





CALM SEAS: ENABLING CANADA'S ENDURING INTERNATIONAL MARITIME COMMITMENT TO THE GLOBAL SYSTEM

LCdr A. Lozer

JCSP 43

Master of Defence Studies

PCEMI 43

Maîtrise en études de la défense

Disclaimer

Opinions expressed remain those of the author and do not represent Department of National Defence or Canadian Forces policy. This paper may not be used without written permission.

© Her Majesty the Queen in Right of Canada, as represented by the Minister of National Defence, 2017.

Avertissement

Les opinons exprimées n'engagent que leurs auteurs et ne reflètent aucunement des politiques du Ministère de la Défense nationale ou des Forces canadiennes. Ce papier ne peut être reproduit sans autorisation écrite.

© Sa Majesté la Reine du Chef du Canada, représentée par le ministre de la Défense nationale, 2017.



CANADIAN FORCES COLLEGE – COLLÈGE DES FORCES CANADIENNES JCSP 43 – PCEMI 2016 - 2017

MASTER OF DEFENCE STUDIES – MAÎTRISE EN ÉTUDES DE LA DÉFENSE

CALM SEAS: ENABLING CANADA'S ENDURING INTERNATIONAL MARITIME COMMITMENT TO THE GLOBAL SYSTEM

LCdr A. Lozer

"This paper was written by a student attending the Canadian Forces College in fulfilment of one of the requirements of the Course of Studies. The paper is a scholastic document, and thus contains facts and opinions, which the author alone considered appropriate and correct for the subject. It does not necessarily reflect the policy or the opinion of any agency, including the Government of Canada and the Canadian Department of National This paper may not be Defence. released, quoted or copied, except with the express permission of the Canadian Department of National Defence."

Word Count: 19748

"La présente étude a été rédigée par un stagiaire du Collège des Forces canadiennes pour satisfaire à l'une des exigences du cours. L'étude est un document qui se rapporte au cours et contient donc des faits et des opinions que seul l'auteur considère appropriés et convenables au sujet. Elle ne reflète pas nécessairement la politique ou l'opinion d'un organisme quelconque, y compris le gouvernement du Canada et le ministère de la Défense nationale du Canada. Il est défendu de diffuser, de citer ou de reproduire cette étude sans la permission expresse du ministère de la Défense nationale."

Compte de mots: 19748

ABSTRACT

Key of any programming item is to provide more of a service to Canada with the same funding, by harnessing capacity and changing process. Canada can derive greater benefit from Canadian Armed Forces (CAF) maritime capability in the decades to come through the creation and implementation of an ongoing and routine international maritime operation. The Op Galateia model enables: better use of CAF maritime capability to support Canada's enduring foreign policy principles and Government of Canada (GoC) policy priorities; an integrated and comprehensive Whole of Government (WoG) planning framework; a forward postured rapid response maritime force for Canada; institutional stewardship benefits associated with personnel and materiel management; and an end to Canada's episodic approach to commitments in the international maritime domain.

Op Galateia maximizes GoC options for response to emergent international events that fall above the threshold of routine with forward postured high readiness CAF maritime capability available for direction. A deliberate and ongoing contribution to the long-term stability of the international maritime neighbourhood that maximizes forward presence and responsive options for Canada is financially viable with minor to negligible incremental funding implications. Opportunities to contribute are abundant. Small changes have the potential to result in big gains. The world is Canada's neighbourhood and its streets are its oceans and seas. The Op Galateia model enables the ongoing delivery of routine CAF maritime effects in support of calm seas in Canada's neighbourhood.

TABLE OF CONTENTS

Abs	stract	2	
Tab	Table of Contents		
Ack	Acknowledgements		
Introduction		5	
Chapter			
1.	Legacy Approach to Canada's International Maritime Neighbourhood	16	
2.	Routine Opportunities for Canada's Enduring Foreign Policy	30	
3.	OP Galateia: Enhancing Response while Enabling Canada's Presence	68	
Conclusion		90	
Bib	Bibliography		

ACKNOWLEDGEMENTS

The author wishes to acknowledge the following people whose approachability, challenge function, patience, knowledge, and mentorship contributed significantly to the development of *Calm Seas: Enabling Canada's Enduring International Maritime Commitment to the Global System*: RAdm Bob Auchterlonie, Siri Bjune, Greg Bunghart, Capt(N) David Colbourne, Alan Cole, Steve Fortier, RAdm Darren Hawco, Todd Kennedy, Anna Kapellas, Stephan King, Jonathon Kouwenberg, Jason Lacoursiere, Corey Lange, Dr. Ben Lombardi, Meiz Madjoub, Dr. Chris Madsen, Capt(N) David Mazur, RAdm Art McDonald, Dr. David Perry, and Ralph Prentice. Special thanks to Corey Bursey, and that one unsuccessful brief in his office that inspired this paper.

Extra special thanks to Lisa, Adriana, and Stefen Lozer for all the love and support you always give, including active participation in riveting family conversations at the dinner table about routine international maritime operations. That's love.

- THEOI Greek Mythology

INTRODUCTION

Day to day policing of a neighbourhood is not done by waiting for 911 calls; but that is exactly how Canada works when it comes to patrolling the maritime streets of its international neighbourhood. When a police patrol leaves its station it goes to work maintaining peace and order by providing a presence and interacting with the community it serves. No call to 911 is needed for a patrol unit to conduct basic policing. The patrol executes duties that are defined, limited, and routine in nature with a clear jurisdiction guided by the continuous oversight of a chain of command with delegated authorities and responsibilities. If a trainee is learning the ropes from a seasoned veteran, training occurs concurrent to the normal duties of the patrol. When a call comes in from a dispatcher, units on patrol are optimally postured to respond, normally prepositioned in different locations of the precinct's area of responsibility so that one can proceed immediately while other units make their way from further locations. The model of ready forces on patrol is sustainable, flexible, scalable, serves the public interest, and is efficient from the perspective of resources spent versus output. If ready patrol units remained at the precinct until calls were received, outputs associated with routine day-to-day policing would be lost, response times would be longer, and there would be an overall marginal return on investment from expensive public safety resources. Further, a purely responsive approach that lacked day-to-day routine patrols would fail to establish the law abiding conditions that normally detect, deter, and disrupt criminal elements that left to their own devices would manifest as singular and systemic threats to order and public safety.

There is an opportunity for Canada to derive greater benefit from Canadian Armed Forces (CAF) maritime capability in the decades to come through the creation and implementation of an ongoing and routine international maritime operation. It is not a glossy sounding proposal but it is one where a few small moves have the potential to result in big gains in operational output that enhances support to enduring Canadian foreign and defence policy principles and the national interest. Extant foundational layers of high readiness capability required in rare cases of extremis to defend Canada's maritime approaches and to fight with allies in all-out war can also be leveraged on a routine basis to support peace, prevent conflict, increase stability of a rules based system, and to build and reinforce relationships and partnerships around the world. Operationalizing the employment of CAF high readiness maritime capability in support of routine global diplomacy and maritime security operations allows the Government of Canada (GoC) to maximize the potential of an expensive and necessary capability in an ongoing, deliberate, measured, and meaningful way. Employment of CAF maritime capabilities in routine international operations represents an untapped potential to enhance the delivery of longstanding GoC policy demands.

Canada is a maritime nation entrenched in a global system ¹ typified by interdependency. The world is Canada's neighbourhood and its streets are its oceans and seas. The ensured use of the global maritime commons positively affects many everyday Canadians and the health of the Canadian economy. As a result of industry innovations

¹ "A term to describe the hyper-connected and massively interdependent contemporary world order, but also meant to convey the idea that many contemporary societal, political, economic, climatological and security challenges are essentially global in scope, multidimensional in connecting across multiple policy domains, and borderless in relation to national and international governance," Mark Norman, *Canada in a New Maritime World: Leadmark 2050* (Ottawa: Minister of National Defence, 2016), G-2.

and improved efficiencies related to intermodal transport, between 2002 and 2012, Canada's seabourne trade doubled to \$204 billion which represented 11% of Canada's Gross Domestic Product. ² According to the United Nations (UN) Conference on Trade and Development, in 2015 seabourne trade counted for 80% of the world's trade. ³ Seabourne trade is recognized by the UN as a critical factor for the realization of eight global sustainable development goals and 11 targets. ⁴ Sustainable development and economic growth increase the demand of emerging markets and further increases trade and the movement of goods in the maritime commons.

The maritime commons used to move the trade that sustains and fuels the global economic engine is also used to challenge and disrupt the global system on which Canada depends. Trafficking humans, smuggling migrants, narcotics, weapons, commodities, and counterfeit products, and maritime piracy all happen in the world's oceans and are persistent antagonists to the global system. This illegal transnational use of the maritime domain supports criminal and terrorist organizations ashore that challenge legitimate governance and development, create systemic corruption, and are sources of regional instability and insecurity. As noted by the 2010 United Nations Office on Drugs and Crime (UNODC) Executive Director, Antonio Maria Costa, "… states have to look beyond borders to protect their sovereignty. . . If police stop at borders while criminals cross them freely, sovereignty is already breached – actually, it is surrendered to those who break the law." ⁵ Given all vessels can freely transit the large expanse of borderless

² Jacques Roy, *The Art of the State Volume VI: Redesigning Canadian Trade Policies for New Global Realities* (PDF, Montreal: Institute for Research on Public Policy, 2016), 11.

³ United Nations Conference on Trade and Development: Review of Maritime Transport 2016 (PDF, Geneva: United Nations, 2016), 6.

⁴ Ibid.

⁵ The Globalization of Crime: A Transnational Organized Crime Threat Assessment, report (United Nations Office on Drugs and Crime, United Nations, 2010), iii.

international waters, and few of the developing countries who are most susceptible to transnational crime and terrorist elements have adequate maritime security capability and capacity, the problem set is even more challenging in the maritime domain. The problem set requires long-term, persistent, and collaborative approaches by partnered stakeholders like the UN, NATO, the EU, and the many other coalitions and individual countries who actively work independently and together to shore up security of the global maritime commons, and to deter its use by elements that contribute to instability ashore.

The Commander of the Royal Canadian Navy (Comd RCN) holds the delegated authorities, responsibilities, and accountabilities for the force generation (FG), force development (FD), and force sustainment (FS) of naval capabilities, and is the overall champion for CAF maritime capabilities. ⁶ To meet strategic readiness requirements, the RCN is required to have a tailorable Naval Task Group (NTG) ready at all times to provide the GoC responsive and sustainable options for the employment of maritime capability anywhere in the world, capable of operations that range from peacetime support operations to combat. CAF capabilities and associated effects are listed inconsistently throughout many different CAF publications, concepts, plans, and directives. For the purposes of this paper, Figure 1 is a distillation of the first and second tier maritime effects that CAF maritime capability delivers the GoC. A high readiness Single Ship

⁶ Organization and Accountability: A Reference Document for Members of the Canadian Armed Forces and Employees of the Department of National Defence Third Edition (Reference Document, Department of National Defence, Canada, Ottawa, 2016), Annex C, 8.

Warfighting		
Defend Canada against maritime threats		
Support Land and Special Operations Forces from sea		
Control domestic and international waters		
Fight full spectrum combat operations		
Integrate with US, closely allied nations, NATO, or coalition task groups		



	· Flotect the movement of manufile trade
	Detect, deter, and disrupt terrorism and transnational crime
	Deliver Maritime Search and Rescue
•	Support Other Government Departments and Civil Authorities
	Help coastal nations build maritime security capacity

Figure 1 – CAF First and Second Tier Maritime Effects 7

Independent Deployer (SSID) or NTG ⁸ is able to deliver all of the effects in Figure 1, anywhere in the world, at a scale relative to the number of elements deployed. The model has historically provided the GoC effective reactive options. In each of the cases of Korea, Iraq's first invasion of Kuwait, Somalia, East Timor, and the 9/11 attacks by Al-Qaeda, high readiness maritime capability was the first to be dispatched to express Canadian commitment to emerging crises with a "forceful, flexible, and versatile" military option. ⁹ Even with known deficiencies funded for rectification over the coming

⁷ Plain language first and second level maritime effects derived from the aggregation and curation of CAF maritime capabilities included in Leadmark 2050, the CAF Joint Capability Framework, Leadmark 2020 Booth's Triangle, the unclassified portion of the Strategic Joint Staff CAF Force Posture and Readiness directive, and Directorate of Naval Strategy staff discussions with Comd RCN 34 as part of the a CAF capability review conducted in Nov 2015

⁸ SSID is a high readiness surface combatant such as a Halifax Class frigate or its replacement the Canadian Surface Combatant with a Helicopter Air Detachment (HELARIDET). A Canadian NTG is task group that consists of 4 major combatant ships, a replenishment ship, associated HELAIRDETs for all ships in the NTG, and a supporting Long Range Patrol Aircraft (LRPA). NTGs can be tailored to include submarines, Kingston Class vessels, Harry de Wolfe class vessels, and are capable of operating with allied and maritime security partner vessels, or integrating into other task groups and task forces

⁹ Mark Norman, *Canada in a New Maritime World: Leadmark 2050* (Ottawa: Minister of National Defence, 2016), 13.

years and the current limitations of CAF maritime capability with regard to capacity and scale, Canada has been and will continue to be able to contribute abroad and participate in a responsive way with scalable maritime capability.

Unfortunately, a responsive Canadian approach to maritime operations also means an episodic approach as it applies to regional presence and partnership. Participation in named operations that represent the diplomacy and maritime security tiers of the CAF maritime effects in Figure 1 are event based in their initiation and are required to be regularly revisited by cabinet to authorize their extension. This is the case regardless of how routine in nature most maritime operations are and the consistency of their alignment with enduring policy principles. This wastes Cabinet's time, ties up operational, strategic, and policy spheres of the Department of National Defence (DND) with lengthy process, and reinforces the episodic characterization of Canadian presence and commitment to partners. The approach prohibits the routine, deliberate, and measurable delivery of CAF maritime effects to support Canada's day-to-day and long term national interests abroad. In contrast, the case is not the same for Whole of Government (WoG) partners operating internationally. WoG partners conduct day-to-day operations as part of their mandates to support GoC national security strategies on an ongoing basis, but without the same level of scrutiny and process associated with international maritime operations. In addition to their own mandates, WoG partners support Global Affairs Canada (GAC) led capacity building, engagement, security, and development initiatives.

The CAF is the GoC's primary and often sole tool for supporting and pursuing security, defence, and foreign policy in the international maritime domain versus on land

10

where other options exist. In *Canada's Voice: The Public Life of John Wendell Holmes*, Adam Chapnick writes about the contribution of Canadian public servant and diplomat John Wendell Holmes' foundational understandings and teachings on the directions of Canada's foreign policy. Chapnick summarizes Holmes' six enduring Canadian foreign policy principles that have stayed consistent through the many successive governments from Canada's post war years to present as follows:

- First, not alone. To promote Canadian interests, Canada needs to promote peace;
- Secure trade. Canada has a reliance on foreign markets and a vital interest in maintaining open trade routes;
- US as ally. Foreign policy cannot be hostile to US interests, as a weakened US would hurt Canada;
- Counterweights. Canada must balance its reliance on the US by building many other positive relationships;
- National unity. Ensure that external affairs does not divide the country along ethnic lines; and
- Potential and limitations. Understand Canada's potential and limitations as a middle power. Canada cannot tell others what to do or force them to follow its lead. But Canada can provide a positive example for others and be a responsible member of the world community.¹⁰

Canada needs peace, multilateralism, and respect for international law to prosper. War is bad for a trading nation's business, and stability fosters development and the emergence of more customers. Providing presence and working with partners on a consistent basis provides counterweights and demonstrates concrete contributions to foster regional security. Promotion of the lawful use of the maritime domain supports a rules based environment for Canadian competition. ¹¹ CAF maritime capabilities and their associated effects support enduring Canadian foreign policy principles. In collaboration with WoG

¹⁰ Adam Chapnick, *Canada's Voice: The Public Life of John Wendell Holmes* (Vancouver and Toronto: UBC Press, 2009), 81.

¹¹ Adam Chapnick, "Canadian Foreign Policy" (lecture, Canadian Foreign Policy presentation to students of the Joint Command and Staff Programme, Canadian Forces College, Toronto, October 24, 2016).

partners, allies, and partner countries and organizations, an ongoing and routine international maritime operation and its effects strengthen the GoC's ability to pursue related objectives in the areas of security, defence, development, and trade policy.

Consideration for the creation of an ongoing and routine international maritime operation has never been timelier for the CAF and the GoC. With the funded 20-year transition to the future fleet, full CAF maritime capability and capacity will be restored over the coming decades, with continuous improvement during the interim period. Canada's strategic shipbuilding initiative insulates this capability restoration and the long-term availability of capability. This is coupled with concurrent RCN efforts to optimize forward sustainment and force management of the CAF's maritime capability, which will enhance overall capability, reliability, and availability far from homeport. Leveraging high readiness CAF maritime capability for routine operations allows for forward maritime elements postured and ready to respond to higher risk emergent national taskings abroad when directed by the GoC. Forward posturing maritime elements also provides more decision and option space to the GoC about getting involved in an emergent event abroad. Examples of emergent taskings in Canada's international maritime neighbourhood include presence at the beginning of a developing conflict or international crisis, evacuation of Canadian citizens, humanitarian operations and disaster response, and staging, surveillance, and sea based logistics in support of other CAF or WoG elements.

As part of an ongoing and routine international maritime operation, participation in partner led maritime security capacity building frameworks provides Canada the opportunity to be a consistent exporter of security to nations with nascent maritime capabilities and regional security challenges that impact the global system. Helping nations build capacity to effectively patrol their area of the maritime neighbourhood and to enforce their own policies contributes to the stability of the entire international maritime domain and benefits Canada. Forward postured CAF maritime elements participating in an ongoing and routine international maritime operation provides more options to the GoC for timely responses to requests from NATO, allied countries, the UN, and aligned partners.

