2020

A Marriage of Intersecting Needs: The Procurement of the Canadian Patrol Frigates by the Pierre Trudeau Government, 1977-1983

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by

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BA History, Wilfrid Laurier University, 2018

THESIS

Submitted to the Faculty of History

in partial fulfilment of the requirements for

Master of Arts in History

Wilfrid Laurier University

To my parents, Gary and Eppie and my little brother, Edgar.

Abstract

In December 1977, the Liberal government of Pierre Elliot Trudeau authorized the Department of National Defence (DND) to begin the acquisition of new warships for the navy. The decision to acquire fully combat capable warships was a shocking decision which marked the conclusion of a remarkable turnaround in Canadian defence policy. The navy, which had grown into a substantial and capable force during the early Cold War in the 1950s, had been in a steady decline since the mid-1960s as a result of the shifts in defence policy, cuts in personnel, and still deeper cuts to the capital funding needed to replace the many aging ships in the fleet. Furthermore, the government's priority was the peacetime enforcement of Canadian laws and regulations, a role that could be carried out more efficiently by lightly armed vessels. The fulfillment of the nation's wartime NATO responsibilities, which required the substantially more capable ship that it chose to acquire instead, was a secondary concern for the Trudeau government. Nevertheless, it opted to acquire fully combat capable warships for both military and political reasons. This marked the beginning of the largest procurement project in the country's history, and one that was both innovative and successful. The result was a contract for six state-of-the art frigates, which was awarded to Saint John Shipbuilding (SJSDD), a shipyard based in Saint John, New Brunswick, in August 1983.

The Canadian Patrol Frigate (CPF) program was certainly a much belated and necessary effort to save the navy from "rust out." As this thesis argues, however, political considerations well beyond those pertinent to the formulation of Canada's defence policy were critically important in the bold decisions to procure sophisticated warships, and, moreover, to design and build them in Canada at a time when the necessary expertise had been severely eroded by the long hiatus in warship construction. In a democratic society such as Canada, which has a

particularly strong tradition of civilian supremacy over the military, politics and defence matters are inseparable. The political leadership not only controls the objectives of the armed forces, but also the means to achieve them. Unsurprisingly, military procurement programs, with the large economic spinoffs at stake, are fraught with political interference in most nations. The CPFs were no exception, as this thesis will demonstrate through an examination of both the military and political developments leading to the acquisition of the ships, and the method of their design and construction. The program was born and shaped by the intersection of defence requirements and the political interest of Cabinet to muster the support of the electorate by stimulating economic development in ways that would both modernize domestic industries and bolster employment in the less prosperous regions in the country.

Acknowledgement

When I first started my examination of the procurement of the Canadian Patrol Frigates in the final year of my undergrad, I had no idea that it would evolve into the project it became today. Young and naive, I thought that this would be something that I could finish in a year and then move onto a new topic for my graduate studies. Perhaps mirroring the topic of this thesis, the project went on for far longer than originally expected; yet the results have certainly rewarded the time and effort. Along the way, I became acquainted with many individuals whose assistance, support and advice were indispensable. As the saying goes, it takes a village to raise a person and I would be remiss if I do not acknowledge the assistance and support of those who helped me along the way.

First and foremost, I would like to thank Dr. Roger Sarty for his guidance and support throughout this process. As my supervisor, he was patient and understanding, allowing me to explore the topic and craft this narrative at my own pace. He was also very supportive of my other pursuits, academic or otherwise, and was always willing to assist me in any ways that he could. Most notably, he put me in touch with many of the individuals mentioned below without whose help this thesis would not have been completed. However, Dr. Sarty was more than just a supervisor, he was a mentor. It was at his urging that I took my first steps in academia, presenting at a pair of conferences in the final year of my undergrad. The contents of these presentations became the basis for the first two chapters of this thesis. As our partnership comes to a formal end, I look fondly back at the time we spent together. Words cannot express the immense gratitude which I owe him, not only for my growth as a student but also as a person.

As this was the first major foray into the procurement of the Canadian Patrol Frigate, there were plenty of gaps within the existing historiography. I was extremely fortunate that

several key individuals involved with the project were willing to share their experience and knowledge with me. I am deeply grateful to Rear-Admiral (ret'd) Eldon Healey, who served as the Project Manager of the Canadian Patrol Frigate project between 1979 and 1983, which largely corresponded with the timeframe of this thesis. He patiently and in great detail, answered all the questions I posed and revealed many of the proceedings which occurred out of public sight which were invaluable to this thesis. Chapters four and five could not have been written without his responses. I would also like to thank Commander (ret'd) Pat Barnhouse of the Canadian Naval Technical History Association (CNTHA) who introduced me to Rear-Admiral Healey, and was instrumental in building the CNTHA's collection of documents (deposited at the Directorate of History and Heritage in Ottawa), which was a valuable resource. Vice-Admiral (ret'd) Nigel Brodeur helped me to understand the complex command structure of the Canadian Armed Forces at the time of the Canadian Patrol Frigate program and provided anecdotes and documents that were important to my research.

I would also like to thank Dr. Marc Milner, Dr. Frank Maas, and Dr. Dan Middlemiss for their assistance and advice. In retrospect, much as I learned, I should have consulted them more often given their expertise in many of the topics related to this thesis. I would also like to recognize the kindness and helpfulness of the staffs at Library and Archives Canada, the Directorate of History and Heritage at DND and the Laurier Centre for Military, Strategic and Disarmament Studies. As someone who has never been in an archive before this project, trying to locate the necessary files proved to be a daunting task; their patience and support was essential.

I would like to thank my employer, the Canada Border Services Agency and especially my manager, Ruby Rajput, for being so accommodating with my work schedule to allow me to

complete this thesis. Striking a balance between work and my studies was not an easy task; however, my manager and coworkers were all supportive of my education and arranged my schedule in a way which ensured that I would not fall behind.

