown* departed Halifax on 2 March 2011 to join international operations already underway in and around Libya. *Charlottetown* arrived on station in the central Mediterranean Sea two weeks later and joined Standing NATO Maritime Group 1.

Charlottetown's contributions to *Operation Mobile* include escorting vessels such as mine-countermeasure and replenishment ships, as well as enforcing an embargo zone to ensure that prohibited materiel does not enter Libya.