Finally, an ongoing and routine international maritime operation concretely messages that Canada is a persistent contributor to the day-to-day stability of the global system. It is international leadership by example. None of these activities involve combat operations or use of force outside of what is always reserved for self-defence whenever CAF elements operate. The activities are at the low end of the spectrum, aligned and supportive of enduring policy objectives, deliberate, collaborative, and routine in nature. They are the equivalent of what police patrols do day-to-day to set the long-term conditions for public safety in the macro scale of the international maritime neighbourhood. But just like the police patrol, resources already patrolling the neighbourhood means postured, high readiness capabilities are immediately available to be dispatched on tasks and on temporary named operations outside the routine spectrum where effects may require the deliberate use of force or higher risks.

This paper posits that the CAF and the GoC should create and implement an ongoing international maritime operation that enables scalable high readiness CAF maritime capabilities to better deliver routine and low risk effects that concretely shape the conditions required in the international maritime domain for a stable global system that benefits Canada and its partners. Canada's status quo approach to international maritime operations demands high readiness CAF maritime capabilities to support up to and including combat operations, but constrains routine presence operations, shaping long-term stability of the international maritime domain, and persistent support to diplomatic initiatives. Delivery of routine CAF maritime effects supports Canada's enduring foreign policy principles and current GoC policy priorities. The established opportunities where CAF maritime capability can be employed day-to-day adds to Canada's ongoing commitment to global peace and security while forward posturing CAF maritime elements as optimally responsive GoC options for emergent priorities. A change of approach is required to enable ongoing and routine international maritime operations is positive and results in more predictable programme funding over a longer period. A new approach enables desired outputs that represent a better return on investment than the current approach.

CHAPTER 1: LEGACY APPROACH TO CANADA'S INTERNATIONAL MARITIME NEIGHBOURHOOD

On a given day, as the lead force generator for maritime capabilities in the CAF, the RCN is responsible for having specified levels of maritime capability and capacity at high readiness for employment in international operations the GoC may look to pursue. High readiness elements are capable of delivering the full range of maritime effects listed in Figure 1, across the entire spectrum of operations. At the lower end of the spectrum, this includes delivering effects such as monitoring maritime and coastal environments and helping coastal nations build maritime security capacity. At the higher end of the spectrum, this includes delivering effects such as integrating into task groups to fight in combat operations and to control international waters. The construct is responsive and flexible, with maritime elements able to often make final mission preparations in a short number of days or weeks, or on route to a specified operations area.

Force employment on named international operations is normally reserved for high readiness CAF maritime elements. Only maritime elements that have achieved the threshold of high readiness are able to quickly scale up for operations that include combat, even if the higher end effects are just needed for the purpose of self-defence and survivability. Lower readiness CAF maritime elements do not possess the force protection and survivability capabilities necessary to operate in certain regions and operational environments. These lower readiness elements are primarily used for emergent and standing domestic and continental operations related to sovereignty, search and rescue, surveillance, and domestic support to WoG partners. The international maritime operating environment continues to necessitate the requirement to generate maritime elements to a high readiness level for the basic purposes of self-defence. A recent event where this was clearly illustrated occurred on 12 October 2016, when a US Navy destroyer, USS Mason, was targeted north of the Bab el-Mandeb Strait by guided missiles fired from the Yemeni coastline. ¹² The Bab el-Mandeb Strait is the strategic maritime chokepoint and corridor between the Mediterranean Sea and Indian Ocean where, according to US Energy Information Administration data, an average of over 3.8 million barrels of crude oil passes each day. ¹³ Without an inherent high readiness force protection ability, a maritime element loses the flexibility to operate in a number of regions, including maritime transit areas of strategic importance like the Bab el-Mandeb Strait. Maritime elements without organic self-defence capability provide limited options for employment internationally to the GoC, and can even be a liability to allies and partners in certain situations. Only high readiness maritime elements provide the GoC with options and effects associated with the full spectrum of operations.

Although presently there is limited availability of high readiness maritime elements in the CAF, based on funded projects to date, at any one time starting in the late 2020s, CAF maritime elements will include a combination of Canadian Patrol Frigates (CPFs) and Canadian Surface Combatants (CSCs) totaling 15, and two Joint Support Ships (JSSs), all at various states of readiness. ¹⁴ This represents the full forecasted

¹² Reuters, "U.S. Navy Destroyer Targeted Again in Missile Attack Off Yemen – gCaptain," GCaptain, October 12, 2016, , accessed March 14, 2017, https://gcaptain.com/u-s-navy-destroyer-targeted-again-in-missiale-attack-off-yemen/.

¹³ World Oil Transit Chokepoints, PDF, Washington: US Energy Information Administration, November 10, 2014, 12.

¹⁴ Deduction based on publicly released project projections (CSC - Canada, "Canadian Surface Combatant Project," Department of National Defence, June 13, 2016, accessed March 14, 2017, http://www.forces.gc.ca/en/business-equipment/canadian-surface-combatant.page; JSS - Canada, "Joint Support Ship Project," Department of National Defence, August 2016, accessed March 14, 2017,

restoration of NTG capability and capacity, which should be sustained as CPFs are retired and CSCs enter into service. While the numbers look impressive at first, they quickly become less so when standing domestic requirements, extended maintenance, and FG of platforms and personnel are factored in. Based on precedent political and strategic direction, both coasts will at all times have at least 1 CPF or CSC available at short notice to support emergent domestic or continental taskings that require a surface combatant. A mix of four to five CPFs and CSCs will be undergoing required extended maintenance, and therefore completely unavailable for operations at sea in any capacity. The result is four force generating normal readiness surface combatants capable of producing maritime effects in the lower end of the spectrum of operations, and four high readiness surface combatants capable of producing maritime effects across the full spectrum of operations, all supported by a minimum of one JSS at high readiness. While the normal readiness elements still require a loose tether to domestic homeports based on program requirements that support paths to high readiness, based on the current force employment model, the high readiness ships will be deployed on named operations or will sail as required to maintain readiness until called upon for emergent international operations. Figure 2 visually depicts the projected force laydown of all NTG maritime elements at their various states of readiness on any given day in the late 2020s based on funded projects, the current FE model, and the RCN FG framework. Figure 2 also includes other CAF maritime elements that will be available to augment and tailor core NTG elements.

http://www.forces.gc.ca/en/business-equipment/joint-support-ship.page). Although the CSC project notes "up to 15" hulls, for the purposes of this paper 15 has been chosen to describe maritime elements available at fully restored capacity and capability relative to the NTG.

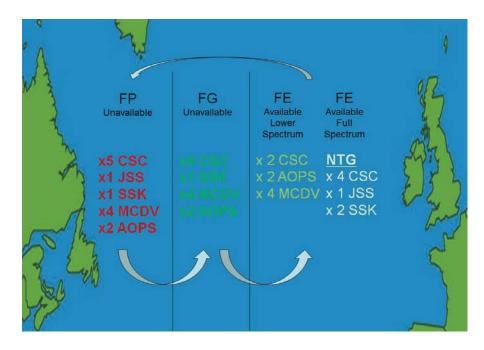


Figure 2 – CAF Maritime Element Availability after Restoration of Capability and Capacity

Source: Based on projects funded to date, on any given day beginning in the late 2020s the CAF will have a full Naval Task Group (NTG) available for force employment on international operations capable of delivering the full spectrum of CAF maritime effects. The NTG will be available as a collective of maritime elements, or as individual elements. The availability of CAF maritime elements for force employment internationally will increase during the interim period between present and restoration of full capacity and capability.

The legacy approach of force employing available high readiness CAF maritime elements internationally involves the creation and approval of named expeditionary operations based on emergent issues and GoC near term priorities. At the time this paper was written, Canada delivered CAF maritime effects to three named operations abroad. As a result of the emergent use of the Caribbean Sea and the eastern Pacific Ocean by transnational organized crime, since 2006 Operation CARIBBE has provided CAF maritime capabilities to a multinational, joint, combined and interagency effort to prevent illicit trafficking in the region. ¹⁵ As a result of Russia's aggression in the Ukraine, since 2014 Operation REASSURANCE has provided CAF maritime capabilities to Standing NATO Maritime Group 2 (SNMG2), "to reinforce collective defence and demonstrate the strength of allied solidarity." ¹⁶ As a result of the resurgence of terrorism in the Middle East region, intermittently since 2012, Operation ARTEMIS has provided maritime capabilities to multinational efforts in the Red Sea, Gulf of Aden, Arabian Sea, and the Western Indian Ocean to work to deter and deny terrorist organizations from using the maritime domain "for smuggling weapons, illicit cargo, and narcotics to fund their activities, while ensuring the safe passage of merchant ships." ¹⁷

While having a specified number of maritime elements at high readiness as options for government is deliberate and required based on strategic orders and directives linked to policy, deliberately posturing ships forward to deliver low risk and routine effects is not. On the surface, the multiple named international operations in which the CAF is delivering maritime effects appears to demonstrate enduring commitment, and the language used to describe them in announcements espouses the same. But these temporary operations occur on an opportunity basis and as a result of emergent problems. They do not occur through deliberate planning to provide meaningful and enduring contributions as part of standing commitments to partners, to the international maritime domain, and to long-term stability operations aimed at building the global

¹⁵ "Operation CARIBBE," Department of National Defence, March 14, 2017, accessed March 14, 2017, http://www.forces.gc.ca/en/operations-canada-north-america-recurring/op-caribbe.page.

¹⁶ "Operation REASSURANCE," Department of National Defence, March 14, 2017, accessed March 14, 2017, http://www.forces.gc.ca/en/operations-abroad/nato-ee.page.

¹⁷ "Operation ARTEMIS," Department National Defence, March 14, 2017, accessed March 14, 2017, http://www.forces.gc.ca/en/operations-abroad-current/op-artemis.page.

neighbourhood's security capacity. Deployment of Canada's limited and valuable high readiness maritime elements occurs in a responsive and episodic manner.

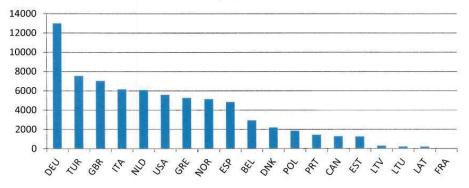
An example of where narrative does not credibly align with enduring contribution and commitment is the recent deployment of maritime elements to SNMG2 as part of Operation REASSURANCE. The official description of the recent deployment points to "Canada's continued leadership on the world stage by making meaningful and enduring contributions to NATO by performing different tasks ranging from participating in exercises to intervening in operational missions." ¹⁸ "Meaningful and enduring contributions to NATO" was stated as a priority in Canada's most recent defence whitepaper. In the 1994 Whitepaper Canada committed to maintaining "one ship to serve with the Standing Naval Force Atlantic" (now SNMG1), and to "assign, on an occasional basis, one ship to NATO's Standing Naval Force Mediterranean (now SNMG2)." ¹⁹ This seems to be a reasonable commitment to a multinational alliance entrenched in the enduring policy principles of CANUS relations, counterweights, securing trade, and promoting peace.

While the 1994 Whitepaper set into policy a benchmark for Canada's defence commitment to NATO, the commitment waxed and waned with governments and priorities over the years. In the case of contributions to NATO with CAF maritime capabilities, while key allies and partners have routinely committed to both SNMGs, Canada has not met its stated commitment, nor committed anywhere in the ballpark of stated intentions. According to NATO Allied Maritime Headquarters data, as illustrated by Figure 3, between 2002-2014 Canada ranked 14th among NATO country contributors

¹⁸ "Operation REASSURANCE," Department of National Defence, March 14, 2017, accessed March 14, 2017, http://www.forces.gc.ca/en/operations-abroad/nato-ee.page.

¹⁹ Canada, White Paper on Defence (PDF, Ottawa: Department of National Defence, 1994), 6.

to SNMG patrols, with a cumulative contribution total of three years out of the possible 12 in the data collection range. This was coupled with having committed the lowest number of days on task per contribution of any participating nation. ²⁰



Total number of days contributed 2002-2013

Figure 3 – Total Number of Days Contributed by Country to NATO SNMGs

Source: NATO Maritime Command May 2014 Point Paper, Standing Naval Forces – Improving the Attractiveness Based on an Analysis of Historic Data

Adhering to the commitment as a rule demonstrates credibility and commitment as a partner in the alliance. Certainly Canadian allied commitment to NATO regional maritime security operations and allied preparedness was affected by variables associated with the availability of resources and emergent events to which Canada committed maritime elements. But another key reason Canada has not achieved policy benchmarks for routine allied commitment to NATO in the maritime domain is because of the reactive and episodic process through which named operations are initiated, approved, and renewed.

In general, the GoC authorizes, directs, and provides limits for CAF expeditionary operations through the Memorandum to Cabinet (MC) process. The MC process within DND is coordinated by Strategic Joint Staff (SJS). The MC itself is drafted by Assistant

²⁰ Geissler, *Standing Naval Forces - Improving the Attractiveness Based on an Analysis of Historic Data* (PDF, Northwood: NATO Allied Maritime Command HQ, May 23, 2014), 3.

Deputy Minister Policy (ADM Pol) who closely liaises with Global Affairs Canada (GAC) to ensure policy alignment. SJS coordinates department MC input from involved stakeholders and subject matter experts. Stakeholders often include as a minimum: Force Generator Commands and Commander Joint Operations Command (CJOC) for input and options related to available capabilities and elements, as well as for estimates of required effects; Assistant Deputy Minister Finance (ADM (Fin)) for resource availability and costing; GAC for expeditionary operations; and any other GoC partners associated with the proposed operation. Within DND the MC draft is endorsed by the Chief of Defence Staff (CDS), the Deputy Minister (DM), and approved for submission by the Minister of National Defence (MND). Often, the MC requires co-approval by the Minister of Foreign Affairs (MFA). Prior to the MC moving to Cabinet the Privy Council Office coordinates and aligns government efforts associated with the MC. Once cabinet has met to discuss the MC, decisions and caveats are captured in the record of decision. The whole process can take months, but can be shortened to weeks or days where urgency is deemed by the GoC to be a factor. Limits are always set by time and / or resource allocation requiring cabinet to revisit the operation for renewal. If a renewal of an operation is required, as is the case for most named maritime operations, it involves repeating the whole process from beginning to end, regardless of the routine nature of the operation, alignment with enduring policy, and the low levels of risk associated with the operation. Renewals are initiated based on time limits set by cabinet, mission changes, the election cycle, financial resource changes, or prompting related to the cyclic participation requests of allies and partners. Ready forces as options to government combined with the MC process ensures that CAF expeditionary operations are aligned with policies and resource availability, and supports an approach in response to emergent geopolitical events determined to be in Canada's national interest. ²¹

Unfortunately, while the MC process is highly effective in considering, approving, and assigning resources related to emergent events and initiatives related to Canada's national interest, the MC also perpetuates Canada's episodic approach to routine presence and contributions in the international maritime domain. Agenda items considered by cabinet represent priority issues and initiatives of the GoC and its many departments on a given day. "At Cabinet, Ministers seek their colleagues' consideration of proposals in their area of responsibility."²² As a member of cabinet, and with the largest budget of any Minister, there is a disincentive to approach Cabinet with initiatives that require resourcing unless an emergent priority exists or there is an initiative driven by policy, a throne speech, or mandate letter for which the Minister does not have adequate resourcing to support. With more issues and initiatives then there are resources and time to discuss, there is an incentive to move long-term and routine initiatives to the bottom of the order. In short, the process is situated such that initiatives that have impact or results in the short term, or that the government has already directed to pursue, take priority. All of this is in the context of inter-departmental lobbying and competition for limited available funding which limits the potential to contribute to the global system as a committed and dependable partner in the consistent way aspired to in enduring policy principles. It would be difficult to come to cabinet to propose an ongoing and routine international maritime operation, when there are already more initiatives than there are resources. The MC is a barrier to the long-term deliberate approach associated with an

²¹ "Strategic Joint Staff - Staff Consultation," telephone interview by author, March 15, 2017.

²² Canada, A Drafter's Guide to Cabinet Documents (PDF, Ottawa: Privy Council Office, 2013),

operation that focuses on the routine, regardless of how concrete the outcomes are or how well aligned outcomes are with policy. Navigating the barrier represented by the MC process would be a major line of effort required to enable a change in approach and Canada's commitment to routine international maritime operations.

Having maritime elements postured forward in the international maritime neighbourhood means more responsive options for the GoC. Whether operating independently or integrated with allies and partners, CAF maritime elements executing tasks anywhere in the world on named operations with assigned orders and direction are available to be immediately redirected on national / GoC taskings. This again is likened to a police unit on routine patrol in a neighbourhood receiving a call from dispatch to investigate or respond to a developing event. The dispatcher has more responsive options because the police patrol is already in the neighbourhood. Having a maritime element postured forward allows for the optimal availability of maritime effects that the GoC can commit to a developing event anywhere in the international maritime neighbourhood. A concrete example of the flexibility and responsiveness associated with forward postured high readiness maritime elements at sea occurred following the 9/11 attacks. Two days after the United States began operations against Al-Qaeda and the Taliban regime in Afghanistan the GoC announced its intent to support the operation. HMCS HALIFAX was detached from conducting routine operations with SNMG1 and was ordered to proceed to the Arabian Sea as Canada's first contribution to America's Operation Enduring Freedom.²³ While CAF air and land elements were still working up to required

²³ "Canadian Armed Forces in Afghanistan – Mission Timeline," Department of National Defence, April 09, 2014, accessed March 14, 2017, http://www.forces.gc.ca/en/operations-abroad-past/afg-timeline.page.

readiness levels and finalizing mission preparations and sustainment arrangements, CAF maritime capabilities were producing effects in theatre for the coalition.