Lastly, it goes without saying that this thesis would not have been possible without the support of my friends and family, of which there are too many to name. Nevertheless, there are several individuals which I would like to specifically acknowledge for their contributions. The first undoubtedly goes to Second Lieutenant David Ashworth, a long-time friend from our days as air cadets. His willingness to listen and offer suggestions on my thesis and to subject himself to my poorly written early drafts was greatly appreciated. Furthermore, he never failed to keep me entertained with his witty comments and remarks. I would also like to thank my friends Ben Patterson and Nick Cheng for their support throughout this process and for offering their time to help me when needed. The same goes to my younger brother, Second Lieutenant Edgar Ma, whose assistance and support was invaluable, particularly in the latter stages of the project. Lastly, I want to acknowledge my parents, Gary and Eppie, for their unwavering support as I completed this long journey.

List of Abbreviations

ADM (Mat)	Assistant Deputy Minister (Material)
AO	Area of operation
AOR	Auxiliary Oiler Replenishment
ASW	Anti-submarine warfare
C3	Command, Control and Communications
CA	Canadian Army
CAF	Canadian Armed Forces
CCG	Canadian Coast Guard
CD	Contract Definition
CDS	Chief of Defence Staff
CMDO	Chief of Maritime Operations and Doctrine
CNS	Chief of Naval Staff
CPF	Canadian Patrol Frigate
DELEX	Destroyer Life Extension Program
DFE	Department of Fisheries and Environment
DGMEM	Director General Maritime Engineering and Maintenance
DND	Department of National Defence
DOI	Department of Industries, Trade and Commerce
DOT	Department of Transportation
DSS	Department of Supply and Services
EEC	European Economic Community
IRB	Industrial and regional benefits
MARCOM	Maritime Command
MOSST	Minister of State for Science and Technology
MND	Minister of National Defence

MP	Member of Parliament
MSS	Minister of Supply and Services
NATO	North Atlantic Treaty Organization
NDHQ	National Defence Headquarters
PMO	Project Management Office
RCAF	Royal Canadian Air Force
RCN	Royal Canadian Navy
RFP	Request for Proposal
SACEUR	Supreme Allied Commander - Europe
SACLANT	Supreme Allied Commander – Atlantic
SCAN	Scan Marine Inc.
SJSDD	Saint John Shipbuilding and Dockyards
SLBM	Submarine Launched Ballistic Missile
SLOC	Sea Line of Communication
SOR	Statement of Requirements
SJSDD	Saint John Shipbuilding
SRP	Ship Replacement Program
STANAVFORLANT	Standing Naval Force – Atlantic
TRUMP	Tribal Refit and Update Modernisation Program
USN	United States Navy

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Introduction

On December 22, 1977, the Pierre Elliot Trudeau government announced its decision to acquire six new frigates for the Canadian Armed Forces. This announcement initiated the Canadian Patrol Frigate (CPF) program, which ultimately delivered twelve state-of-the-art vessels for Maritime Command (MARCOM) at a final cost of $8.856 billion.[1] To this day, it remains the single most expensive military procurement project in Canadian history.[2] The acquisition of these new warships within the planned budget was a sorely-needed victory for not only MARCOM, which desperately needed new ships to replace its obsolete fleet, but also for the military procurement system, which has been and continues to be characterized by critics and frustrated participants alike as inefficient and incompetent. To the casual observer, the acquisition of equipment for the Canadian Armed Forces (CAF) should not be an overly complex task as it ought to be an exercise of matching the needs of the military with the proper equipment. However, this simplistic view discounts the constant interference throughout the process by political interests, which are the true cause of the deficiencies that plagues Canada's procurement system, and indeed, one which plagued most governments which endeavour to manage large defence procurement programs that features cutting-edge technology. As this thesis will demonstrate, the acquisition of the warships, while initiated to meet pressing military needs, was ultimately driven by political considerations.

In a democratic country such as Canada, understanding the complex relationship between politics and defence matters is paramount if one is to make sense of how military procurement programs are initiated and carried out. After all, politicians not only control the objectives of the

[1] DND. *CPF Project Completion Report*. (Ottawa: Department of National Defence, 2005): 20.
[2] The Canadian Surface Combatant project, which is currently ongoing is expected to cost up to $60 billion, making it the new most expensive procurement project in Canadian history.

CAF but also the means to achieve them. The choices of equipment procured for the military are seldom driven by military requirements alone, but rather by compromise between military and political needs. This is the result of the often-incongruent interests of the two main stakeholders: the CAF and Cabinet. The former is concerned with the security and defence of the nation while the latter is preoccupied with a larger range of considerations such as interprovincial relations, industrial development, and the socio-economic wellbeing of the nation and its citizens. There will always be a need for new equipment for the military as existing systems wear out or become obsolete, together with the constantly evolving geopolitical landscape and the emergence of new threats. However, the fierce competition for funding within the bureaucracy as well as the relatively low priority of defence spending in most Canadian governments meant that major procurement programs only occurred when the needs of the military and Cabinet converged. Yet, to characterize defence procurement as the mere product of a marriage of intersecting needs between the military and political leadership underscores both the complexity of these projects, and the marked importance of political considerations.

The long timespan of the CPF program (1977-2006) means that it is impossible to examine the entirety of the project within this thesis. Instead, this analysis will focus on the Project Definition phase for the initial six vessels which largely took place from 1977 to 1983. To understand why the procurement took place, and how the innovative features of the program such as a heavier reliance on civilian industry than previous warship projects came to be, it is essential to examine the military and political developments which led to the government's decision to acquire the vessels (Chapters One to Three).

The thesis seeks to address two main questions: 1) how did the military formulate its requirement for the frigates and 2) why did the Pierre Trudeau government proceed with the project? The first question has led to an examination of how the military came to lay down the specifications for the new vessels, and how DND presented the case for these warships to Cabinet (Chapter Four). In responding to the second question, the thesis explores how political considerations that were largely domestic in nature not only persuaded the government to proceed with the procurement of the Canadian Patrol Frigates in 1977, but also continued to shape the program long afterward (Chapter Five).