Although the example above illustrates the flexibility and responsiveness associated with forward postured high readiness maritime elements, it must be highlighted that the available option did not happen by design. As noted before, commitment of CAF maritime elements to NATO's SNMG1 and SNMG2 has been intermittent. In the example above, other maritime elements were not postured forward, and although it would not be long before Canada had additional maritime elements in theatre, the responsiveness to coalition efforts lagged behind the forward postured HALIFAX, and the many allied maritime elements that were forward postured. Under the status quo model, there is no requirement for high readiness assets to be forward postured and readily available as options to the GoC with capabilities and effects that represent billions of dollars of government investment and sunk costs.

With a comprehensive understanding of the value opportunity represented in the CAF's maritime capability and the limits of the legacy force employment model, the RCN has more recently taken the initiative to forward posture maritime elements beyond Canada's maritime approaches as part of the RCN's FG program. As part of the FG program, the RCN employs maritime elements to deliver maritime effects in the international maritime domain outside of named operations in order to fully maximize "the operational use of limited personnel and materiel assets." ²⁴ Maritime effects delivered are at the low end of the spectrum and include regional engagement, maritime security capacity building with partners, and building interoperability with maritime

²⁴ Darlene Blakely, "Generate Forward: Enabling Deployed RCN Assets to Provide Strategic Capability Abroad," *The National News Magazine of the Royal Canadian Navy: Crowsnest*, Winter Issue, 2017, 2.

security partners. With the exception of submarines which are always at a high readiness state when operating at sea, maritime elements employed as part of this RCN's approach are at varying levels of readiness, and therefore can only be employed in geographic areas where higher levels of readiness are not required for the purposes of self defence. As a result of HMCS VANCOUVER's FG program that included participation with allies in the 75th anniversary of New Zealand's naval forces, VANCOUVER was available to the GoC to offer timely humanitarian assistance when a 7.8 magnitude earthquake hit the South Island. "VANCOUVER contributed to the evacuation of approximately 900 people and the delivery of more than 216 tonnes of food and emergency supplies such as generators, portable pumps and portable chemical toilets." ²⁵ The ship changed very quickly from conducting routine forward postured operations to having a change of operational command to CJOC and Canada's Maritime Component Commander (MCC) for force employment in an emergent event in support of GoC direction.

The legacy model to force employment of CAF maritime elements in international operations is designed to revolve around near term emergent issues and initiatives, and squanders sunk costs associated with the potential for CAF maritime elements to contribute to long-term, enduring policy objectives. CAF maritime elements, capable of producing many lower end effects in the maritime domain on an ongoing, deliberate and routine basis are force generated to await employment in a responsive manner associated with near term GoC issues. The MC process used to review, approve, and resource international force employment of CAF maritime elements is the same for all-out war as it is for maritime capacity building and regional engagement. The model of forces ready and waiting coupled with a clear process that considers and resources

²⁵ *Ibid.*, 3.

international operations works well for near term and emergent efforts related to Canada's national interest, especially as it applies to higher end operations that involve the application of force and combat operations. Unfortunately, the current approach is suboptimal and episodic as it applies to the lost opportunities to produce routine maritime effects in support of international commitments and enduring Canadian policy objectives in the international maritime neighbourhood.

Subject to the completion of funded projects to stated levels required to restore CAF maritime capability and capacity, expensive CAF maritime capability and capacity necessary for the defence of Canada and to fight in combat operations with allies will be restored, which will incrementally increase the ability to deliver lower end CAF maritime effects abroad over the next 20 years. There is an opportunity ahead that requires a different approach to force employment where an ongoing and routine international maritime operation forms an enduring, recognized, and credible commitment to the international maritime neighbourhood, and that optimally postures CAF maritime elements around the "neighbourhood" as options for the GoC to respond to emergent issues that span the full spectrum of operations. The delivery of routine CAF maritime effects supports Canada's enduring foreign policy principles and current GoC policy priorities, and highlights many of the established opportunities where CAF maritime capability can be employed day-to-day to concretely demonstrate Canada's ongoing commitment to global peace and security. Forward posturing CAF maritime elements optimally positions them as responsive options for emergent GoC priorities.

CHAPTER 2: ROUTINE OPPORTUNITIES TO CONTRIBUTE TO CANADA'S ENDURING FOREIGN POLICY

The legacy approach to international force employment of CAF maritime elements: inhibits the full potential to deliver routine CAF maritime effects in support of Canada's enduring foreign policy principles; perpetuates episodic commitment to shaping the long-term stability of the global system on which Canada's prosperity relies; and reduces responsiveness and availability of CAF maritime capability as timely options to the GoC. There is room to increase the GoC return on investment on expensive yet necessary CAF maritime capabilities. Current and enduring GoC policy demands necessitate a deliberate, committed, and long-term approach to routine operations in Canada's international maritime neighbourhood. Established, low risk, and policy aligned international initiatives represent immediate opportunities for Canada to contribute to global peace and security in concrete, multilateral, and enduring ways through the FE of extant CAF maritime capacity and capability.

The highlighted effects in Figure 4 can be delivered in the international maritime domain as part of a routine operation that does not need to be continuously revisited by cabinet for its merits or validity with regard to producing outputs desired by the GoC. Asterisks denote effects that can only be considered routine when conducted in permissive operating environments that do not require the use of force other than for self defence. For example, "Support to Land and Special Operations Forces from sea" could include relaying communications and sea based Intelligence Surveillance and Reconnaissance (ISR), delivering support to land based peace support operations, or monitoring a coastline in support of operations ashore. "Integrate with US, closely allied



Figure 4 – Routine CAF Maritime Effects

nations, NATO, or coalition task groups" and "Command a multinational Naval Task Group" could include maritime security efforts related to large international exercises, SNMG patrols, and maritime crime and terrorism detection, deterrence, and disruption. None of these effects require the use of force for delivery other than for self defence.

Identifying what CAF maritime effects can be delivered as part of an ongoing and routine international maritime operation is required as a baseline for considering value and potential outputs linked to such an operation. CAF maritime effects are the *ways* that *ends* determined through policy are delivered in the maritime domain. It is important to note that traditional mechanisms used to ensure alignment of operations with policy goals resident at SJS and ADM (Pol) would continue to be necessary to allow CJOC and the MCC to validate plans for the routine delivery of CAF maritime effects for each deployment rotation during planning cycles. The fact that a planning cycle would be ongoing and predictable would enhance the ability to validate the planned delivery of effects during a rotation because it would allow for predictable planning phases and

tailoring through regular engagement with important stakeholders such as GAC and other WoG partners. That said, to examine the general validity of pre-existing, low risk, and high output activities as opportunities where Canada can contribute with little effort in a routine way to the international maritime neighbourhood, it is necessary to explicitly demonstrate the standing relationship between CAF maritime effects and the desired *ends* associated with enduring foreign policy principles and current policy demands.

An examination of the relationship between the *ends* desired by government and the deliberate and routine delivery of CAF maritime effects that support those *ends*, revisits Canada's enduring foreign policy principles in the light of current direction to the MND, MFA, and Minister of Public Safety (MPS). According to the revered Canadian diplomat John Wendell Holmes, Canadian foreign policy principles have endured across governments post war years. Canada needs to promote peace in order to promote Canadian interests. Canada's reliance on foreign markets means a vital interest in the maintenance of open trade routes. What Canada does abroad cannot be hostile to the United States because a weakened United States would impact Canada. While a prosperous United States is vital to Canada, Canada must balance its reliance on the United States by building and maintaining other positive relationships. Canada's potential and limitations as a middle power means Canada is limited to leading other countries through its positive example as a responsible member of the world community. ²⁶

The current MND mandate letter directs the Minister to pursue objectives that very closely align with Holmes' principles. In the letter, the MND is directed to ensure the CAF's ability to "provide disaster relief, conduct search and rescue, support United

²⁶ Adam Chapnick, *Canada's Voice: The Public Life of John Wendell Holmes* (Vancouver and Toronto: UBC Press, 2009), 81.

Nations peace operations, and contribute to the security of ... allies and coalition operations abroad."²⁷ The letter stresses the need to ensure a close link between defence policy, foreign policy, and national security. The letter clearly directs the MND to work with the MFA to renew Canada's commitment to United Nations peace operations, including: making specialized capabilities available on a case-by-case basis; responding quicker to emerging and escalating conflicts and providing well-trained personnel, commanders, staff officers, and headquarters units; and improving and expanding capacity building on peace operations.²⁸ In addition, the MND is mandated with maintaining strong commitments to NATO.

A number of security related themes associated with the global system are contained in the current mandate letter to the MFA. Many of the MFA's mandated deliverables closely dovetail with MND deliverables, and again align with many of Holmes' principles. The MFA is mandated to restore constructive leadership that will serve Canadian security interests and support making a "real and valuable contribution" to peace.²⁹ With regard to the US, the Minister is directed to maintain relations as Canada's closest ally and security partner, to continue "joint efforts to address global security threats [and] combat terrorism", and to cooperate on energy security. ³⁰ Globally, the MFA is to expand Canadian diplomacy to include strengthening bilateral, regional and multilateral partner relationships, to support UN peace operations, to seek leadership in multilateral institutions, and to revitalize "Canada's public diplomacy, stakeholder

²⁷ "Minister of National Defence Mandate Letter," Prime Minister of Canada, March 10, 2017, accessed March 14, 2017, http://pm.gc.ca/eng/minister-national-defence-mandate-letter ²⁸ *Ibid*.

²⁹ "Minister of Foreign Affairs Mandate Letter," Prime Minister of Canada, March 24, 2017, accessed April 14, 2017, http://pm.gc.ca/eng/minister-foreign-affairs-mandate-letter.

³⁰ *Ibid*.

engagement, and cooperation with partners." ³¹ Lastly, and of particular relevance to a proposed routine international maritime operation, the MFA is directed to work with the MND to ensure CAF deployments align with national interest, multilateral commitments, and government policy objectives.

Public Safety Canada leads the effort to coordinate the activities of federal departments and agencies as the department responsible to "protect the safety and security of Canadians both at home and abroad." ³² The Minister's Mandate letter clearly articulates the Minister's primary task of leading the GoC's work to keep Canadians safe, noting the requirement to appreciate where threats originate including terrorism and crime, and the requirement to work closely with the MND and MFA. ³³ The three primary agencies within Public Safety Canada that work abroad as part of the national security mandate are the Royal Canadian Mounted Policy (RCMP), Canada Border Services Agency (CBSA), and the Canadian Security Intelligence Service (CSIS). Specific national security areas they are mandated to pursue include counter-terrorism and counter-proliferation. ³⁴ In addition to national security, the RCMP and CBSA are mandated to counter crime related to Canada abroad, including combatting the movement of illicit drugs, human trafficking, and weapons. ³⁵

Table 1 maps the relationship between enduring foreign policy principles and the stated policy objectives of the government as extracted from mandate letters and GoC

 $^{^{31}}$ Ibid.

³² "National Security," Public Safety Canada, December 01, 2015, accessed March 14, 2017, https://www.publicsafety.gc.ca/cnt/ntnl-scrt/index-en.aspx.

³³ "Minister of Public Safety and Emergency Preparedness Mandate Letter." Prime Minister of Canada. March 10, 2017. Accessed March 14, 2017. http://pm.gc.ca/eng/minister-public-safety-and-emergency-preparedness-mandate-letter.

³⁴ "National Security," Public Safety Canada, December 01, 2015, accessed March 14, 2017, https://www.publicsafety.gc.ca/cnt/ntnl-scrt/index-en.aspx.

³⁵ "Countering Crime," Public Safety Canada, March 03, 2017, accessed March 14, 2017, https://www.publicsafety.gc.ca/cnt/cntrng-crm/index-en.aspx.

published defence and security information. In the third column of Table 1, specific CAF maritime effects are listed that contribute to the fulfillment of stated policy goals and enduring foreign policy principles.

Enduring Foreign Policy Principles	Government Policy (Ends)	CAF Maritime Effects (Ways)
First, not alone To promote Canadian interests, Canada needs to promote peace	 DND Renew commitment to UN peace operations including: make specialized capabilities available on a case-by-case basis; respond quicker to emerging and escalating conflicts; provide well-trained personnel, commanders, staff officers, and headquarters units; and improve and expand capacity building on peace operations Maintain strong commitments to NATO Contribute to security of allies and coalition operations abroad GAC Support making a real and valuable contribution to peace Support UN peace operations and seek leadership in multilateral institutions PSC Counter-terrorism and counter-proliferation abroad Counter crime related to Canada abroad, including combatting the movement of illicit drugs, human trafficking, and weapons 	 Sustain and build international partnerships and conduct naval diplomacy Help coastal nations build maritime security capacity Detect, deter, and disrupt terrorism and transnational crime Support OGDs and Civil Authorities
Secure trade Canada has a reliance on foreign markets and a vital interest in maintaining open trade routes	DND Contribute to security of allies and coalition operations abroad Maintain strong commitments to NATO GAC Support making a real and valuable contribution to peace Cooperate with US on energy security PSC Counter-terrorism and counter-proliferation abroad Counter crime related to Canada abroad, including combatting the movement of illicit drugs, human trafficking, and weapons	 Protect the movement of trade Sustain and build international partnerships and conduct naval diplomacy Monitor maritime and coastal environments Support OGDs and Civil Authorities
US as ally Foreign policy cannot be hostile to US interests, as a weakened US would hurt Canada	DND Maintain strong commitments to NATO Maintain relations with closest ally and security partner GAC Jointly address global security threats and combat terrorism Cooperate with US on energy security PSC Counter-terrorism and counter-proliferation abroad Counter crime related to Canada abroad, including combatting the movement of illicit drugs, human trafficking, and weapons 	 Integrate with US, closely allied nations, NATO, or coalition task groups Command a multinational Task Group Monitor maritime and coastal environments
Counterweights Canada must balance its reliance on the US by building many other positive relationships	 DND contribute to security of allies and coalition operations abroad renew commitment to United Nations peace operations Maintain strong commitments to NATO GAC Expand Canadian diplomacy to include strengthening bilateral, regional and multilateral partner relationships Support UN peace operations and seek leadership in multilateral institutions 	 Integrate with US, closely allied nations, NATO, or coalition task groups Command a multinational Task Group Sustain and build international partnerships and conduct naval diplomacy
Potential and limitations Canada cannot tell others what to do or force them to follow its lead. But Canada can provide a positive example for others and be a responsible member of the world community	 DND contribute to security of allies and coalition operations abroad renew commitment to United Nations peace operations Maintain strong commitments to NATO GAC Support making a real and valuable contribution to peace Expand Canadian diplomacy to include strengthening bilateral, regional and multilateral partner relationships Support UN peace operations and seek leadership in multilateral institutions PSC Counter-terrorism and counter-proliferation abroad Counter crime related to Canada abroad, including combatting the movement of illicit drugs, human trafficking, and weapons 	 Conduct sea-based Humanitarian Operations and disaster Relief Deliver maritime search and rescue Sustain and build international partnerships and conduct naval diplomacy Support OGDs and Civil Authorities

 Table 1 – Enduring Foreign Policy Principles and Current Government Policy

 Objectives Supported by the Delivery of Routine CAF Maritime Effects

Many international initiatives exist for operational, strategic and political planning staffs to consider during the planning cycle of each routine international maritime operation rotation. Given delivery of routine CAF maritime effects falls in the lower end of the spectrum of operations, any commitments can at any time be superseded by emergent national taskings. For instance, in the event a maritime element was scheduled to participate in a capacity building activity such as embarking a coastal nation's boarding team for a one week patrol and training in their regional waters, the event could be rescheduled or postponed in the event a nationally directed interdiction emerged. Similarly, if a maritime element was scheduled to join a task force for a two week patrol and an urgent tasking associated with support to land forces or special operations forces arose, the maritime element would retask to support the national tasking. All international frameworks that involve the routine delivery of lower end maritime effects are established to allow nations to detach and to proceed on national tasks when ordered.

None of the following examples requires commitments that preclude the availability of CAF maritime elements for national tasks, and therefore represent opportunities that are non-binding and flexible, while also providing the platform through which to pursue policy goals through routine operations internationally. The only roles that require assured commitment are ones that include leadership in the provision or delivery of a maritime security framework such as a Flag Ship for a NATO SNMG or another task group or task force.

Routine Maritime Security Capacity Building

Maritime security capacity building involves the exporting of security to coastal nations with nascent or developing maritime security capability and capacity. The end state of any maritime security capacity building roadmap is ownership by a coastal state of its maritime security. This includes the ability to ensure the undisrupted lawful use of a state's coastal waters, engagement and partnership with other regional coastal states in the security and stewardship of the regional maritime domain, and the detection, denial and disruption of unlawful use of a coastal state's regional maritime domain. Activities associated with routine maritime security capacity building centre around training and mentorship in permissive settings. Although it can occur and often happens in the land and air domains, maritime security capacity building is rarely executed through bilateral arrangements or bilateral capacity building plans. Due to the borderless and connected nature of international waters, meaningful maritime security capacity building involves many stakeholders that include national maritime security elements, law enforcement, search and rescue organizations, and many other maritime safety and security partners. It requires a framework that enables structured frequent coordination and liaison, maintenance of relationships related to the training and mentorship planning, tracking of training goals and performance outcomes, and repeated engagement. All of that requires dedicated resources and infrastructure which would make leadership through provision or ownership of a framework expensive and constraining. However, the benefit of the maritime domain is that many standing maritime security capacity building frameworks exist that provide the opportunity to deliver CAF maritime effects in deliberate, concrete, and meaningful ways without having to build a framework from scratch at great expense.