This work is comprised of five largely chronological chapters. Chapter One will examine the rise and fall of the Royal Canadian Navy (RCN) in the post-World War II era up to Pierre Trudeau's election as prime minister in 1968. From one of the largest fleets in the world in 1945, the RCN was reduced to a shadow of its former self only twenty-five short years later. In 1970, the Canadian fleet totaled only twenty-four major surface combat vessels, the majority of which were nearing the end of their service life and more concerning were operationally obsolete. During the intervening decades, the rapid expansion of the Soviet submarine fleet forced the RCN to adopt an anti-submarine warfare (ASW) orientation and set the navy down a course from which there would be no return. However, the greatest threats to the RCN were not under the waves but rather in the halls of Parliament in Ottawa. Political apathy and the need to free up funds for other government priorities led first to the integration of the armed forces and subsequently, the Unification Crisis, which resulted in enormous upheavals in the Canadian military establishment. By the time Trudeau imposed further changes on the armed forces during his first administration (1968-1972) the ability of Canada's maritime service to fulfill its core functions was already in question. The arrival of the four DDH-280 *Iroquois*-class destroyers and

the *Protecteur*-class Auxiliary Oiler Replenishment (AOR) ships in the early 1970s brought a glimmer of hope, but the outlook of Canada's maritime forces remained very bleak as the new prime minister had a radically different vision for the Canadian Armed Forces (CAF).

Chapter Two follows Trudeau's early efforts to re-invent Canada's defence and foreign policies. Trudeau had made it clear from the beginning that he was not a strong supporter of the military, NATO, or the policies adopted by his predecessor.[3] This quickly created a rift between Canada and its allies, who saw his pursuit of new nationalist priorities and the proposed drastic reconfiguration of the armed forces as signs that the nation would abandon its alliance responsibilities.[4] Yet by 1975, when Trudeau had his now famous meeting with the West German Chancellor Helmut Schmidt, there was a clear reversal of policy as Canada once again embraced its participation in the NATO alliance. This shift, while largely a political decision, demonstrated Trudeau's maturity as he learned of the value that a capable and competent military had to the advancement of Canadian interests and policies beyond just defence and foreign relations matters.[5] In the wake of this revelation, several major capital equipment programs were initiated which resulted in the acquisition of the C1 Leopard tanks, the CF-188 Hornet fighter, CP-140 Aurora long-range patrol aircraft and, last, the Canadian Patrol Frigates.[6]

Chapter three analyses the new world which Maritime Command (MARCOM), the successor to the RCN, found itself in 1975 as the government initiated the Ship Replacement Program (SRP). While the navy endured far-reaching organizational changes and cuts to

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[3] Robert Bothwell and Jack Granastein, *Pirouette: Pierre Trudeau and Canadian Foreign Policy*, (Toronto: University of Toronto Press, 1990), 8-9.
[4] Ibid, 28.
[5] Frank Maas, *The Price of Alliance: The Politics and Procurement of Leopard Tanks for Canada's NATO Brigade,* (Vancouver: UBC Press, 2017), 91.
[6] While more commonly known as the CF-18 Hornet, the official designation of the fighter is CF-188.

personnel and capital budgets during the 1960s and early 1970s, the international strategic situation which it was still tasked to protect Canadian maritime interests in was evolving rapidly. In 1954, USS *Nautilus*, the world's first nuclear-powered submarine (SSN) entered service with the US Navy (USN). This development sparked a new arms race between the USA and the USSR fuelled by the proliferation of naval nuclear technology. The introduction of SSNs and later their nuclear ballistic missile armed variants, SSBNs, revolutionized naval warfare and indeed the strategic balance between the West and the Soviet Bloc. Canada's warships were outmatched by these new threats and quickly became operationally obsolete. The nuclear problem was further exacerbated by the massive expansion of the Soviet Navy during the 1960s. While these were not problems with which Canada alone had to contend, they nevertheless had significant implications for MARCOM. It was against this backdrop that the longstanding funding problems of the CAF once again resurfaced. Trudeau had no alternative but to initiate a comprehensive review of Canada's military roles, capabilities, force structure, and funding formula to address the inadequacies of the CAF. At the end of the 1975 Defence Structure Review, Cabinet ordered the Department of National Defence (DND) to begin the foundational work for a ship replacement program.

Chapter four examines the DND's difficult journey to craft the Statement of Requirements (SOR) for its newest warships. Compounding the woes of defence officials was MARCOM's twin roles which required very different types of vessels to fulfill.[7] The sovereignty role assigned by the government was best served by lightly armed patrol vessels while Canada's NATO responsibilities could only be met by proper warships. These competing requirements

[7] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 19, Barney Danson Fonds, R13905-1415-0-E, Library and Archives Canada. [Hereafter LAC].

resulted in intense debates both within the military and in Cabinet over how the SRP should proceed. Ultimately, after two long years of preparatory studies, it was decided that Canada would procure a new combat frigate. However, the experience of previous DND-administered procurement projects resulted in a deep mistrust of the military's ability to carry out such programs. In response, a new procurement strategy was implemented to ensure the problems of the past did not resurface. This was the first step in the long journey to acquire MARCOM's new warships.

The final chapter seeks to understand why the government approved of the CPF project. Just several years prior, the idea that the Trudeau government would instigate a procurement program to acquire a class of ASW frigates would have been unfathomable. However, the decision to proceed with the project, despite the clear military needs, was made largely based on political considerations. The Trudeau government was eager to use the CPF project to promote economic, industrial and technological growth in Canada. Two areas of particular interest to the government were the fledgling electronics sector and the deeply troubled shipbuilding industry. The emphasis on economic and industrial development meant that the distribution of industrial and regional benefits (IRB) became a major source of contention within Trudeau's cabinet as well as among the provinces and relevant stakeholders. After much deliberation, Saint John Shipbuilding (SJSDD) was announced as the victor of the CPF competition on June 29, 1983, thereby ending the Project Definition phase of the program. By all measures, the procurement of the Canadian Patrols Frigates was a highly successful event, especially given the strategic and political complexities which DND faced.