Given the scope of the maritime domain, maritime capacity building frameworks are generally designed by lead organizations and partners to be collaborative, multilateral, comprehensive, and "plug and play" in nature. This makes it easy for any nation to contribute with as much or as little as they are willing to deliver to capacity building objectives that are tracked, measured, and based on identified needs of partner nations. The following are just a few of the established maritime security capacity building frameworks that align with mandates, policy, and enduring Canadian foreign policy principles, and that represent opportunities to make routine contributions to the long term peace and security of the maritime streets of Canada's international neighbourhood.

Africa Partnership Station

Africa Partnership Station (APS) is a maritime security cooperation program led by US Naval Forces Africa (NAVAF). APS focuses on cooperative improvement of capabilities related to four pillars: developing Maritime Domain Awareness (MDA); building maritime professionals; establishing maritime infrastructure; and developing response capabilities while building regional integration. ³⁶ The stated impact of the framework that boasts over 30 nations is the development of "African solutions to global problems", and a shared common goal of "regional prosperity, stability and peace" between African, European, North and South American partners, and non-governmental organizations. ³⁷ Although the framework allows for participating capacity building nations to contribute as much or as little as they want, NAVAF, along with other

 ³⁶ Africa Partnership Station US Africa Command Fact Sheet, PDF, Stuttgart: United States Africa Command, January 2012.
 ³⁷ Ibid.

³⁷

organizations, takes an approach that is deliberate, measured, and based on the expressed and assessed capacity building needs of coastal African countries. Figure 5 is a screenshot of the APS capacity building schedule from February 2015 to July 2015. As the schedule in Figure 5 demonstrates, planned capacity building initiatives in the APS framework is specific to need and delivered in different formats, by different stakeholders. Funding and infrastructure that ensures continuity of the established APS

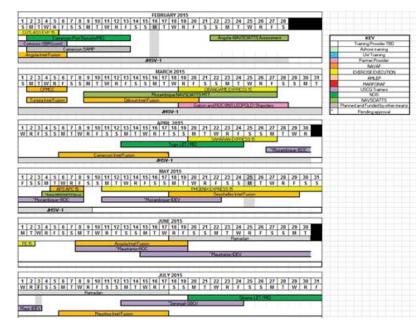


Figure 5 - APS Maritime Capacity Building Programme Feb - Jul 2015

Source: Africa Partnership Station Training Master Fiscal Year 2015, XLSX, Naples: US Naval Forces Africa, November 13, 2014.

framework and that funds the planning conferences for the 4 times per year regional series of exercises is provided by NAVAF. APS requires the support of trainers from contributing nations for short capacity building sessions coordinated by APS that are folded into NAVAF's series of four regional exercises. ³⁸ Contributing nation support

³⁸ Benjamin Selph, Assessment of Africa Partnership Station Training - 2014, DOC, Naples: US NAVAL FORCES AFRICA, April 15, 2014.

with professional subject matter expertise and training is prioritized with partner nations for delivery.

As a focal point for both maritime security capacity building and assessment, NAVAF leads the coordination of the Express series of exercises with partner nations. They occur four times per year, divided into Africa's cardinal point regions. Figure 6 is a depiction of the Express series of exercises in 2015, the involved partner nations, and the exercise planning milestone dates. As part of the capacity building line of operation for

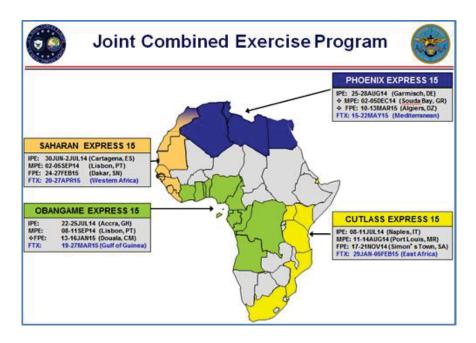


Figure 6 – APS Express Series of Exercises 2015

Source: *Express Series Joint Combined Exercise Program Africa*, PPT, Naples: US Naval Forces Africa, October 22, 2014.

the Dec 2014 – Apr 2015 Canada commanded Combined Task Force (CTF) 150 deployment, experts from the integrated Canadian and Australian staff delivered mentorship and training for two weeks in Kenya, Tanzania and Mauritius as part of CUTLASS EXPRESS 2015 (CE15). In addition, two RCN personnel with recent boarding party experience in the region were flown in from Canada to augment the staff. Inside two months of planning, Canada was able to contribute in a concrete and meaningful way to maritime security capacity building in the region. ³⁹ In the case of CE15, the CAF maritime elements used to deliver the CAF maritime effects of helping coastal nations build maritime security capacity and sustaining and building international partnerships were highly trained and talented maritime professionals. Plugging into the framework came with no strings attached, and no funding was required outside of resources already allocated for the Canadian CTF 150 staff deployment.

More recently, again seeing the opportunity to lean forward and deliver CAF maritime effects in the absence of a named force employment operation, Comd RCN incorporated maritime security capacity building in West Africa as part of a FG programme. HMC Ships SUMMERSIDE and MONCTON, and personnel from the Maritime Tactical Operations Group (MTOG) participated in Obangame Express 2017. ⁴⁰ Again, through routine operations abroad, CAF maritime effects were delivered in support of GoC stated mandates. In this case, the region where the two ships operated did not represent the level of threat requiring layers of self defence beyond that of a normal readiness ship. The lower threat level allowed the RCN to leverage ships not normally

³⁹ Adriano Lozer, *CCTF 150 Capacity Building Post Visit Report – CUTLASS EXPRESS 2015*, PDF, Bahrain: Combined Maritime Forces, March 15, 2015.

⁴⁰ "Royal Canadian Navy Deploys to African West Coast," Government of Canada, February 18, 2017, accessed March 14, 2017, https://www.canada.ca/en/department-national-defence/news/2017/02/royal_canadian_navydeploystoafricanwestcoast.html?=undefined&wbdisable=true.

employed away from the continent in a manner that positively contributed to GoC policy. While the ships were able to deliver lower end maritime effects, if an emergent task developed that required self defence beyond the ships' levels of readiness, or required the delivery of higher end effects, these ships would not represent forward postured options for the GoC.

EU Maritime Security Capacity Building Mission in Somalia

Since 2012, headquartered out of Mogadishu, the EU Maritime Security Capacity Building Mission in Somalia (EUCAP Nestor), and its nine contributing nations, have delivered maritime security capacity building in Somalia, Djibouti, Seychelles, Kenya, and Tanzania as part of the comprehensive approach to restore maritime security in the waters surrounding the strategically located Horn of Africa (HOA). The HOA has until recently been plagued with piracy and the region's waters continue to be used to support and perpetuate criminal and terrorist operations that create instability in land and maritime domains that expand far outside of the HOA region. The mission supports the "practical implementation of legislation and policy frameworks", includes training, mentoring and advising, and capacity building in support of maritime law enforcement. ⁴¹ The primary training audience for this program consists of Coast Guards, Maritime Police Units, prosecutors and judges. The approach is evidence and human rights based, and it is layered onto UN and African Union efforts around the HOA. While work in Somalia itself may not be within the risk threshold of the GoC, delivery of CAF maritime

⁴¹ EU Maritime Security Capacity Building Mission in Somalia (EUCAP Nestor), PDF, European Union External Action, November 2016.

effects as part of EUCAP Nestor's efforts in lower risk areas such as Kenya and Tanzania would complement the GAC and WoG presence and efforts in the region, and would contribute to stronger bonds with the EU, with which Canada has recently increased economic relations through the Canada-EU Comprehensive Economic and Trade Agreement (CETA).

UNODC Global Maritime Crime Programme

While the GoC has publically declared a renewed commitment to UN international peace and security efforts, the opportunity for some of that commitment to materialize in contributions of a routine nature to UN efforts in the maritime domain has not emerged in the discourse. Through its Global Maritime Crime Programme (GMCP), now in its eighth year, the UNODC leads sustained maritime capacity building assistance and "successful technical assistance to combat maritime crime through its interregional approach." ⁴² With 2/3 of the world covered in borderless ocean not subject to as strict a jurisdiction as the land domain, groups use the maritime domain: to conduct transnational organized crime that has a far reaching and destabilizing impact ashore; to directly conduct terrorist operations that involve the movement of fighters, weapons, and explosives; and to indirectly support terrorist groups through the trade of heroin and commodities that fund terrorism. ⁴³ The GMCP has a broad regional base and includes an Indian Ocean Programme, Horn of Africa Programme, and Atlantic Ocean Programme.

⁴² Global Maritime Crime Programme: Annual Report 2016, PDF, Nairobi: United Nations Office on Drugs and Crime, February 2017, iii.

⁴³ "UNODC's Global Maritime Crime Programme," YouTube, February 07, 2017, accessed March 14, 2017, https://www.youtube.com/watch?v=fqXVZJIkVmM&list=PLP1rrIC89eFCcOzBqR6a-ZO-bLAXZtCmn

According to Alan Cole, the UNODC Head of the GMCP based out of Nairobi Kenya, recent capacity building support by international maritime forces has included: the creation of HF radio networks with the EU Naval Force; the training of regional African coast guards in Vessel Boarding Search and Seizure by US Coast Guard; and the training of regional African coast guards in counter piracy operations by the Japanese Coast Guard. ⁴⁴

Through a regional capacity building coordination group, the UNODC led GMCP tracks regional maritime capacity building needs, can coordinate capacity building activities of contributing nations, and can support the policy and law enforcement aspects of any capacity training with UNODC personnel. This represents an easy and meaningful opportunity to contribute to long term peace and security efforts under the UN flag with extant capacity and capability while also forward posturing CAF maritime elements as options to the GoC for emergent taskings. In addition, because many of the maritime capacity building efforts have a rules based, law enforcement layer associated with maritime activities, UNODC GMCP work could provide a WoG capacity building opportunity in the international maritime domain that includes Canadian law enforcement. Lastly, delivering CAF maritime effects in support of GCMP maritime capacity building efforts would align and complement the \$716,152 USD that Canada has contributed to date to the GMCP since its inception. ⁴⁵ For a CAF deployment to support a UN land based mission in Africa, much time is needed to have difficult policy and resource discussions regarding: which region or states Canada should commit to in the

⁴⁴ Allan Cole, "Inquiry - UN Maritime Security Capacity Building Framework," e-mail message to author, April 10, 2017.

⁴⁵ *Global Maritime Crime Programme: Annual Report 2016*, PDF, Nairobi: United Nations Office on Drugs and Crime, February 2017, 39.

land domain in Africa; what higher end spectrum effects may be needed to support a land based UN mission; the inherent higher risks of the missions; and the determination of long-term outputs for Canada. In contrast, with very little lead time, Canada could support the UN with lower end spectrum CAF maritime effects that are desired to support low risk and meaningful UN led peace and security efforts. This support would concretely demonstrate the commitment to the UN espoused in GoC announcements and mandate letters, and would contribute to the long-term safety and security of the international maritime neighbourhood.

EU CRIMARIO

EU CRIMARIO is the EU funded maritime security capacity building initiative that aims to enhance the collective Maritime Situational Awareness (MSA) in the Indian Ocean. EU CRIMARIO is an information based capacity building initiative that focuses on "the sharing and fusion of data from various maritime sources such as national and international agencies, the maritime industry, and non-governmental organizations to achieve an understanding of the maritime domain." ⁴⁶ The approach of enhanced shared MSA is intended to enable maritime stakeholders throughout the Indian Ocean region to improve the security, safety and environment of their own portions of the region. EU CRIMARIO provides the opportunity to deliver subject matter expertise through training and mentoring on common operating approaches and procedures to partner operations centre staffs spread across a strategically important maritime area through which 70% of

⁴⁶ European Union, *EU CRIMARIO: Enhancing Maritime Situational Awareness in the Indian Ocean*, June 26, 2015, accessed April 4, 2017, http://ec.europa.eu/europeaid/eu-crimario-enhancing-maritime-situational-awareness-indian-ocean_en

the world's oil passes. ⁴⁷ The unique aspect of EU CRIMARIO is that while it could be complimented by larger unit sized CAF maritime elements like NTG ships, meaningful contributions could involve as little as a few maritime operations room personnel from ships or shore based units surged for periods of time in support of this capacity building framework.

Maritime Security Patrol Opportunities

Integrating into groups of allied and partner elements for maritime security patrols, even with only a single CAF maritime element, provides a multiplying framework for the delivery of CAF maritime effects. Operating with allied groups and partner coalitions of maritime elements involves continuous cooperation and relationship building with international partners through day-to-day operations and the refinement of interoperability and readiness on patrols. The ability of a group of elements to monitor areas of the international maritime neighbourhood far outweighs the breadth and depth that an independent high readiness element or an entire full scale NTG can achieve on its own. Patrolling and monitoring the international maritime neighbourhood in force with partners promotes the stability of coastal regions and transit routes essential for the safe movement of maritime trade on which the global system depends. CAF maritime effects delivered while participating in standing maritime security patrols are low risk, routine, and directly contribute to national policy objectives and enduring foreign policy principles while strengthening key relationships with Canada's allies and partners. Several standing maritime security patrol frameworks exist within Canada's allied and

⁴⁷ Ibid.

partner communities. An opportunity exists to leverage these patrol frameworks as part of an ongoing and routine international maritime operation in a deliberate approach that bolsters Canada's reputation as an ally committed to long term maritime peace and security.

NATO Response Force

Through its Allied Maritime Command, NATO employs two Standing Naval Maritime Groups (SNMGs); one in the North Atlantic and another in the Mediterranean. The maritime elements that make up the SNMGs are from NATO member nations. SNMGs are multinational, include maritime air elements, and are force employed on a continuous basis as standing maritime forces to "establish Alliance presence, demonstrate solidarity, conduct routine diplomatic visits to different countries, support transformation and provide a variety of military maritime capabilities to ongoing missions." ⁴⁸ While the aforementioned activities are of a routine nature and the SNMG patrols have valuable day-to-day outputs, the foundational purpose of the SNMGs is heightened collective readiness to activate the maritime elements of the NATO Very High Readiness Joint Task Force (VJTF) when required. ⁴⁹ Among other tasks, once activated, the VJTF is capable of providing: an "immediate collective defence response capability, prior to the arrival of other forces; crisis management and peace support operations; and disaster

⁴⁸ "NATO Maritime Groups," NATO Allied Maritime Command, 2017, accessed March 14, 2017, http://www.mc.nato.int/missions/maritime-groups.aspx.

⁴⁹ Jason Lacoursiere, "Sea Guardian," e-mail message to author, April 18, 2017.

relief and protection of critical infrastructure." ⁵⁰ The multinational force is maintained through exercises that occur throughout the year, ensuring responsiveness, interoperability, and effectiveness if the force is called upon in an emergent crisis. Contributions to SNMG patrols are a concrete example of Canada's commitment to NATO, though only when there is a general consistency to contributions that associate with being a dependable and credible partner. While NATO's preference is to have maritime elements dedicated to SNMGs for fixed rotations, high readiness CAF maritime elements force generate to an interoperability standard that allows for the seamless integration of forces into a SNMG at times that fall outside of rotational turnovers, which allows for the tailoring of Canadian commitments when there are resource or national tasking conflicts.

Joint Interagency Task Force South

Under the US Southern Command Joint Interagency Task Force South (JIATF South), international military maritime and air elements work with US law enforcement to detect, monitor, and interdict illicit trafficking in the Caribbean Sea and the eastern Pacific Ocean in support of US and hemispheric security. ⁵¹ Canada delivers CAF maritime effects to JIATF South through Op CARIBBE. CAF maritime effects delivered through Op CARIBBE include integrating with the US and allied nations, sustaining and building international partnerships, monitoring the maritime environment, detecting,

⁵⁰ "NATO Response Force / Very High Readiness Joint Task Force," NATO Supreme Headquarters Allied Powers Europe, January 2016, accessed April 20, 2017, http://www.shape.nato.int/nato-response-force--very-high-readiness-joint-task-force.

⁵¹ "About Us," Joint Interagency Task Force South, accessed April 14, 2017, http://www.jiatfs.southcom.mil/About-Us/.

deterring and disrupting transnational crime, and supporting law enforcement. Based on an interview conducted with the then Director of JIATF South in 2016, United States Coast Guard (USCG) Rear-Admiral Christopher Tomney, the task force averages one seizure per day with an average load of 700kg of cocaine per vessel. The street value of 2015's 193 metric tonnes of interdictions totaled \$3.7 billion US dollars. ⁵² The most recent ship to deploy on Op CARIBBE, HMCS SASKATOON, assisted the USCG in the seizure of 1124kg seizure of cocaine and the disruption of another estimated 1500kg.⁵³ Canada has delivered CAF maritime effects to JIATF South through Op CARIBBE for the past 11 years and Canada's commitment to the continental and international effort is recognized often. Given OP CARIBBE has spanned 3 governments, JIATF South is perhaps the most routine international maritime commitment to which Canada has delivered CAF maritime effects. Although continental, support to JIATF South is international in scope given its relation to transnational maritime crime and its connection to South American and global stability. A similar framework led by US law enforcement under US Pacific Command is JIATF West. The framework is an opportunity for Canada to contribute in similar ways, but in the Indo-Asia-Pacific region.

⁵² Virginia Beaton, "JIATF South Director Thanks RCN for Successes in Op CARIBBE," Royal Canadian Navy - News and Operations, June 21, 2016, accessed March 14, 2017, http://www.navy-marine.forces.gc.ca/en/news-operations/news-view.page?doc=jiatf-south-director-thanks-rcn-for-successes-in-op-caribbe%2Fipmtfvw0.

⁵³ "Operation CARIBBE," Department of National Defence, March 14, 2017, accessed March 14, 2017, http://www.forces.gc.ca/en/operations-canada-north-america-recurring/op-caribbe.page.