Chapter 0.1 – Literature Review

This thesis occupies a unique place in the study of the procurement of the Canadian Patrol Frigates as it constitutes the first major study on the topic, which made this project both an exciting and daunting task. While military procurement in Canada is not a new topic in academia, most of the existing literature comprises contemporary studies which either examine procurement projects as part of the defence policies of the day or are commentaries about the failures of a procurement system. [8] While they provide valuable context, these publications are largely written by political scientists and defence commentators, who do not have access to the project files and papers of participants which historians enjoy. In other words, the values of these commentaries and analysis decreases with the passage of time as archived sources are opened for research.

In the past two decades, there have been several substantial works on the influence of politics on military procurement. Michael Hennessey's PhD thesis, "The Rise and Fall of a Canadian Maritime Policy, 1939-1965" (1999) specifically focused on the hopes of political leaders to build on the large emergency shipbuilding program during World War II for post-war economic development. Aaron Plamondon's, *The Politics of Procurement: Military Acquisition in Canada and the Sea King Helicopter* (2010) was a more tightly focused study of the interplay of military and political influences on the Canadian military procurement system. This was followed by *Cold War Fighters: Canadian Aircraft Procurement, 1945-54* (2011) by Randall Wakelam, and Frank Maas' *The Price of Alliance: The Politics and Procurement of Leopard*

[8] Peter Haydon, "Choosing the Right Fleet Mix: Lessons from the Canadian Patrol Frigate Selection Process," *Canadian Military Journal* 9, No.1 (2008): 65.

Tanks for Canada's NATO Brigade (2018). This thesis seeks to add to this growing historiography with an examination of the CPF program.

Aaron Plamondon's *The Politics of Procurement* and Frank Maas' *The Price of Alliance* were particularly influential in the development of the present thesis. Plamondon's work chronicled the acquisition of the CH-124 Sea King helicopter in 1960 and the various political controversies which dogged both that project as well as the various later attempts to procure a modern replacement. While the topic of this study was largely unrelated to this thesis, it demonstrated the importance of politics to military procurement, showing in detail how the procurement of helicopters for the navy was used as a tool to achieve political objectives. Maas' *The Price of Alliance* examined the procurement of the C1 Leopard Tanks for the Canada's brigade stationed in West Germany by Pierre Trudeau in the early 1970s and was more directly related to the CPF program, which was also initiated by the Trudeau government in the mid 1970s. Maas argued that Trudeau's decision to procure the tanks, which he was adamantly opposed to several years prior despite extensive efforts by defence officials to convince him of the need for modern tanks, was effectively a political transaction in order to secure closer trade relations with the European Economic Community (EEC).

For broader context on the history of Canada's navy and defence policy, the existing historiography is substantial. Marc Milner's *Canada's Navy: The First Century* and Nicholas Tracy's *A Two-Edge Sword: The Navy as an Instrument of Canadian Foreign Policy*, *The Naval Service of Canada 1910-2010, A Centennial Story*, edited by Richard Gimblett, and *RCN in Transition, 1910-1985* are four of the most notable publications on the history of Canada's maritime service and were indispensable for chapters one, two and three as they treat the evolution of Canada's maritime force from the post-World War II era to when the CPFs were

announced in 1977. Sharon Hobson's *The Composition of Canada's Naval Fleet, 1946-85* provided specific information on the classes of warships that made up Canada's fleet. Paul Hellyer's memoir, *Damn the Torpedoes: My Fight to Unify Canada's Armed Forces*, was an invaluable source for Chapter 1.2 as it detailed the important events of 1963 to 1968 from the former defence minister's perspective. *Canadian Defence: Decisions and Determinants* by Dan Middlemiss and Joel Sokolsky was a valuable piece which provided a detailed overview of the development of Canada's defence policies during the Cold War.

On the topic of Pierre Trudeau's defence and foreign policy during the 1970s, *Pirouette* by Jack Granatstein and Robert Bothwell remains the authoritative work. *The Canadian Way* by Pierre Trudeau and Ivan Head supplies the perspective of the prime minister and his chief advisor. Larry Stewart's *Canada's European Force, 1971-1980: A Defence Policy in Transition* is valuable on Trudeau's defence policy with respect to NATO. Colin Gray's *Canada's Maritime Forces* is a detailed contemporary analysis of the changes to the priorities of MARCOM in the government's white paper *Defence in the 70s*. *The Naval Service of Canada 1910-2010, A Centennial Story* and *RCN in Transition, 1910-1985*, are two collection of essays edited by Richard Gimblett and W.A.B. Douglas respectively which contain a number of articles from important contributors such as Joel Sokolsky, Peter Haydon, Dan Middlemiss and Michael Hennessey. The *Canadian Defence Quarterly* which was the CF's professional journal, published a number of articles that were particularly useful in highlighting differing views among serving naval officers on the future roles and capabilities of the service.

The lack of readily available published sources on the details of the CPF program made it a challenge to initially piece together a cohesive narrative of the events which ultimately led to the decision to build the first six Canadian Patrol Frigates. Fortunately, there are large collections

of relevant material at Library and Archives Canada (LAC), the Department of National Defence's Directorate of History and Heritage (DHH), and the Laurier Centre for Military, Strategic and Disarmament Studies (LMCSDS). The majority of source documents used in this thesis were obtained from these depositories. Many of the documents at LAC and DHH had to be acquired through the Access to Information program (ATIP).

One of the most important collections is the George Lindsey Fonds, parts of which are located at DHH and parts at LCMSDS. Lindsey, a physicist and key DND analyst in the development of Canada's defence policy, was a long-time member of the Defence Research Board, and ultimately head of the Operational Research and Analysis Establishment.[9] Important documents from his collection include: "Memo to Cabinet: Financing the Defence Program from 1975/76 - 1979-80" (October 13, 1974), "Strategic Trends of the 70s and their Implications for Canadian Defence Policy" (May 20, 1970) and "Canadian Defence Policy in the 70s" (May 1969) all of which were critical for chapter three. Other key documents found at DHH included the "Canadian Patrol Frigate Program: Project Definition Stage Procurement Plan" (1978) and the "CPF Project Completion Report." (2005).