Combined Maritime Forces and Combined Task Force 150

Combined Maritime Forces (CMF) is an inclusive and flexible permanent multinational framework committed to conducting maritime security operations in 3.2 million square miles of international waters "that encompass some the world's most important shipping lanes." ⁵⁴ CMF's area of operations includes the international waters of the Indian Ocean that extend as far south as Mozambique, a far west as the Suez Canal, as far east as the Pakistan-India border, and includes the Arabian Gulf. CMF is a naval partnership of 31 nations with the main focus areas of "defeating terrorism, preventing piracy, encouraging regional cooperation, and promoting a safe maritime environment." Reasons for the CMF maritime security framework's inclusiveness and flexibility include: voluntary participation; partnership is not bound by political or military mandate; and nations only perform tasks permitted by national chains. ⁵⁵ Nations contribute with liaison officers, HQ staff officers, maritime and air elements, and law enforcement officers based on availability, and only to efforts to which the nation is willing to contribute. Given the number and diversity of partners and capabilities, backbone infrastructure for coordination of command and control is provided by US Navy Central Command and physically located at Naval Support Activity in Bahrain. Participation requires no contribution to the backbone infrastructure, including secure and unsecure communication between all partner countries which is again provided and supported by the US. All operations and taskings are closely scrutinized by legal and

⁵⁴ "About CMF," Combined Maritime Forces, February 18, 2016, accessed March 14, 2017, https://combinedmaritimeforces.com/about/.

policy representatives to ensure operational compliance with international law and policies.

Canada has been a CMF partner since the framework's inception, and the delivery of CAF maritime effects to CMF operations has been fairly consistent between 2004 and the present. Participation has mostly consisted of contributions to CMF's maritime security and counter-terrorism task force, CTF 150. In more recent years as part of OP ARTEMIS, although Canada has not contributed CAF maritime or air elements to CTF 150 operations due to resource challenges, Canada has commanded two CTF 150 rotations with Royal Australian Navy (RAN) personnel integrated into the combined staff. In between the two Canadian commanded rotations, RCN personnel integrated into a RAN commanded rotation. The approach has provided continuity with regard to measured regional progress associated with maritime security operations and progressing regional cooperation and maritime security capacity building roadmaps with the many coastal navies and law enforcement organizations within the region. The initiative has also strengthened the relationship between the CAF and the Australian Defence Force (ADF). In the absence of dedicated CAF maritime and air elements, CAF maritime effects that included integration with allies and partners, sustaining and building relationships, and commanding a multinational naval task group, were all delivered with CAF personnel only. Under the planning and coordination of the 2014-2015 CTF 150 command rotation staff, the first successful interdiction was conducted of charcoal linked to the funding of the terrorist group Al Shabaab and which was banned for import and export by UNSCR 2182. ⁵⁶ This was all conducted through requests to partners not

⁵⁶ "Adopting Resolution 2182 (2014), Security Council Extends Mandate of African Union Mission in Somalia for One Year, Amends Sanctions Regime," United Nations Meetings Coverage and

directly supporting CMF, and coordination with the UNODC and local customs authorities at the destination country.

When CAF maritime elements have been available to directly deliver CAF maritime effects on the water in support of CTF 150 maritime security operations, the readiness and skill resident in CAF maritime capability has been recognized for its effectiveness. Over the course of HMCS Toronto's 2013 deployment, the ship interdicted 8.5 metric tonnes of heroin linked to Afghanistan production and Taliban funding. ⁵⁷ In comparison, during the 2014-2015 CTF 150 staff deployment where staff relied solely on coordination and the availability of non-national elements, not one successful on water narcotics interdiction took place over the span of the rotation. Although CAF maritime personnel deliver effect, the effect does not compare to the meaningful and concrete way in which high readiness CAF maritime capabilities can contribute to global maritime peace and security efforts on the water.

EU Naval Force Operation Atalanta

In 2008, within the framework of the EU's Common Security and Defence Policy (CSDP), in support of United Nations Security Resolutions, the EU launched the European Union Naval Force (EU NAVFOR) and initiated Operation Atalanta to:

- Protect vessels of the World Food Programme (WFP), African Union Mission in Somalia (AMISOM) and other vulnerable shipping;
- Deter and disrupt piracy and armed robbery at sea;

Press Releases, October 24, 2014, accessed April 20, 2017, https://www.un.org/press/en/2014/sc11613.doc.htm.

⁵⁷ "Watch HMCS Toronto Sailors Make a Heroin Bust," CBC News, February 27, 2014, accessed April 20, 2017, http://www.cbc.ca/news/canada/nova-scotia/watch-hmcs-toronto-sailors-make-a-heroin-bust-1.2554222.

- Monitor fishing activities off the coast of Somalia; and
- Support other EU missions and international organizations working to strengthen maritime security and capacity in the HOA region. ⁵⁸

EU NAVFOR participation includes member and non-member states and takes the form of maritime sea and air elements, Vessel Protection Detachment Teams, and staff contributions to EU NAVFOR's Operational HQ (OHQ) in Northwood, UK. The patrolling force operates a group that averages 1200 personnel, four to six surface combat ships, and two to three maritime patrol aircraft. ⁵⁹ In addition, EU NAVFOR runs the innovative and effective Maritime Security Centre Horn of Africa (MSCHOA), where military and civilian personnel have worked continuously with the global shipping industry to provide 24 hour manned monitoring of vessels transiting the Gulf of Aden, along with real-time intelligence based advisories to transiting vessels and anti-piracy guidance. ⁶⁰

The results of EU NAVFOR's work is impressive. Table 2 provides the selfreported raw data from the commencement of EUNAVFOR's Operation Atalanta in 2009 to Spring 2017. The outputs reflect: 100% success at escorting WFP vessel shipments for the Somali people and AMISOM shipments needed for operations in Somalia; protection of ships transiting the Internationally Recommended Transit Corridor in the Gulf of Aden; and deterring, preventing and interdicting acts of piracy with the transfer of suspects to UNODC supervised and assisted competent authorities for prosecution and

⁵⁸ "EU NAVFOR Missions," EU NAVFOR Somalia, 2017, accessed April 14, 2017, http://eunavfor.eu/mission/.

⁵⁹ *Ibid*.

⁶⁰ "About MSCHOA and OP ATALANTA," Maritime Security Centre - Horn of Africa, 2016, accessed April 20, 2017, http://www.mschoa.org/on-shore/about-us.

conviction. ⁶¹ Although both NATO and CMF have actively conducted counter piracy operations in the HOA region, the EU's efforts and delivery of maritime effects to the counter piracy mission drove the comprehensive approach to counter piracy that involved the collaboration with industry, the establishment of competent authorities and infrastructure for which to transfer pirates for prosecution and incarceration, maritime security and law enforcement capacity building in Somalia, and elimination of piracy attacks in the region. There is no guarantee that piracy has been permanently suppressed in the region; security and development challenges persist in Somalia. OP Atalanta has been extended to 2018 by the European Council and the force continues to patrol the region to keep piracy suppressed. ⁶²

⁶¹ "EU NAVFOR Missions," EU NAVFOR Somalia, 2017, accessed April 14, 2017, http://eunavfor.eu/mission/.

⁶² "European Union Naval Force Operation Atalanta," EU NAVFOR Somalia, 2017, accessed April 20, 2017, http://eunavfor.eu/.

VESSELS HELD ²					HOSTAGES HELD ²					
WFP VESSELS PROTECTED					406					
AMISOM VESSELS PROTECTED					139					
TONNES O	F FOOD/AID	DELIVERED	BY WFP				1,432	057 ³		
PIRATES TRANSFERED TO COMPETENT AUTHORITIES WITH A VIEW TO THEIR PROSECUTION					TOTAL 160		REMANDED 0		CONVICTED 145	
	2008	2009	2010	2011	2012	2013	2014	2015	2016	201
SUSPICIOUS EVENTS	8	59	99	166	74	20	5	1	2	2
TOTAL ATTACKS	24	163	174	176	34	7	2	0	1	4
OF WHICH PIRATED ⁴	14	46	47	25	4	0	0	0	0	2
DISRUPTIONS ⁵	0	14	65	28	16	10	1	0	0	2
DISRUPTIONS ⁵ Plus an unknown number of u Estimated. Reported metric tonnes of for TOTAL ATTACK is the combin mads and crews taken hotta	nreported/unc od/aid delivere ed number of a	onfirmed dhow d to Somali por	is and smaller v	essels. od Programme	shipping prote	cted by EU NAV	FOR.		6	2

Table 2 – OP Atalanta Key Facts and Figures

Source: "European Union Naval Force Operation Atalanta," EU NAVFOR Somalia, 2017, accessed April 20, 2017, http://eunavfor.eu/.

A January 23, 2012 Canadian Press (CP) article reported that, based on a series of briefing notes obtained under Access to Information, the GoC was unable to authorize CAF maritime elements to conduct counter piracy operations as part of the large international allied and coalition effort due to concerns over the final disposition of prisoners captured during piracy attacks. ⁶³ The article describes the GoC at the time as having a high level of interest to contribute to this low risk and high importance effort, but also having an institutional belief that international consensus on a legal regime associated with detention would never be reached. While Canada walked away from the international problem of piracy and counter piracy operations in the Gulf of Aden, in

⁶³ "Inability to Prosecute Somali Pirates Frustrates Ottawa," CTV News, January 23, 2012, , accessed April 20, 2017, http://www.ctvnews.ca/inability-to-prosecute-somali-pirates-frustrates-ottawa-1.757727.

which most of Canada's partners in the EU, NATO, and CMF continued to engage, the UN and all of Canada's partners found solutions that ensured prosecution of those who violated international law while ensuring due process and human rights. Counter piracy in the Gulf of Aden is a success story that has resulted from enduring and routine commitments to maritime security frameworks and collaborative work between partners, industry, and the UN. Canada's partners continue to contribute with maritime capabilities to long-term efforts to keep piracy suppressed in the region, to enhance maritime security and the law enforcement capacity of coastal nations, and to ensure the movement of maritime trade on which the global system depends. Canada has benefitted from the many countries who committed to what is a truly an international problem. With solutions well established associated with detention of interdicted pirates, and heavy UNODC oversight to ensure those standards, there is opportunity both through EU NAVFOR and CMF to deliver CAF maritime effects to the international counter piracy effort as part of an ongoing and routine international maritime operation.

NATO Operation Sea Guardian

One other recently developed routine maritime security patrol opportunity is being led by NATO Allied Maritime Command and is named Operation Sea Guardian. Operation Sea Guardian is a maritime security mission, operating in the Mediterranean region. Sea Guardian focuses on MDA, counter terrorism, and enhancing capacity building with Mediterranean stakeholders. ⁶⁴ Sea Guardian efforts involve focused

⁶⁴ "Operation Sea Guardian," NATO Allied Maritime Command, accessed April 20, 2017, http://www.mc.nato.int/missions/operation-sea-guardian.aspx.

operations that target specific areas of interest for NATO MARCOM as part a wider and continuous intelligence based maritime threat targeting effort. In simple terms, Operation Sea Guardian uses continuous intelligence collection and fusion to find potential threats, and then executes short focused operations when needed to more closely watch or interdict targeted vessels. Sea Guardian aims to make NATO MARCOM the "hub of maritime security information sharing for the Alliance," in order to ensure the timely identification and awareness of security concerns.⁶⁵ Elements employed in Operation Sea Guardian are not part of the SNMGs, and freed of NATO response force obligations. When Commander NATO Allied Maritime Forces addressed the CMF hosted Shared Awareness and Deconfliction Conference (SHADE) on 30 Nov 2016, he indicated that his aspirations for Operation Sea Guardian include the hope that it "might evolve into a (maritime security) framework mandate for ships flying the NATO flag wherever in the world they are".⁶⁶ As Operation Sea Guardian expands, it may provide an opportunity to continuously contribute to NATO member situational awareness of global maritime threats related to terrorism and transnational crime, and to contribute to focused operations that are low risk but high gain for allied threat targeting.

Routine National Tasks in the International Maritime Neighbourhood

Although much has been said about emergent national taskings that would require forward postured CAF maritime elements to respond based on GoC direction, to this point little has been said about the ongoing and long term national activities of WoG

⁶⁵ NATO, *Operation Sea Guardian Fact Sheet*, 2017, accessed April 4, 2017, http://www.mc.nato.int/media-centre/fact-sheets/operation-sea-guardian.aspx.

⁶⁶ Clive Johnstone, CB CBE, "Commander NATO Maritime Command Remarks at 39th SHADE in Bahrain " (speech, 39th Shared Awareness and Deconfliction Conference, Bahrain, Manama, December 3, 2016).

partners that occur on a day-to-day basis abroad. The MND, MFA, and MPS are all mandated to collaborate on national security efforts abroad. WoG national security efforts in the international domain involve law enforcement, intelligence, immigration, development, and engagement. Forward postured CAF maritime elements conducting routine operations, and the associated deliberate planning of ongoing rotations, provide WoG partners with a dependable and enduring GoC capability to leverage in support of mandated activities related to international security, crime, development, and engagement efforts important to Canada. Forward postured CAF maritime capabilities support the shaping of environments for WoG operations, provide presence operations, and support diplomatic initiatives. In addition, the opportunity exists to better support Canadian land and special operations forces working abroad through the delivery of CAF maritime effects through an ongoing and routine international maritime operation. The RCMP, CBSA, and CSIS all permanently work in the international domain conducting operations that support their agency mandates. Domestically, these Public Safety Canada agencies possess their own capabilities in the maritime domain to deliver effects associated with their mandates, or have access to capabilities through other agencies and departments through supported requests. In international waters, CAF maritime elements represent the sole GoC resource capable of delivering maritime effects in support of Canadian law enforcement and national security efforts. An example of such assistance in international waters is Op CHABANEL, where HMCS FREDERICTON supported the RCMP in a sting operation against the transfer of narcotics at sea. HMCS FREDERICTON was needed in the South Atlantic, off the coast of Africa, as a command and logistics platform and as a contingency to provide armed assistance for self defence of the RCMP if the operation escalated.⁶⁷

The same effects CAF maritime elements delivered in support of international maritime security patrols and maritime security capacity building can be delivered to WoG security partners abroad when operations focus on activities that happen in international waters or coastal countries where bilateral or regional agreements exist. For example, CBSA has a permanent National Targeting Program that identifies:

Suspected high-risk people, goods and conveyances in order to alert the appropriate CBSA personnel of an impending suspected risk or threat to national security and/or public safety priorities, supported by evidence-based data and intelligence.⁶⁸

⁶⁷ "Operation CHABANEL Information," Directorate of History and Heritage Operations Database, November 28, 2008, accessed April 20, 2017, http://www.cmp-cpm.forces.gc.ca/dhh-dhp/od-bdo/di-ri-eng.asp?IntlOpId=340&CdnOpId=413.

⁶⁸ "Evaluation of the Canada Border Services Agency Targeting Program," Internal Audit and Program Evaluation Directorate, January 2016, accessed April 20, 2017, http://www.cbsaasfc.gc.ca/agency-agence/reports-rapports/ae-ve/2016/tp-pc-eng.html.

CBSA continuously conducts work to build the information picture associated with movement of people, goods, and conveyances in and out of Canada. While CBSA uses many means to do this and to identify and keep threats as far away from Canada as possible, CBSA does not have maritime capability that supports monitoring and conducting surveillance of ships who frequent Canada beyond Canada's maritime approaches. The activity of ships that make deviations from their declared routes, and that often switch off their Automatic Identification System, ⁶⁹ cannot be monitored on the water by CBSA. Through planning and operational relationships that could be established and maintained through an ongoing routine operation, Canadian maritime elements located anywhere in the world could monitor and observe vessels of particular interest to CBSA when in vicinity of CAF maritime elements. This one simple way CAF maritime capability can support the national security work of CBSA abroad in a way that does not interfere with other routine operations.

The RCMP have an international operations branch that includes RCMP liaison officers based out of Canadian diplomatic missions around the world. These RCMP officers work abroad to provide "direction, support and assistance to Canadian law enforcement agencies in the prevention and detection of international offences that impact Canada." ⁷⁰ As part of this work, the RCMP also conduct training and capacity building. As part of maritime security operations abroad, CAF maritime elements work on a routine basis with international law enforcement agencies and international

⁶⁹ The Automatic Identification System (AIS) is a vessel tracking system that automatically provides updates on a vessel's position and other relevant ship voyage data to a marine vessel traffic operator. Source - "Maritime Security - Automatic Identification System (AIS)," Canadian Coast Guard, June 24, 2013, accessed April 20, 2017, http://www.ccg-gcc.gc.ca/eng/CCG/Maritime-Security/AIS.

⁷⁰ International Operations Branch: Canadian Police Beyond Borders Fact Sheet, PDF, Ottawa: Royal Canadian Mounted Police, January 2010.

organizations such as the UNODC that are focused on the interdiction of criminal elements that use international waters to support transnational crime and terrorism. There is an opportunity for the RCMP to leverage the relationships and the law enforcement capabilities of these international frameworks in support of Canadian international policing work abroad, and to participate in the integrated law enforcement efforts with other nations in international waters while supported by the delivery of routine CAF maritime effects.

As mentioned earlier in this chapter, the MPS is mandated to appreciate where threats to Canadians originate, including terrorism and crime, and has a requirement to work closely with the MND and MFA. Work abroad by CBSA, the RCMP, and CSIS includes counter-terrorism and counter-proliferation, and the RCMP and CBSA are mandated to counter crime related to Canada abroad, including combatting the movement of illicit drugs, human trafficking, and weapons. Given the well-known use of the international maritime domain by organizations to conduct all of the aforementioned activities, and the borderless nature of the international maritime domain, an ongoing and routine international maritime mission provides a national framework to plan deliberate activities where Canadian law enforcement and security agencies are supported by CAF maritime capability. The opportunity is a more integrated approach to WoG national security operations in the international maritime domain in support of work that is already being done internationally ashore, and for enhanced outputs based on the international maritime domain's association to many of the mandated priorities of Canada's WoG national security team.

Support to GAC

There is opportunity to spread good will and to sustain and build international partnerships in every region a ship passes through. That same effect is amplified when delivered in support of the engagement efforts of Canadian diplomatic missions around the world. A routine international maritime mission would allow GAC to forecast engagement priorities where it would like to leverage the support of CAF maritime elements, and to gain a focused awareness of the regions that CAF maritime elements will be operating during the planning phase for the rotation. This would facilitate early and direct liaison between ship planners and diplomatic mission staffs. It also optimizes lead time for the mission staffs to find targeted outreach and bilateral capacity building opportunities for CAF personnel on deployed maritime elements. Simple outreach events like soccer games against a network of defence attaches, or minor development projects like repairing schools or hospitals take time to plan. Predictable availability of forward postured ships and deliberate regular planning engagement would greatly enhance the delivery of CAF maritime effects associated with international engagement to GAC.

The Minister of International Development and La Francophonie mandate letter directs the Minister to refocus development assistance on helping the poorest, most vulnerable, and supporting fragile states. ⁷¹ Many of these countries have the least of amount of transportation infrastructure with those needing development assistance located in austere locations. CAF maritime elements could deliver effects in support of development work that require capabilities not readily available to certain countries

⁷¹ "Minister of International Development and La Francophonie Mandate Letter," Prime Minister of Canada, March 10, 2017, accessed April 20, 2017, http://pm.gc.ca/eng/minister-international-development-and-la-francophonie-mandate-letter.

accredited to regional missions. Potential support could include air transport for development staffs to austere locations through the use of embarked helicopters, delivery of goods to countries with limited infrastructure and lines of communications, support to the suppression of illegal fishing and to food security efforts, and protection of commercial shipping delivering aid to fragile states. As CAF maritime capability is restored over the next few decades, ships with increased health services capacity could be used to deliver scheduled assistance to coastal communities. All of these examples can be programmed into a routine deployment programme. At the same time, as was the case with HMCS VANCOUVER off the coast of New Zealand, continuous availability of forward postured CAF maritime elements also provides an immediate option for the GoC to support Humanitarian Operations in an emergent natural disaster or humanitarian relief event. Support to Land and Special Operations Forces

Having a CAF maritime element in a region means that support to lower end spectrum operations ashore can be integrated into a land deployment well ahead of time. As part of an ongoing and routine international maritime operation, support to land and special operations forces ashore can be programmed into rotations during planning phases through planning coordination and engagement with land and special operations planners. Examples of potential support are many. A replenishment vessel deployed to support an ongoing and routine international maritime operation could have a scheduled delivery of troops or equipment to a coastal environment. A submarine or any maritime element with an unmanned aerial vehicle could conduct covert surveillance of a coastal area as part of a UN monitoring or peace support operation for periods of time. Any helicopter carrying CAF maritime element can move personnel and equipment to and from, or around land based operations. Helicopters can be moved ashore to provide air mobility to land operations for temporary periods. Any core NTG maritime element can provide a command and control platform for focused low end spectrum operations within a routine operation, along with access to higher level intelligence and communications infrastructure where austere environments or the nature of land missions preclude the deployment of such a capability.

The aforementioned are just a few of the lower tier effects that forward postured CAF maritime elements can deliver to land and special operations forces ashore who are involved in lower spectrum missions. Support to land and special operations forces complements concepts for scalable light forces, and if planned into a supporting role, enhances scalability to the capabilities and the flexibility of forces ashore. In addition, in the event of a change in the threat situation or an escalation in a land based operation, forward postured high readiness CAF maritime elements, if ordered, can deliver higher spectrum effects such as naval fires in support of forces ashore, or insertion and extraction of land or special operations forces. These latter activities would not be routine, but forward posturing of CAF maritime elements as part of a routine international maritime operation provides a timely and flexible contingency to lightly equipped forces ashore. Programming support to land and special operations forces into a routine international maritime operation rotation enhances forward posturing by formalizing support for specific periods of times and the type of support required.

The CAF is one of the most connected armed forces in the world. In the maritime domain this is even more so due to the fact there are very few information sharing, interoperability, sustainment, and command and control challenges compared to the air and land domains. CAF maritime capabilities are force developed to ensure congruence with partners represented in the core CANUS, Five Eyes (Canada, United States, New Zealand, Australia, and United Kingdom), and NATO alliances. This is necessary due to the nature of operations in the maritime domain, and allows high readiness CAF maritime elements to join, operate with, and leave any coalition effort seamlessly in almost any region in the world. Strong relationships and interoperability are the backbone of international maritime operations and delivering CAF maritime effects, and provide an immense flexibility to where, when, and how CAF maritime effects can be delivered. This happens by design as part of the RCN's force generation model and enables the force employment potential to better deliver effects through an ongoing and routine international maritime operation across the entire international maritime domain. When

deployed, CAF maritime elements continually deliver maritime effects in support of Canadian policies and enduring foreign policy principles.

A smorgasbord exists of routine international maritime security and maritime security capacity frameworks in which Canada can contribute to on an ongoing basis. In the past, Canada's contributions to international maritime security efforts have been episodic and reactive based on emergent events and short term policy priorities versus based on commitments to long-term peace and security. The opportunity exists to make the long-term peace and security of the maritime domain a day-to-day priority while posturing high readiness CAF maritime capabilities in an optimal way that enables them to respond to emergent high risk events that are short term priorities to the GoC and national security. The opportunities for routine operations vary in scale and are flexible. Opportunities can be pursued through an ongoing and tailored approach that aligns with both long-term and short term policy objectives, and that harnesses public resources to better contribute in a predictive way. A change of approach is required to enable an ongoing and routine international maritime operation.

65

CHAPTER 3 – OP GALATEIA: ENHANCING RESPONSE WHILE ENABLING CANADA'S PRESENCE

A stable international maritime neighbourhood is important for the prosperity of Canada and the entire international community. Delivering routine CAF maritime effects internationally contributes to Canadian enduring foreign policy principles and current policy mandates, and demonstrates Canada's commitment to allies and partners in a credible and concrete way. As CAF maritime capability and capacity necessary for defence of Canada and to fight in full spectrum combat operations with allies is restored over the coming decades, the ability to deliver CAF maritime effects more broadly and consistently will increase incrementally. Despite the low risk nature of delivering routine CAF maritime effects, the episodic and reactive approach to resourcing and employing CAF maritime capabilities in named international operations is the same for all-out war as it is for operations associated with standing maritime security patrols and maritime security capacity building frameworks. The way CAF maritime capabilities are force generated, and the flexible nature of high readiness CAF maritime elements, enables the seamless delivery of routine maritime effects to maritime security patrol and maritime security capacity building frameworks throughout the maritime streets of the international neighbourhood, and to support international WoG national security, development, and engagement efforts. There are an abundant number of established international frameworks that allow the ongoing delivery of CAF maritime effects that contribute to long term peace and security. In addition, there are better integrated and routine ways to contribute to national partner efforts internationally. With small changes, the opportunity

exists to force employ CAF maritime capabilities abroad on a day-to-day and year-toyear basis through an ongoing and routine international maritime operation.

Every operation needs a name. In Greek mythology, Galateia (pronounced galatee-a) is the goddess of calm seas and an attendant to Poseidon. ⁷² An ongoing and routine international maritime operation that spans the globe and that contributes to the metaphorical calm seas of a stable global system can be appropriately named OP Galateia. Op Galateia will be used from this point forward to assist in the analysis of this new approach.

Global Standing Operation

When a named international operation is initiated, early in the planning process a joint commander defines the operation area for the mission. According to CAF Capstone Doctrine, when defining the geographic areas of named international operations, temporary areas are designated by a joint commander that include the geographic, time, and mission parameters that are particular to planning and executing "a specific mission at the operational level of war." ⁷³ In the doctrinal approach, the designation of geographical areas for planning and executing operations defines where operations can happen, and prohibits the planning and execution of operations outside the defined area.

To allow the flexibility needed to plan and execute OP Galateia, changes to the doctrinal approach for the geographic and the time parameters associated with an

⁷² "GALATEA (Galateia) - Nereid Nymph of Greek Mythology," THEOI Greek Mythology, accessed April 20, 2017, http://www.theoi.com/Pontios/NereisGalateia.html.

⁷³ Canadian Forces Experimentation Centre, comp., *Canadian Forces Joint Publication 01 Canadian Military Doctrine* (Ottawa: Minister of National Defence, 2011), GL-4.

operation area must be accepted. To enable the enduring and routine nature of Op Galateia, the first required change to the status quo approach is to specify parameters for the length of the operation that are indeterminate versus temporary and finite. Although the establishment of a permanent duration would be the ideal, and demonstrate commitment and leadership, an operation that has no off ramp carries risk for the GoC regardless of the merits of the operation or how benign it is. An indeterminate duration allows for Op Galateia to be a standing operation and enables planners, WoG partners, and international allies and partners to coordinate efforts in the deliberate and ongoing manner required for long term, routine peace and security operations.

The second change required is related to the limitations inherent to the doctrinal specification of geographic parameters for a named operation. Instead of a bordered area of operations that excludes the planning and execution of operations anywhere outside of the geographic area, the baseline geographic area of Op Galateia should include all international waters, with exceptions as needed that should be updated as required at the combined ministerial level of the MND and MFA. Three exceptions that must be considered include:

- The exclusion of specific areas as required, the list of which can be reviewed at regular intervals and should be limited in number. Shutting an area of international waters down for operations should be a rare case that is carefully considered given that the nature of routine operations involves the lawful use of the maritime domain and does not involve anything more provocative then presence;
- Planning and executing operations in territorial waters should be permitted subject to the permission of the coastal allied and partner countries involved, and the alignment of operations with the routine operations authorized as part of Op Galateia; and
- Subject to the permission of the countries involved, land and air operations should be permitted in coastal states to support WoG engagement and development efforts, to support CAF land and special operations forces, and to support and engage in maritime security capacity building.

As opposed to slicing up the globe with many named operations, most of which are associated with routine effects, each with their own area of operations, resourcing process, and renewal, Op Galateia aggregates all routine international CAF maritime operations. From a precedence point of view, the acceptance of this change to doctrinal approach is possible. Op Limpid "is the routine domestic surveillance and presence in Canada's air, maritime, land, space, and cyber domain," aimed at early detection of threats to Canadian security. ⁷⁴ The geographic area of the operation is immense, extending 2075 nautical miles to the west of Vancouver Island, and 1224 nautical miles to the east of Gander Newfoundland. It is funded from the CJOC Operations and Maintenance budget, meaning it is funded and business planned on an ongoing basis, year-over-year, as core business firmly linked to enduring policy objectives, and does not need to continuously be linked to cabinet. ⁷⁵

Process

By way of process, operations are approved, resourced, and renewed through the MC process which treats most maritime operations the same. Unfortunately, while the MC process is highly effective in considering, approving, and assigning resources related to emergent events and initiatives related to Canada's national interest, the MC process also perpetuates Canada's episodic approach to routine presence and contributions in the international maritime domain, and limits the potential outputs of CAF maritime capability.

⁷⁴ "Operation LIMPID," Department of National Defence, April 03, 2017, accessed April 20, 2017, http://www.forces.gc.ca/en/operations-canada-north-america/op-limpid.page.

⁵ "Strategic Joint Staff - Staff Consultation," telephone interview by author, March 15, 2017.

Legally and procedurally, the need for Cabinet to approve a named operation and a commitment of CAF personnel to international deployments is clear. "Under the Canadian Constitution, command of the armed forces . . . is vested in the Queen and exercised in her name by the federal Cabinet acting under the leadership of the Prime Minister." ⁷⁶ Cabinet is needed to initiate OP Galateia, but in order to enable the benefits of a forward postured and ongoing maritime operation, the approach will need to change slightly. The resultant approach will have to continue to ensure alignment of operations with policy and government priorities, but also negate the episodic nature associated by cabinet renewals. In order to achieve this outcome, Op Galateia needs to stay out of Cabinet after being approved as a named operation, but must continue to have appropriate high level oversight.

The first consideration should be to treat Op Galateia as a routine operation despite the fact it is executed in the international domain. That would require an approval by cabinet to recognize the indeterminate duration of the operation. Cabinet would also need to recognize Canada's commitment to long term and day-to-day stability of the international maritime domain as a foundational attribute of the operation. As part of the acceptance of the routine nature of the operation, and to avoid the requirement to continually approve the use of CAF capabilities and associated elements as part of Op Galateia, Cabinet approval should include authorization to the use of up to and including all high readiness CAF maritime elements not deployed as part of other named operations for the execution of Op Galateia, within the limits of the financial resource allocation for the operation. This identifies Op Galateia as a named operation subordinate to all other

⁷⁶ "International Deployment of Canadian Forces: Parliaments's Role," Library of Parliament -Parliamentary Information and Research Service, May 18, 2006, accessed April 20, 2017, http://www.lop.parl.gc.ca/content/lop/researchpublications/prb0006-e.htm.

international operations where CAF maritime effects are required, and clearly articulates to strategic and operational planners that any CAF element committed to efforts that are part of Op Galateia must be available for immediate reassignment in the event of a national tasking or higher level named operation.

Resourcing for an international operation requires an approval by Cabinet. Given the low risk, ongoing, and routine nature of Op Galateia, funding approval should be divested from the MC process and an aggregate of the funding of the many operations that would fold into Op Galateia should be reprogrammed departmentally into the budgets of CJOC, RCN, DGMEPM, and CMP. Similar to Op Limpid, funding programmed year-over-year that supports incremental expenses will negate the requirement to continually revisit Cabinet for the resourcing of routine international maritime operations.

In the absence of regular renewals by Cabinet, a reliable and effective oversight mechanism for OP Galateia is essential. To ensure alignment of operations with policy and government priorities, the MND and MFA should co-approve the 2 and 5 year programmes for OP Galateia on an annual basis. The premise outlined here is that the MCC, the lead operational planner for CJOC and for RCN force generation at-sea operations, would work on a long-term, pre-planned and pre-approved programme. The GoC of the day might want to amend the programme and send the NTG to focus on a particular region for a period of time. The fact that the ships are already abroad and available for national direction and retasking will make it easier for them to react to any change of mission based on GoC direction. As part of the annual co-approval, scheduled reviews will still need to be conducted by the normal stakeholders involved for an MC, including GAC counterparts at the strategic, operational, and regional levels levels, ADM Pol, and PCO. Continuous and iterative interdepartmental planning to ensure day to day alignment, availability of forward postured maritime elements to be retasked, a clear understanding of what is considered routine, and Ministerial co-approval of programmes well before operations take place. This should all cumulatively provide the threshold level of oversight required for Op Galateia. If a programmed item is assessed to fall outside of Op Galateia during planning or the co-approval process, and there is a need to pursue the activity, it can be elevated to Cabinet through the MC process for initiation as a separate named operation with capabilities and resources assigned as needed. The fact that maritime elements are forward postured means that when Cabinet does meet as the result of an emergent issue to discuss incident related direction and policy, timely 911 call resources are options available for their consideration.

As a final note on process, while there is no disputing its legitimacy and importance, if process limits return on investment when the risk is low and the resource bill has little to no fiscal impact, it necessitates a change of approach that still meets the fundamental requirements of process but that does not reduce effectiveness or eliminate the use of policy tools. Process should enable public return on investment that serves the national interest. When it comes to emergent events, addressing short term policy, or to the delivery of higher risk CAF effects, the normal MC process is an enabler and is therefore still needed in its current form for operations that fall outside of the routine category. However, while effective in reacting to emergent events and trends, the MC process perpetuates the episodic nature of Canada's commitment to long-term peace and security and stability of the global system as it applies to the maritime domain. A change of approach is required to enable something routine.

Resource Implications

Key to any programming item is to provide more of a service to Canada with the same funding, by harnessing capacity and changing process. Op Galateia is about getting more of a service to Canada out of CAF maritime capability and capacity. This section focuses on the funding implications of OP Galateia.

CAF maritime elements have a daily cost just for existing. The 2014/2015 full daily cost for a CAF maritime element to exist is produced by ADM (Fin) for DND and the Treasury Board, and is published in the ADM (Fin) *Cost Factors Manual*.⁷⁷ In general terms, the ADM (Fin) full daily cost for a CAF maritime element to exist includes operating costs, maintenance, equipment repair, personnel costs, base support, and amortization. The baseline full daily cost does not change if a ship is at sea or alongside and therefore will not be included in the analysis of the extra costs associated with operating CAF maritime elements at sea.

Conducting operations at sea costs extra. When a ship leaves homeport, incremental costs are incurred that include expenses related to fuel, personnel allowances, operations and maintenance, equipment repair, and communications away from homeport. Noting that there is a daily cost for a ship to exist, this section will focus on costs that change based on how much ships are at sea. More specifically, this section will look at the

⁷⁷ Cost Factors Manual 2014-2015 Volume II - Equipment and Facility Costs, PDF, Ottawa: Directorate Costing Services National Defence Headquarters, November 2014.

following three data points to understand and assess the funding implications of OP Galateia:

- The average number of sea days per year that NTG surface combatants have been employed on under the legacy model;
- The number of sea days per year required to sustain the forward postured surface combatants of an NTG conducting routine international maritime operations under the Op Galateia model; and,
- The resultant incremental cost difference between the two models.

Analysis on the funding implications of the Op Galateia model will focus on the incremental at-sea costs for CPF employment. The reason for this approach is fivefold: 1. CPF surface combatants are the core CAF maritime element required to meet NTG readiness requirements; 2. CSC incremental costing data is not yet available; 3. If only two JSS are built, as is planned, this paper assumes that one will have to be operating at any given time to service the fleet at sea, resulting in costing that is the same for both models; 4. Although submarines are combatants and can be used as high readiness NTG elements capable of full spectrum of operations up to combat, it is in addition and complimentary to the core NTG surface combatants to deliver unique capability as part of the NTG; and 5. Kingston Class coastal defence vessels and the soon to be in service Harry de Wolfe Class offshore patrol vessels can augment the capabilities of a mission tailored NTG, but they are not capable of the full spectrum of operations and therefore not core maritime elements of the NTG that require consideration for the model.