A second major source of primary documents came from LAC, where the Pierre Trudeau Fonds, the Barney Danson Fonds, the Romeo LeBlanc Fonds and the Cabinet Conclusion Fonds were especially useful. From the files of Barney Danson, the minister of National Defence when the procurement of the CPFs began, the two most important documents were a copy of Ivan Head's "Canadian Defence Policy: A Study" (1969) and the DND Discussion Paper "Maritime Forces Surface Requirements."(1977) Head's report, as will be seen in Chapter Two, was

[9] Matthew Wiseman, *The Selected Works of George R. Lindsey: Operational Research, Strategic Studies and Canadian Defence in the Cold War*, (Toronto: University of Toronto Press, 2019), XIX.

essentially the basis for Canada's early defence policy under Trudeau and was instrumental to the formulation of the 1970 White Paper on Defence. The "Maritime Forces Surface Requirements" was a discussion paper presented to cabinet by DND which presented the military's full case for new warships and outlined how the procurement of these vessels would be conducted. Its importance cannot be overstated as much of Chapter Four was written based on this set of documents. Romeo LeBlanc was the minister of Public Works when the contract for the CPFs was awarded in 1983. In the collection is a series of memos which detailed the assessment of the final bids from the competing consortia. This set of documents clearly highlight the importance which the Trudeau government placed on regional and industrial benefits in the decision to procure the Canadian Patrol Frigates. Due to time constraints and the Coronavirus Pandemic, the documents examined in this thesis constituted only a small portion of those held in various archives across Canada. These collections present an opportunity for future historians to further study the politics of military procurement in Canada.

Chapter 0.2 - Military Procurement in Canada

The distinguished historian David Bercuson once stated, "of all the interesting, dramatic, exciting aspects of defence policy and military operations, none is more dull than procurement. The very word seems to induce boredom."[10] However, for those who enjoy the intrigues of politics, procurement programs are fascinating because they provide valuable insights into the inner workings of government, especially how defence policies are often guided by considerations that are non-military in nature. Canada's procurement system has long been described as nothing short of a national tragedy due to its consistent inability to deliver quality

[10] David Bercuson, "Time to wake up on procurement," *Legion Magazine*, (November 2005). https://legionmagazine.com/en/2005/11/time-to-wake-up-on-procurement/.

equipment in a timely and affordable manner.[11] Notable failures such as the Avro Arrow and the numerous attempts to replace the Sea King helicopters represent the epitome of the flawed procurement system. Even projects considered to be successful such the CF-100 Canuck fighter and the DDH 205 *St. Laurent*- class destroyers, were dogged by significant cost overruns and lengthy delays. The acquisition of the Canadian Patrol Frigates, the topic of this thesis, took an astounding fifteen years from the initiation of the project to when the lead ship was commissioned into the fleet. This was double the accepted norm for a major shipbuilding program. While the procurement of military equipment had never been smooth in Canada, the intervention of political interests, exacerbated by the civilianization of the process created the nightmarish system in place today.

There was a time when the Canadian military was responsible for the procurement of its own equipment. The Department of Defence Production (DDP) was created in April 1951 as the primary agency responsible for defence procurements due to the unique nature of such purchases. However, this arrangement was short-lived as the department was dissolved in 1963 in the aftermath of the Glassco Commission on the consolidation of government services. The procurement of military equipment then became the responsibility of the Department of Industry, Trade and Commerce (DOI) and later, the Department of Supply and Services (DSS). The end of an independent military procurement agency, ostensibly to eliminate redundancy in government services and to restore accountability, had severe consequences for the Canadian Forces.

The foremost problem which resulted from the civilianization of the military procurement system was that meeting the needs of the armed forces was no longer the prime directive of the

[11] Richard Shimooka, "Canada has the worst military procurement system in the Western world," *Laurier-McDonald Institute*, (Jan 21, 2019). https://www.macdonaldlaurier.ca/canada-worst-military-procurement-system-shimooka-the-hill-times/.

projects. Instead, this was superseded by political considerations that originated from Cabinet. Canada's military procurement system is unique in that all defence-related goods and services are required by law to be acquired through a competitive selection process.[12] This was done to ensure both transparency as well as to determine the most cost-effective option which met the CAF's requirements. However, this arrangement also allowed Cabinet to control the distribution of industrial and regional benefits (IRB), which as this thesis will demonstrate, was used to achieve political objectives which are non-military in nature. Furthermore, of the many parties involved, only DND was concerned with the actual capabilities of the equipment; considerations such as costs and IRB distribution were more important than the actual capabilities of the equipment for Cabinet and other government departments involved.[13] As civilian priorities overtook those of the military, the equipment procured in many instances was not the best option for the armed force's requirements, but rather, the best compromise between military and political needs.

The second problem which stemmed from the civilianization of the defence procurement process was that the relationship between DND and DSS had become muddled. [14] Unlike most other nations where the military or a designated agency is responsible for such projects, procurements programs in Canada became a joint venture between the armed forces and other relevant government departments following the dissolution of the DDP.[15] In theory, the Department of National Defence (DND) would be the lead agency in the procurement project

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[12] Alan Williams, *Reinventing Canadian Defence Procurement: A View from the Inside*. (Montreal and Kingston: Breakout Educational Network. 2006): 5.
[13] Aaron Plamondon, *The Politics of Procurement: Military Acquisition in Canada and the Sea King Helicopter*. Vancouver: UBC Press (2010), 9.
[14] J.R. Killick, "Aide Memoire – The Management of Capital Acquisition Programs in the Defence Department." (February 23, 1977) Vol 73, File 6, 3, Barney Danson Fonds, R13905-1415-0-E, LAC; Williams. *Reinventing Canadian Defence Procurement,* 76.
[15] Plamondon. *The Politics of Procurement,* 7.

and be supported by officials from DOI and DSS who would manage aspects in which DND lacked experience such as contract negotiations and management of IRBs.[16] In practice, this resulted in a highly complicated procurement system where DND remained as the project overseer but its functions were greatly reduced to that of technical authority and end user. [17] The real power was in the hands of DSS, which was responsible for the negotiation and management of the contract with the selected contractor. However, its officials possessed neither the requisite knowledge of the CAF's needs nor understood the unique nature of these acquisitions. Instead, its focus was on the administration of the contract. More important, they were not held accountable for their actions.[18] Despite the reduced role of DND, it was still responsible for any cost overrun and political baggage left behind by DSS.