In addition to the above note on the use of CPF data, funding analysis in this section is based on the full planned and programmed restoration of CAF maritime capability and capacity that includes 15 NTG surface combatants. As mentioned earlier in this paper, 15 surface combatants is required to sustain a high readiness NTG capability where four are employed, four are being generated, and four are in extended maintenance, while three ensure that domestic readiness requirements are filled. Although there are currently only 12 NTG surface combatants, all of which are CPFs, this is the result of a gap between the retirement of three Iroquois Class destroyers and the CSCs entering service. Although the surface combatant fleet is operating with fewer ships than is needed and directed to meet NTG readiness requirements because of the aforementioned gap, no announcement has been made that reduces the size of the fleet or the NTG readiness requirement. If 15 surface combatants represent the upper limit of a capability and capacity that will be incrementally restored over the next two decades, it is prudent to use 15 surface combatants in the analysis of the funding implications of the proposed Op Galateia model.

Recent Average Days at Sea per Year Under the Legacy Model

Based on data from the east and west coast RCN formations, and data retrieved through the RCN's Directorate of Naval Operations, between fiscal years 13/14 and 16/17, the CAF's 12 CPFs collectively conducted operations at sea an average of 1112 days per year and conducted foreign port visits an average of 246 days per year.⁷⁸ In order to have a figure that represents what a notional 15 surface combatant fleet would have sailed, an average number of sea days per ship per year must be extrapolated and applied to the notional three ships. Applying an extrapolated 92 days per ship per year average to the three notional ships results in 186 additional sea days. Based on the extrapolation and application of sea day to port visit ratio to that extrapolated data, the average number of sea days for a 15 surface combatant fleet employed under the legacy model is 1388 sea days and 306 port visit days per year.

Days at Sea per Year Needed to Sustain Op Galateia

Sea day requirements to sustain the routine operations of high readiness ships under the OP Galateia model are based on: four surface combatants continually executing a routine international maritime operations programme; four surface combatants executing dedicated force generation programmes at a 50/50 at sea and home port ratio; and two surface combatants executing a domestic maritime operations programme at a 25/75 at sea and home port ratio. Assuming the ratio of at sea days versus port visit days remains relatively the same as what was derived from historical data above, total sea days

⁷⁸ Based on calculations conducted from data provided by DNOPs. Range of annual sea days was from 944-1327. Range of data for annual port visit days was 181-288. Data Source - Royal Canadian Navy Sea Days Data 2013 - 2017, raw data, Royal Canadian Navy, Ottawa.

required under the Op Galateia model is 1902 sea and 470 port visit days per year for the collective surface combatant force. The sea and port visit days per year are further broken down as follows: International Programme – 1138 sea and 322 port visit days; Force Generation Programme - 622 sea days and 108 port visit days; and Domestic Programme - 142 sea days and 40 port visit days. Based on recent Directorate of Naval Force Readiness estimates, to ensure the force generation and readiness requirements of the current 12 surface combatant force, a minimum of 1014 force generation sea days are needed. ⁷⁹ While the number conflicts with the number used in this analysis, it should be noted that the number is based on having assured sea days, and that many force generation activities required to maintain readiness can happen within force employment sea days.

Model Comparison and Funding Implications

The cost factor used to resource and programme extra / incremental costs for a CPF at sea conducting international operations is \$107,866 CAD per day, and for a CPF visiting a port on international operations is \$12,715 per day, all based on 2014/15 dollars. ⁸⁰ Application of the aforementioned incremental cost figures to the difference in sea and port days between the two models provides the aggregate funding implications of implementing the Op Galateia model. Using the methodology above, in a fleet with 15 surface combatants, where NTG capability and capacity is restored, and the NTG

⁷⁹ "Directorate of Naval Force Readiness Staff Consultation," telephone interview by author, April

^{28, 2017.} ⁸⁰ Royal Canadian Navy Comptroller Staff Amended Cost Factors Manual Fiscal Year 2014-2015 Ship Tables, XLSX, Ottawa.

elements are continuously forward postured conducting routine international security operations, the cost differential between both models is \$57.5 million dollars.

A few comparable examples associated with the funding of current international operations is useful to understand what \$57.5 million worth of incremental funding means to the overall funding of international operations under the legacy model. The total spent for incremental funding in support of CAF international operations was close to \$347.5 million CAD in FY 2015/16. ⁸¹ Op IMPACT, the CAF contribution to the Middle East Stabilization Force, was close to \$212 million alone. ⁸² Op REASSURANCE, support to NATO assurance measures which includes the delivery of CAF maritime effects with a CPF as part of SNMG2, was \$56 million. ⁸³ In the same fiscal year, the budgeted incremental costs of Op CARIBBE and Op ARTEMIS, both of which are international maritime operations, was \$12 million CAD. ⁸⁴

It will be many years before the restoration of CAF maritime capability and capacity, including the 15 surface combatants required for a sustained, restored NTG capability. That said, in the interim, routine international maritime operations can be conducted under the Op Galateia model in a scaled form with negligible funding implications. Using the same methodology as earlier, forward posturing three CPFs in an ongoing basis with the interim 12 surface combatant fleet would require an additional \$5 million in incremental spending compared to current spending under the legacy model. It must be stressed that this could only occur if force structure and force sustainment

⁸¹ "Incremental Costs for Major Canadian Armed Forces Operations Fiscal Year 2015-16," Department of National Defence, November 21, 2016, accessed April 28, 2017, http://www.forces.gc.ca/en/about-reports-pubs-departmental-performance/2016-incremental-costs-formajor-canadian-armed-forces-operations.page.

⁸² *Ibid.*

⁸³ Ibid.

⁸⁴ *Ibid*.

capacity is at levels needed to sustain three forward postured CPFs. Canada cannot continuously forward deploy what cannot be sustained. Although this will increase in scale over the next two decades, sustainability will only improve as the delivery of funded projects restores capability and capacity.

In his essay entitled *Setting Priorities Given Finite resources: National Interest Guidelines for Making Policy Choices*, Roy Rempel asks, "What resource demands may result from the desire to play a leadership role in UN or other multilateral processes?" ⁸⁵ In the maritime context, the answer is - not much. No extra capability investment outside of that already programmed is required. From the analysis of funding implications of employing CAF capability in a deliberate and ongoing contribution to the long-term stability of the international maritime neighbourhood, Op Galateia is financially viable and has minor to negligible incremental funding implications. The OP Galateia model provides more of a service to Canada by harnessing capacity and changing process. The barrier to harnessing more service to Canada is not related to funding. Process and approach to routine operations in the international maritime domain are the enablers needed to increase the use of CAF maritime capability to support Canada's international policies.

Outputs

In his policy essay for the Canadian Global Affairs Institute, Ron Rempel writes that the, "promotion of national interests in international policy encompasses those political, economic and military objectives that are directly related to the prosperity and

⁸⁵ Roy Rempel, Setting Priorities Given Finite Resources: National Interest Guidelines for Making Policy Choices, August 2016, 2016 Policy review Series Essay, Canadian Global Affairs Institute, Ottawa, 1.

security of the Canadian people.³⁸⁶ The undisrupted stability and rules based use of the international maritime domain directly benefits the prosperity and security of Canadians. The implementation of OP Galateia enhances the ability to employ CAF maritime capabilities in support of political, economic, and military objectives in an ongoing way that benefit Canadians. This section will examine the many outputs that demonstrate the weighted advantages of conducting ongoing and routine international maritime operations under the Op Galateia model.

Canada's Rapid Response Maritime Capability

Forward postured high readiness CAF maritime elements, conducting operations as Canada's ongoing commitment to the long-term stability of the international maritime domain, means assured responsive options to the GoC to deliver CAF maritime effects in support of emergent issues in the national interest. Instead of waiting weeks for ships to depart home port and then to transit a few weeks to over a month to reach a specific region, CAF maritime elements are positioned and ready to respond independently, or collectively as an NTG, as directed to deliver CAF maritime effects. Similar to special operations forces, the model allows for a rapid response capability for the GoC to deliver unique effects across the spectrum of operations including: immediate presence and reassurance during an international crisis stabilization operations; supporting land and special operations forces from sea in the case of the escalation of a land based mission; support to GAC led non-combatant evacuation operations; international humanitarian assistance in the event of a natural disaster; or to control waters in support of a coalition efforts or to enforce UNSCRs. The OP Galateia model enables a more agile, quickly deploying force as an immediate option for Canada on a continuous basis.

Centralized, Integrated, and Deliberate Planning Platform

The legacy model where the CAF plans and executes many different temporary international maritime operations, most designed to deliver routine and low risk effects, limits the deliberate collaborative planning needed to build and maintain relationships with the wide networks of allied, partner, organizational, and WoG planners as part of a comprehensive and long term approach. The nature of delivering routine CAF maritime effects involves integrating into the frameworks of others or supporting WoG partners and allies. Good planning relationships and enduring engagement are required for this to occur. Segregation of the planning of many different operations that start and stop means disjointed and temporary planning relationships with very little depth. Often, because of limitations associated with named international operation renewals, even if planners develop good planning relationships, they can be prohibited from planning until approvals to extend commitments are officially received. OP Galateia creates an ongoing deliberate planning cycle associated with successive rotations and sustained operations. Commitments can be made well in advance and planners engaged continuously. Given the enduring nature of an overarching routine operation, strategic roadmaps consisting of long term objectives and incremental milestones relevant to the nature of maritime security challenges, capacity building, engagement, and national security efforts can be established, progressed, measured, and evaluated. OP Galateia enables a centralized, integrated and deliberate planning platform that allows a one stop shop for planners from GAC, RCMP, CBSA, CSIS, CANSOF, RCAF, and CA to engage as part of periodic

planning events and as required. At the strategic and operational level, staff churn is reduced between CAF planners and planning stakeholders given engagements for multiple maritime operations do not have to occur, while still enabling forward planning at the tactical level. Finally, the planning apparatus associated with the Op Galateia model enables Canada to become connected experts and leaders in international maritime security initiatives that directly relate to keeping the trade Canada relies on moving. Through ongoing and deliberate planning with partners, the model enables a professional cadre to develop subject matter expertise in the nuanced and interconnected international maritime security efforts being pursued by the UN, UNODC, IMO, EU, US, and others. Enduring planning engagement facilitates a deeper and wider understanding between DND, GAC, and PSC on the multilateral political, diplomatic, and military security initiatives such as the Djibouti Code of Conduct and the African Union's Lomé Charter.

More Canada: The End to Episodic Commitments

When former US President Barack Obama addressed Canada's Parliament on June 29, 2016, he delivered the message that "the world needs more Canada." ⁸⁷ The message came at a point in his 78 minute address where he stressed the need for NATO countries to contribute their "full share to . . . common security." ⁸⁸ OP Galateia enables strengthened defence and trade relationships consistent with enduring presence, commitment, and work with allies, partners, and international organizations. The model demonstrates in an enduring and concrete way, with CAF maritime capabilities contributing a routine, full share to common security in the maritime domain. Without

 ⁸⁷ Barack Obama, "President Obama's Speech to Parliament," CBC News, June 29, 2016, accessed
 April 28, 2017, https://www.google.ca/amp/www.cbc.ca/amp/1.3659229.
 ⁸⁸ Ibid.

taking a lead, it demonstrates leadership, and provides an example of what commitment looks like. The multilateral and cooperative approach associated with the model demonstrates commitment in all three of the political, diplomatic, and military spheres, and builds on Canada's ability to influence and be part of international discourse. The flexibility and routine nature of OP Galateia allows responsive CAF maritime capability to assist with routine CAF maritime effects. The model enables enduring proof of Canada's steadfast contributions of commitments to NATO, US, and the UN, and contributes to Canada's international reputation and credibility, all in a way that aligns with enduring and current policy objectives rooted in Canada's national interests.

Canada's primary and dependent relationship is with the US when it comes to both economy and defence. Op Galateia enhances the credibility of Canada on the world stage, and strengthens Canada's relationship with the US. It also provides a counterweight to US pressure to engage in operations not deemed to be in Canada's interest. The claim can always be made that Canada is contributing in other ways that benefits the US if a US endeavor does not align with Canadian policies and national interests.

Better support to WoG Partners

Op Gataleia enables better support to the efforts of WoG partners abroad and meets the GoC mandated goal of a WoG approach to national security, development, and engagement abroad. Most routine international maritime operations include shared jurisdictions and mandates of CAF WoG partners working abroad. The nature of most security efforts in international waters support the work of international law enforcement partners or are supported by international law enforcement partners. Op Galateia enables a platform by which Canadian security agencies can leverage law enforcement networks with allies already involved in the bigger effort of maritime security linked to transnational crime and counter terrorism, and can expand existing Canadian security agency networks. All engagement and development initiatives dovetail into and enhance GAC efforts. Both GAC and CAF WoG security partners will be able to leverage CAF maritime capability in a routine and predictable manner. For example, large diplomatic engagements can be routinely scheduled and hosted on board CAF maritime assets in a manner that best fits GAC regional priorities and efforts, with significant lead time to obtain the maximum effect from these events.

Institutional Benefits

The Op Galateia model better supports the DND institution. The fridge calendar is commonly referred to by many serving members in Canada's fleets. In an ideal world, CAF personnel involved in maritime operations write the days they will be away on the fridge calendar and make plans that allow them to support their families and maintain a balance with operational tempo and training. Intuitively, it is easy to understand how the fridge calendar is rarely a reliable source for families as a result of the episodic and reactive approach to the employment of CAF maritime capability. Awaiting the renewal of a named operation from Cabinet, and the start and stop nature of the many named operations, creates variables that fridge calendars cannot cope with. Predictable and successive deployments allow the better management of people and support the credibility of fridge calendars with families.

The model supports that CAF's transformative leadership model in that it provides a singular and easily communicably answer to why ships are deploying on a routine operation: to contribute to ongoing peace and security / "calm seas" in the maritime streets of Canada's international neighbourhood. The international "calm seas" foundation of Op Galateia provides valuable, identifiable service that contributes to morale, purpose, and understanding of strategic intent. Given operations are conducted as part of force employment, the model enables the better support of CAF personnel and their families with operational allowances and basic recognition for service in the form of decorations associated with the operation. This last point may seem trivial at first glance, but consider the cumulative effect on morale when CAF personnel conduct extensive international operations under FG programmes without allowances or the baseline recognition of operational medals. Finally, when it comes to the recruitment of a millennial demographic searching for meaningful connections to their career choices, the model supports force structure sustainment efforts by providing an easily messaged contextualization of how CAF maritime personnel serve and contribute day-to-day to a safer world.

Under the Op Galateia model, resource tracking and forecasting will be more consistent. As well, it will provide better coordination and programming of maintenance, work periods, and class updates, along with better management of the civilian workforce and resources involved in those activities. The overall effect should be better materiel readiness to support routine or emergent operations.

Canada can do more with what it has, with simple changes to process and approach, and with little to no funding implications. Canada is not just missing opportunity, it is punching below its weight and doing less than others because of the rigidity of an approach to international maritime operations designed for activities that fall outside of the routine. CAF maritime capability must always be at a state of readiness to defend Canada and to fight with Canada's allies. When no conflicts are being fought, an approach that does not fully employ expensive capability day-to-day in a deliberate and routine way limits the return on investment of the capability. The opportunity exists to meaningfully shape and contribute to the long term conditions necessary for a prosperous Canada that relies on trade and partnerships, and to pursue political, diplomatic, and military efforts in the national interest. Sailors want to serve in a way that includes easy and meaningful answers to two questions: What do I do and why do I do it? The answers should not be theoretical or abstract. They should be answers that can be touched and experienced in a day-to-day context. The same questions need to be easily answered in the context of what CAF maritime capabilities do for Canada on a day-today basis. The answer has always been abstract. Op Galateia makes them concrete.

CONCLUSION

Key of any programming item is to provide more of a service to Canada with the same funding, by harnessing capacity and changing process. Canada can derive greater benefit from CAF maritime capability in the decades to come through the creation and implementation of an ongoing and routine international maritime operation. The Op Galateia model enables: better use of CAF maritime capability to support Canada's enduring foreign policy principles and GoC policy priorities; an integrated and comprehensive WoG planning framework; a forward postured rapid response maritime force for Canada; institutional stewardship benefits associated with personnel and materiel management; and an end to Canada's episodic approach to commitments in the international maritime domain.

Op Galateia maximizes GoC options and responsiveness to emergent international events that fall above the threshold of routine with forward postured high readiness CAF maritime capability. A deliberate and ongoing contribution to the long term stability of the international maritime neighbourhood is financially viable with minor to negligible incremental funding implications. Opportunities to contribute are abundant. Small changes to process, programmed funding for routine international operations, and parameters associated with planning and executing named operations have the potential to result in big gains. The world is Canada's neighbourhood and its streets are its oceans and seas. The Op Galateia model enables the ongoing delivery of routine CAF maritime effects in support of calm seas in Canada's neighbourhood.