The effectiveness of this arrangement had been questioned as early as 1972. The DND Management Review Group raised two significant problems with the capital acquisition programs in its sweeping review of the senior management structure of the CAF/DND. The first was that there was no single official responsible for the many aspects of procurement such as but not limited to engineering, preparing the SOR and project management.[19] This was easily resolved with the creation of the position of ADM (Mat) at the recently created National Defence Headquarters (NDHQ). The second problem dealt with the relationship between DND and DSS in defence procurement. The Management Review Group had significant doubts about the suitability of DSS as the lead agency in defence procurement given the unique natures of these purchases and its general lack of knowledge of the needs of the armed forces. The Management

[16] Ken Bowering, "Military/Naval Procurement in Canada: A Flawed Process." *The Conference of Defence Associate Institute*. General Sir Arthur Currie Paper 1-08 (November 19, 2008):4.
[17] Williams, *Reinventing Canadian Defence Procurement*, 76.
[18]Bowering, "Military/Naval Procurement in Canada: A Flawed Process," 4.
[19] J.R. Killick, "Aide Memoire – The Management of Capital Acquisition Programs in the Defence Department." (February 23, 1977) Vol 73, File 6, 2, Barney Danson Fonds, R13905-1415-0-E, LAC.

Review Group Report (Pennefather Report) explicitly stated that "We also consider it inappropriate to allow other Government departments to have primary responsibilities for matters related to defence procurement as has been the case on occasions in the past. It represents a fundamental abdication of the Department's responsibility, and the Auditor-General's criticisms have borne witness to this view."[20] Furthermore, the report stated that if DSS was to remain the lead agency for the acquisition of military equipment, there must be mechanisms in place to ensure that it, not DND, would be held responsible should the product fail to satisfy the needs of the armed forces or if its actions or inactions resulted in significant and costly delays.[21] This recommendation was never acted upon as government departments jealously guarded their areas of responsibilities as fiefdoms under the pretext of accountability. As such, DSS remained the lead government department for defence procurement projects, a practice which continues to this day under its successor, Public Works and Government Services Canada.

The decision to retain DSS as the lead agency in procurement projects ensured that in practice, there would be parallel chain of commands within the Project Management Office (PMO). While DND was in charge of the overall project, the departmental staff from DSS and DOI reported to their respective deputy ministers instead of the project manager. This meant that the Project Manager, nominally a military officer, had very little control over much of the procurement project. The new arrangement was highly flawed particularly when problems which intersected the responsibilities of multiple departments arose as these had to be dealt with at the

[20] John Pennefather was an executive of the Industrial Acceptance Corporation who was tasked to lead a committee comprised of civilian executive and military leaders to review the management structure of DND with a special emphasis on the procurement of capital equipment. "Extract from Management Review Group Report," (1972), Vol 73, File 6, 99, Barney Danson Fonds, R13905-1415-0-E, LAC.
[21] Ibid, 100.

deputy minister or ministerial level. This in turn led to lengthy delays to the already snail-paced procurement process. The civilianisation of the acquisition program exacerbated what originally was already a difficult defence procurement process.

The Canadian government procurement process consists of nine major steps:[22]

1. Defining the military requirements
2. Validation of requirements
3. Government approval and budget allotment
4. Creating an official Statement of Requirement (SOR)
5. Selection of procurement strategy
6. Bid solicitation and source selection
7. Negotiation and awarding of contract
8. Administration of the contract
9. Delivery of the product

Although it appears to be logical, it fails to take into consideration the innumerable delays caused by political, legal and social-economic complications which have reduced the system to the ineffective bureaucratic nightmare it is today. Alan Williams, a former ADM (Mat) at DND, stated that a major reason for the lengthy delays in the procurement of new equipment for the Canadian Armed Forces are the politics associated with the process.[23]

It is the responsibility of the prime minister and Cabinet to decide the defence and foreign policy direction of Canada which in turn dictated the roles and equipment requirements of the CAF. The acquisitions of major military capital equipment are highly visible and public events which spark considerable political scrutiny. They are particularly attractive targets for political

[22] Plamondon, *The Politics of Procurement,* 3.
[23]Williams, *Reinventing Canadian Defence Procurement,* 5.

and interest groups given the high costs of these projects and the millions of dollars in IRB at stake.[24] In most instances, the attacks are not necessarily about the particular equipment or weapon system being procured but rather the overarching defence and foreign policies adopted by the government of the day.[25] This places significant pressure on the government not only to defend the equipment purchase, but also its overall defence policy. Failure to sufficiently justify the policy often resulted in even lengthier delays to the project and the longer it remained in the public eye, the more susceptible it was to attack and criticism.[26]

The distribution of industrial and regional benefits was another political factor which greatly influenced defence procurement in Canada. IRBs are economic benefits which stemmed from government procurements and are mandatory for acquisitions valued at over $100 million. Furthermore, the value of IRB commitments is required to be at least equal to the value of the contract.[27] The objective of the policy, formalized in 1986, was "to provide long-term industrial and regional benefits that are of high quality, provide long-lasting economic benefits, emphasize innovation and investments and pre-position Canadian industries for the export market and long-term support."[28] However, The increased emphasis placed on IRB by politicians, only further exasperated the failures of an already dysfunctional system. These requirements drastically increased the cost of procurement programs to the point where Canada now pays several times more for a similar piece of equipment as other nations. The distributions of IRBs, as this thesis

[24] The debate surrounding the procurement of the F-35 during the past two election cycles clearly demonstrates the politicization of military procurement in Canada.
[25] Haydon, "Choosing the Right Fleet Mix," 65.
[26] Plamondon, *The Politics of Procurement,* 29.
[27] Williams, *Reinventing Canadian Defence Procurement*, 64.
[28] Ibid, 64.

will demonstrate later, are highly contentious political matters and politicians spend a great deal of time to ensure that their constituents benefit from government procurement projects.