BIBLIOGRAPHY

- "About CMF." Combined Maritime Forces. February 18, 2016. Accessed March 14, 2017. https://combinedmaritimeforces.com/about/
- "About MSCHOA and OP ATALANTA." Maritime Security Centre Horn of Africa. 2016. Accessed April 20, 2017. http://www.mschoa.org/on-shore/about-us
- "About Us." Joint Interagency Task Force South. Accessed April 14, 2017. http://www.jiatfs.southcom.mil/About-Us/
- "Adopting Resolution 2182 (2014), Security Council Extends Mandate of African Union Mission in Somalia for One Year, Amends Sanctions Regime." United Nations Meetings Coverage and Press Releases. October 24, 2014. Accessed April 20, 2017. https://www.un.org/press/en/2014/sc11613.doc.htm
- Africa Partnership Station Training Master Fiscal Year 2015. XLSX. Naples: US Naval Forces Africa, November 13, 2014.
- Africa Partnership Station US Africa Command Fact Sheet. PDF. Stuttgart: United States Africa Command, January 2012. http://www.africom.mil/media-room/document/8931/fact-sheet-africapartnership-station
- Beaton, Virginia. "JIATF South Director Thanks RCN for Successes in Op CARIBBE." Royal Canadian Navy - News and Operations. June 21, 2016. Accessed March 14 , 2017. http://www.navy-marine.forces.gc.ca/en/news-operations/newsview.page?doc=jiatf-south-director-thanks-rcn-for-successes-in-opcaribbe%2Fipmtfvw0

Blakely, Darlene. "Generate Forward: Enabling Deployed RCN Assets to Provide Strategic Capability Abroad." *The National News Magazine of the Royal Canadian Navy: Crowsnest*, 2017, 2-3. http://www.navymarine.forces.gc.ca/assets/NAVY_Internet/docs/en/crowsnest/crowsnest_volume-11_issue-1.pdf

- Building Resilience Against Terrorism: Canada's Counter-Terrorism Strategy. PDF. Ottawa: Government of Canada, 2013. https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/rslnc-gnst-trrrsm/rslnc-gnst-trrrsm-eng.pdf
- Canada. *A Drafter's Guide to Cabinet Documents*. PDF. Ottawa: Privy Council Office, 2013.

http://www.pco-

bcp.gc.ca/index.asp?lang=eng&page=information&sub=publications&doc=mc/gu ide-eng.htm

- Canada. "Canadian Surface Combatant Project." Department of National Defence. June 13, 2016. Accessed March 14, 2017. http://www.forces.gc.ca/en/business-equipment/canadian-surface-combatant.page
- "Canadian Armed Forces in Afghanistan Mission Timeline." Department of National Defence. April 09, 2014. Accessed March 14, 2017. http://www.forces.gc.ca/en/operations-abroad-past/afg-timeline.page
- Canadian Forces Experimentation Centre, comp. *Canadian Forces Joint Publication 01 Canadian Military Doctrine*. Ottawa: Minister of National Defence, 2011.
- Chapnick, Adam. *Canada's Voice: The Public Life of John Wendell Holmes*. Vancouver and Toronto: UBC Press, 2009.
- Chapnick, Adam. "Canadian Foreign Policy." Lecture, Canadian Foreign Policy presentation to students of the Joint Command and Staff Programme, Canadian Forces College, Toronto, October 24, 2016.
- Cole, Allan. "Inquiry UN Maritime Security Capacity Building Framework."
 E-mail message to author. April 10, 2017.
 Email correspondence with UNODC Global Maritime Crime Programme Head Alan Cole.
- Cost Factors Manual 2014-2015 Volume II Equipment and Facility Costs. PDF. Ottawa: Directorate Costing Services National Defence Headquarters, November 2014.
- "Countering Crime." Public Safety Canada. March 03, 2017. Accessed March 14, 2017. https://www.publicsafety.gc.ca/cnt/cntrng-crm/index-en.aspx
- De Kerchove, Ferry. "In Search of a New Compass 2016: The Strategic Outlook for Canada." Edited by David McDonough, PHD. CDA Institute Vimy Paper 27 (February 2016). www.cdainstitute.ca
- Department of National Defence and the Canadian Armed Forces Global Engagement Strategy Strategic Guidance. PDF. Ottawa: Department of National Defence, April 2015.
- "Directorate of Naval Force Readiness Staff Consultation." Telephone interview by author. April 28, 2017.
- European Union. EU CRIMARIO: Enhancing Maritime Situational Awareness in the Indian Ocean. June 26, 2015. Accessed April 4, 2017.

http://ec.europa.eu/europeaid/eu-crimario-enhancing-maritime-situational-awareness-indian-ocean_en

- EU Maritime Security Capacity Building Mission in Somalia (EUCAP Nestor). PDF. European Union External Action, November 2016. https://www.eucapnestor.eu/data/file/1427/EUCN_Factsheet_November_2016.qF10OOwtvM.pdf
- "EU NAVFOR Missions." EU NAVFOR Somalia. 2017. Accessed April 14, 2017. http://eunavfor.eu/mission/
- "European Union Naval Force Operation Atalanta." EU NAVFOR Somalia. 2017. Accessed April 20, 2017. http://eunavfor.eu/
- "Evaluation of the Canada Border Services Agency Targeting Program." Internal Audit and Program Evaluation Directorate. January 2016. Accessed April 20, 2017. http://www.cbsa-asfc.gc.ca/agency-agence/reports-rapports/ae-ve/2016/tp-pceng.html.
- *Express Series Joint Combined Exercise Program Africa*. PPT. Naples: US Naval Forces Africa, October 22, 2014.
- Fjell, Lars Ivar. A Nordic Perspective on Eastern African Standby Forces. PPT. Nairobi: Nordic Advisory and Coordination Staff Eastern Africa, September 16, 2014.
- "GALATEA (Galateia) Nereid Nymph of Greek Mythology." THEOI Greek Mythology. Accessed April 20, 2017. http://www.theoi.com/Pontios/NereisGalateia.html
- Geissler, H. Standing Naval Forces Improving the Attractiveness Based on an Analysis of Historic Data. PDF. Northwood: NATO Allied Maritime Command HQ, May 23, 2014.
 HQ Point Paper
- Global Marine Trends 2030. PDF. Lloyd's Register, QinetiQ, and the University of Strathclyde, 2013. http://www.lr.org/en/projects/global-marine-trends-2030.aspx

- Global Maritime Crime Programme: Annual Report 2016. PDF. Nairobi: United Nations Office on Drugs and Crime, February 2017. https://www.unodc.org/documents/Reports/GlobalMaritimeCrimeProgramme_An nualReport2016.pdf
- Hensley, Corey. *Exercise Cutless Express 2015 Nations Meet to Finalize Plans*. PDF. Naples: US Naval Forces Africa, November 19, 2014.
- Hrychuk, Heather. "Combating the Security Development Nexus?: Lessons Learned from Afghanistan." *International Journal* 64, no. 3 (September 2009): 825-42.
- "Inability to Prosecute Somali Pirates Frustrates Ottawa." CTV News. January 23, 2012. Accessed April 20, 2017. http://www.ctvnews.ca/inability-to-prosecute-somalipirates-frustrates-ottawa-1.757727
- "Incremental Costs for Major Canadian Armed Forces Operations Fiscal Year 2015-16." Department of National Defence. November 21, 2016. Accessed April 28, 2017. http://www.forces.gc.ca/en/about-reports-pubs-departmental-performance/2016incremental-costs-for-major-canadian-armed-forces-operations.page
- "International Deployment of Canadian Forces: Parliament's Role." Library of Parliament - Parliamentary Information and Research Service. May 18, 2006. Accessed April 20, 2017. http://www.lop.parl.gc.ca/content/lop/researchpublications/prb0006-e.htm
- International Operations Branch: Canadian Police Beyond Borders Fact Sheet. PDF. Ottawa: Royal Canadian Mounted Police, January 2010. http://www.rcmp-grc.gc.ca/ip-pi/pdf/iob-soi-eng.pdf
- International Policing: Working Abroad to Build a Safer Canada Fact Sheet. PDF. Ottawa: Royal Canadian Mounted Police, 2010. http://www.rcmp-grc.gc.ca/ip-pi/pdf/international-policing-police-2010-eng.pdf
- Johnstone, Clive, CB CBE. "Commander NATO Maritime Command Remarks at 39th SHADE in Bahrain." Speech, 39th Shared Awareness and Deconfliction Conference, Bahrain, Manama, December 3, 2016. http://www.mc.nato.int/media-centre/news/2016/com-marcom-remarks-at-39thshade-in-bahrain.aspx
- Canada. "Joint Support Ship Project." Department of National Defence. August 2016. Accessed March 14, 2017. http://www.forces.gc.ca/en/business-equipment/jointsupport-ship.page

- Lacoursiere, Jason. "Sea Guardian." E-mail message to author. April 18, 2017. Email between author and NATO Maritime Command HQ staff.
- Lombardi, Ben. *The Future Maritime Operating Environment and the Role of Naval Power*. Scientific Report. Centre for Operational Research and Analysis, Defence Research and Development Canada. Ottawa: Department of National Defence, 2016. 1-116. http://cradpdf.drdc-rddc.gc.ca/PDFS/unc229/p803867_A1b.pdf
- Lozer, Adriano. CCTF 150 Capacity Building Post Visit Report CUTLASS EXPRESS 2015. PDF. Bahrain: Combined Maritime Forces, March 15, 2015.
- MacNamara, Don. ""Comprehensive" National Security." *Frontline Defence*, no. 6 (2010): 24-27.
- Maritime Crime Programme: Annual Report 2014. Report. United Nations Office on Drugs and Crime, United Nations. 2014. http://libraryresearch.unvienna.org/maritimecrime.
- "Maritime Security Automatic Identification System (AIS)." Canadian Coast Guard. June 24, 2013. Accessed April 20, 2017. http://www.ccggcc.gc.ca/eng/CCG/Maritime-Security/AIS
- McDonough, David, PHD, and Charles Davies, eds. "2017: The Strategic Outlook for Canada." *Vimy Paper* 34 (2017). http://cdainstitute.ca/research-andpublications/vimy-papers/
- "Minister of Foreign Affairs Mandate Letter." Prime Minister of Canada. March 24, 2017. Accessed April 14, 2017. http://pm.gc.ca/eng/minister-foreign-affairsmandate-letter
- "Minister of International Development and La Francophonie Mandate Letter." Prime Minister of Canada. March 10, 2017. Accessed April 20, 2017. http://pm.gc.ca/eng/minister-international-development-and-la-francophoniemandate-letter
- "Minister of National Defence Mandate Letter." Prime Minister of Canada. March 10, 2017. Accessed March 14, 2017. http://pm.gc.ca/eng/minister-national-defence-mandate-letter
- "Minister of Public Safety and Emergency Preparedness Mandate Letter." Prime Minister of Canada. March 10, 2017. Accessed March 14, 2017. http://pm.gc.ca/eng/minister-public-safety-and-emergency-preparedness-mandateletter

- "National Security." Public Safety Canada. December 01, 2015. Accessed March 14, 2017. https://www.publicsafety.gc.ca/cnt/ntnl-scrt/index-en.aspx
- "NATO Maritime Groups." NATO Allied Maritime Command. 2017. Accessed March 14, 2017. http://www.mc.nato.int/missions/maritime-groups.aspx
- "NATO Response Force / Very High Readiness Joint Task Force." NATO Supreme Headquarters Allied Powers Europe. January 2016. Accessed April 20, 2017. http://www.shape.nato.int/nato-response-force--very-high-readiness-joint-taskforce
- Norman, Mark. *Royal Canadian Global Engagement Directive*. DOC. Ottawa: Royal Canadian Navy, June 30, 2014.
- Norman, Mark. *Canada in a New Maritime World: Leadmark 2050*. Ottawa: Minister of National Defence, 2016. Accessed November 15, 2016. http://navy-marine.forces.gc.ca/assets/NAVY_Internet/docs/en/rcn_leadmark-2050.pdf
- Obama, Barack. "President Obama's Speech to Parliament." CBC News. June 29, 2016. Accessed April 28, 2017. https://www.google.ca/amp/www.cbc.ca/amp/1.3659229
- "Operation ARTEMIS." Department National Defence. March 14, 2017. Accessed March 14, 2017. http://www.forces.gc.ca/en/operations-abroad-current/op-artemis.page
- "Operation CARIBBE." Department of National Defence. March 14, 2017. Accessed March 14, 2017. http://www.forces.gc.ca/en/operations-canada-north-americarecurring/op-caribbe.page
- "Operation CHABANEL Information." Directorate of History and Heritage Operations Database. November 28, 2008. Accessed April 20, 2017. http://www.cmpcpm.forces.gc.ca/dhh-dhp/od-bdo/di-ri-eng.asp?IntlOpId=340&CdnOpId=413
- "Operation LIMPID." Department of National Defence. April 03, 2017. Accessed April 20, 2017. http://www.forces.gc.ca/en/operations-canada-north-america/op-limpid.page
- "Operation REASSURANCE." Department of National Defence. March 14, 2017. Accessed March 14, 2017. http://www.forces.gc.ca/en/operations-abroad/natoee.page
- "Operation Sea Guardian." NATO Allied Maritime Command. Accessed April 20, 2017. http://www.mc.nato.int/missions/operation-sea-guardian.aspx
- NATO. *Operation Sea Guardian Fact Sheet.* 2017. Accessed April 4, 2017. http://www.mc.nato.int/media-centre/fact-sheets/operation-sea-guardian.aspx

- Organization and Accountability: A Reference Document for Members of the Canadian Armed Forces and Employees of the Department of National Defence Third Edition. Reference Document. Department of National Defence, Canada. Ottawa, 2016.
- Perry, David. "A Return to Realism: Canadian Defence Policy after the Great Recession." *Defence Studies* 13, no. 3 (2013): 338-60. doi: http://dx.doi.org/10.1080/14702436.2013.845386
- Pitfalls and Promises: Security Implications of a Post-Revolutionary Middle East. PDF. Ottawa: Canadian Security Intelligence Service, September 2014. http://publications.gc.ca/collections/collection_2015/scrs-csis/PS73-1-2014-09-02-eng.pdf
- Rempel, Roy. Setting Priorities Given Finite Resources: National Interest Guidlines for Making Policy Choices. August 2016. 2016 Policy review Series Essay, Canadian Global Affairs Institute, Ottawa. http://www.cgai.ca/policy_review
- Roy, Jacques. The Art of the State Volume VI: Redesigning Canadian Trade Policies for New Global Realities. PDF. Montreal: Institute for Research on Public Policy, 2016. http://irpp.org/wp-content/uploads/2015/05/AOTS6-koldyk-et-al.pdf
- Royal Canadian Navy Comptroller Staff Amended Cost Factors Manual Fiscal Year 2014-2015 Ship Tables. XLSX. Ottawa. Cost Factors Manual FY 14/15 Ship Tables with additional tables prepared by RCN Comptroller staff that extrapolate incremental daily costs of ships operating at sea.
- "Royal Canadian Navy Deploys to African West Coast." Government of Canada. February 18, 2017. Accessed March 14, 2017. https://www.canada.ca/en/department-nationaldefence/news/2017/02/royal_canadian_navydeploystoafricanwestcoast.html?=und efined&wbdisable=true
- Royal Canadian Navy Sea Days Data 2013 2017. Raw data. Royal Canadian Navy, Ottawa.
 Multiple digital XlsX files from both Maritime Forces Pacific and Atlantic staffs retrieved through RCN Directorate of Naval Operations staff.
- Selph, Benjamin. Assessment of Africa Partnership Station Training 2014. DOC. Naples: US NAVAL FORCES AFRICA, April 15, 2014.
- "Strategic Joint Staff Staff Consultation." Telephone interview by author. March 15, 2017.

- The Foreign Fighters Phenomenom and Related Security Trends in the Middle East. PDF. Ottawa: Canadian Security Intelligence Service, January 2016. http://publications.gc.ca/collections/collection_2016/scrs-csis/PS73-1-2016-01-01-eng.pdf
- The Globalization of Crime: A Transnational Organized Crime Threat Assessment. Report. United Nationa Office on Drugs and Crime, United Nations. 2010. https://www.unodc.org/unodc/en/data-and-analysis/tocta-2010.html
- Transport Canada: Transportation in Canada 2012 Overview Report. PDF. Ottawa: Canada, 2012. https://www.tc.gc.ca/media/documents/policy/Transportation_in_Canada_2012_e ng_ACCESS.pdf
- Reuters. "U.S. Navy Destroyer Targeted Again in Missile Attack Off Yemen gCaptain." GCaptain. October 12, 2016. Accessed March 14, 2017. https://gcaptain.com/u-s-navy-destroyer-targeted-again-in-missile-attack-offyemen/
- United Nations Conference on Trade and Development: Review of Maritime Transport 2016. PDF. Geneva: United Nations, 2016. http://unctad.org/en/PublicationsLibrary/rmt2016_en.pdf
- "UNODC's Global Maritime Crime Programme." YouTube. February 07, 2017. Accessed March 14, 2017. https://www.youtube.com/watch?v=fqXVZJIkVmM&list=PLP1rrIC89eFCcOzBq R6a-ZO-bLAXZtCmn
- Vigneault, David. "National Security in Canada." Lecture, Assistant Secretary to the Cabinet Privy Council Office Presentation to the Joint Command and Staff Programme, Canadian Forces College, Toronto, October 28, 2016.
- Walker, Timothy. "Policy Brief 96: Reviving the AU's Maritime Strategy." Institute for Security Studies. February 08, 2017. Accessed April 4, 2017. https://issafrica.org/research/policy-brief/reviving-the-aus-maritime-strategy
- "Watch HMCS Toronto Sailors Make a Heroin Bust." CBC News. February 27, 2014. Accessed April 20, 2017. http://www.cbc.ca/news/canada/nova-scotia/watchhmcs-toronto-sailors-make-a-heroin-bust-1.2554222
- Canada. *White Paper on Defence*. PDF. Ottawa: Department of National Defence, 1994. http://publications.gc.ca/site/eng/429769/publication.html
- World Oil Transit Chokepoints. PDF. Washington: US Energy Information Administration, November 10, 2014.

 $https://www.eia.gov/beta/international/analysis_includes/special_topics/World_Oil_Transit_Chokepoints/wotc.pdf$