The flaws of Canada's military procurement process are too numerous to be explained in detail in such a short summary. Nevertheless, it is apparent that the failures of the defence procurement process in Canada are systemic in nature and that politicians, defence officials and bureaucrats are all complicit. These themes, especially the politicization of the defence procurement process, will be further expanded upon in the following chapters.

Chapter 1: The Slow Demise of Canada's Navy, 1945 – 1968

"Our role in naval operations is definitely known…. It is antisubmarine work, largely in the waters across the North Atlantic and coastal protection on both coasts."– Brooke Claxton, Minister of National Defence (June 9, 1950) [29]

The history of the Canadian navy in the post-World War II era was a tale of two navies. Whereas the 1950s represented the high point of the RCN, the 1960s was a decade of darkness. The demise of the Royal Canadian Navy (RCN) and its successor, MARCOM, was not the result of a singular event which occurred overnight. Rather, it was the culmination of many years of institutional short-sightedness and political mismanagement. The objective of this chapter is to examine the slow demise of Canada's naval service and to lay the foundation for the rest of the thesis as the RCN's transition into a dedicated anti-submarine warfare (ASW) fleet would set into motion the events to come. At the end of the Second World War, plans were developed for Canada to maintain a versatile fleet which could perform a variety of missions and roles as needed. However, such plans went awry almost immediately as the strategic situation forced the RCN to adopt ASW as the primary mission. Though it did not resemble the one envisioned by naval planners in 1945, it was still nevertheless a highly effective fighting force and more importantly, the reorientation gave the navy a purpose as well as the justification needed to push for additional warships. As the 1950s came to a close, all seemed calm on the surface; however, trouble was brewing on the horizons.

The election of the Liberal government in 1963 ushered in one of the darkest periods in Canadian military history as the venerable Lester B. Pearson tapped a young and ambitious MP by the name of Paul Hellyer to serve as the new Minister of National Defence (MND). Eager to

[29] Parliament of Canada, "House of Commons Debates," (June 9, 1950) 21st Parliament, 2nd Session, Vol. 4: 3437.

make his mark on the portfolio and to find savings to fund the ongoing expansion of the social welfare system, Hellyer forcibly merged the Canadian Army (CA), Royal Canadian Air Force (RCAF) and Royal Canadian Navy together into a new entity known as the Canadian Armed Forces. The ensuing crisis, known as the *Unification Crisis*, resulted in a protracted and highly public war between the military's high command and the defence minister. In the end, Hellyer got his way and the three distinct elemental services ceased to exist. The navy, now reconstituted as Maritime Command, suffered heavily for leading the fight against unification. When Pierre Elliot Trudeau became prime minister in April 1968, he would take over a military that was a shell of its former self.

Chapter 1.1 – The Development of Canada's Cold War Navy, 1945-1963

When the Second World War ended in August 1945, the Royal Canadian Navy was one of the largest naval forces in the world, comprising of over four hundred ships and ninety thousand sailors. Over the course of the conflict, it had gained a hard-earned reputation as an elite escort and ASW force. Despite its distinguished wartime record, Canada lacked the logistical, financial and manpower capability to maintain such an enormous fleet in peacetime and the drastic reduction of the navy was all but a foregone conclusion. Nevertheless, plans were drafted to ensure that the RCN remained a formidable naval power as the world prepared to navigate the uncertainty of the Cold War. The envisioned post-war fleet would have consisted of two light aircraft carriers, five cruisers and three destroyer squadrons supported by other smaller support ships manned by approximately twenty thousand sailors.[30] This configuration was designed to provide the RCN with the organizational and operational flexibility to undertake a

[30] Sharon Hobson, *The Composition of Canada's Naval Fleet, 1946-1985*. (Halifax: Dalhousie University Centre for Policy Study, 1986), 14.

wide range of roles and operations. Unfortunately, those plans were quickly scuttled as fiscal and strategic realities of the post-World War II era quickly set in.

The Cold War erupted immediately after the conclusion of the Second World War with the drawing of the Iron Curtain in Europe. Unlike the CA and the RCAF, the RCN initially struggled to define a role for itself in the new geopolitical landscape. Central Europe was expected to be the main battlefield of the East-West conflict. As a primarily land-based conflict, there was little use for a navy other than to escort the trans-Atlantic convoys necessary to sustain the war effort. This was however a low-intensity activity as the Soviet Navy was still in its infancy and posed little threat to the collective naval power of NATO. Unsurprisingly, while the CA and RCAF received the lion's share of new equipment and personnel, the RCN was relegated to the forgotten service.[31] As a result, the post-war fleet originally envisioned in 1945 never came into fruition. Instead, Canada's navy was reduced by half and consisted of merely a single light carrier, two light cruisers and a dozen destroyers manned by ten thousand sailors in 1950.

To counter the growing threat posed by the Soviet Union and its increasingly aggressive actions, Canada, the USA and other like-minded allies formed the North Atlantic Treaty Organization (NATO) on April 4, 1949. Realizing that, as individual nations, they lacked the resources to effectively counter the USSR, the goal of NATO was to deter Soviet aggression through collective defence. The RCN's principle mission, derived from Articles 5 and 6 of the NATO Agreement, was to deter war with the Warsaw Pact through the presentation of a credible deterrence capability and pending the failure of this first objective, to maintain the sea line of communications (SLOC) between North America and Europe during times of tension and

[31] Joel Sokolsky, "A Question of Balance: Canada and the Cold War at Sea 1945-1968," *Reflections on the RAN*, Edited by T.R. Frame, J.V.P Goldrick and P.D. Jones, (Kenthurst: Kangaroo Press, 1991): 351.

hostilities.[32] As the main threat to the SLOC was posed by Soviet submarines, anti-submarine warfare became the foremost priority of the RCN.

As early as 1946, the Canada-US Permanent Joint Board of Defence's Military Committee identified the Soviet Union as the main maritime threat which the two nations faced. The USSR had captured the designs and manufacturing facilities for the advanced Type XXI submarines which Nazi Germany had only begun to introduce at the end of the Second World War and were beginning to reproduce them in large quantities. The Type XXI was an advanced submarine which was capable of operating at much higher underwater speed than its predecessors and could only be countered by large, modern destroyers which Canada and its allies sorely lacked. In light of this new threat, the navy re-equipped the majority of its warships with the latest ASW weapons and sensors in 1948-49. Furthermore, it drew on its experience in the Second World War to embark on an ambitious program to design a large ASW-specialized destroyer which could operate effectively in the demanding North Atlantic environment. This was the genesis of the *St. Laurent*-class destroyers which began to enter service in 1955.

The outbreak of the Korean War in June 1950 drastically changed the outlook for the Canadian military, particularly the navy. Canada supported the US-led military response to the North Korean aggression and RCN destroyers served in the theatre until the cessation of hostilities in 1953. They made significant contributions in support of UN forces and operations, acting as screens for larger British and American warships as well as conducting naval fire support missions and interdiction operations which severely disrupted the North Koreans'

[32] George Lindsey. "Maritime Defence – International Obligations and Arrangements," Series X, Vol 68, 1, George Lindsey Fonds, MG-0005, Laurier Centre for Military, Strategic and Defence Studies. [hereafter LCMSDS]

railway and supply lines.[33] However, the most important implications of the conflict were felt far away from the Korean Peninsula.

The Korean War led many leading Western leaders and officials to conclude that war with the Soviet Union was inevitable and more importantly, while central Europe remained the most likely battleground, it could potentially break out anywhere. The majority of the RCN's warships was concentrated on Canada's east coast in preparations for operations in the North Atlantic which left its Pacific coast severely understrength and ill-equipped to deal with potential Soviet incursions. Concurrently, the Soviet Navy's submarine service underwent a massive expansion from just a dozen ships in 1945 to some two-hundred fifty vessels by 1957.[34] The few ships which the RCN possessed were far from sufficient to combat this threat and this development provided Vice Admiral Harold Grant, the Chief of Naval Staff (CNS), with the justification he needed to press for more ships.[35] Between 1955 and 1964, the RCN welcomed the addition of twenty new domestically designed and built destroyers.[36]

The addition of the new destroyers greatly enhanced the ASW capabilities of the RCN as well as solidified Canada's commitment to NATO. However, it also locked the RCN into the ASW and escort role which naval planners had originally sought to avoid.[37] Canada lacked the requisite manpower or financial resources to defend the entirety of its territory and instead recognized it must rely on collective security arrangements, such as NATO, to ensure its safety

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[33] Roger Sarty, "A Navy of Necessity: Canadian Naval Forces, 1867-2014," *Canadian Military History* 23, Nos. 3 & 4 (2014): 50.
[34] Nicholas Tracy, *A Two-Edge Sword: The Navy as an Instrument of Canadian Foreign Policy*, (Montreal & Kingston: McGill-Queen's University Press, 2012), 107.
[35] Joel Sokolsky, *A Question of Balance*, 356.
[36] The 7 ships of the *St. Laurent*-class destroyers entered service beginning in 1955; this was followed by 7 *Restigouche*-class destroyers in 1958, 4 *Mackenzie*-class destroyers in 1962 and 2 *Annapolis*-class destroyers in 1964.
[37] Dan Middlemiss, "Economic Consideration in the Development of the Canadian Navy since 1945" in *The RCN in Transition: 1910-1985*, Edited by W.A.B Douglas, (Vancouver: University of British Columbia, 1988): 261.

and security. A fleet primarily built around a large destroyer core with a strong ASW specialization was deemed to be the most effective contribution to the collective defence effort while simultaneously meeting Canada's own national security needs.[38] While the continued specialization in these roles made sense, there were growing concerns as to the RCN's ability to react to future trends. [39] In 1955, when defence spending made up nearly 40 percent of total federal government expenditure, this was a minor concern as any capability gaps could be addressed by future ship classes.[40] However, as defence spending fell due to a combination of an economic recession and the diversion of funds for other government priorities, these problems became increasingly difficult to address. Unfortunately for MARCOM, these fears were quickly realized as rapid technological advancements made Canada's latest warships obsolete just as they entered service.

In 1956, the RCN pitted HMCS *St. Laurent*, then considered to be the world's most advanced ASW warship, in a training exercise against the USS *Nautilus*, the world's first nuclear powered submarine, to test its ability to combat the emerging nuclear submarine (SSN) threat.[41] It proved to be ineffective against the SSN which could not only sustain a higher speed than its pursuers but also had the ability to remain submerged indefinitely. To further compound the problem, the sensors and weapons onboard the destroyers were too short ranged to detect and engage its opponent. This was only the tip of the proverbial iceberg for the RCN. In response, the navy experimented with a number of new innovative technologies to improve the operational capability of its ASW forces. The most notable innovation was the development of the "beartrap" helicopter landing system which enabled heavy ASW helicopters to be launched and

[38] Joel Sokolsky, *A Question of Balance*, 351.
[39] Ibid, 354.
[40] Annex A – Figure 1: Defence Expenditure 1946 – 1984.
[41] Tracy, *A Two-Edge Sword*, 131.

recovered on the small flight deck of a destroyer. As helicopters greatly enhanced the detection range of the destroyers, the CH-124 Sea Kings were acquired in 1961, with the *St Laurent* and *Annapolis* class destroyers converted to better accommodate these new assets as Destroyer Helicopter Escorts (DDH). [42] Another major technological advancement made by the RCN was the variable depth sonar. Unlike traditional hull-mounted sonars, the variable depth sonar was kept in a watertight unit which was then dropped into the ocean. The advantage of this new method was that it could detect submarine movements over a much larger area. However, as these new technologies were slowly being developed and retrofitted onto the destroyers, the limitations of the warships became increasingly apparent.

The shortcomings of Canada's destroyers were highlighted by its experience during the Cuban Missile Crisis in October 1962 when the RCN's Atlantic fleet was ostensibly sent out to sea for maneuvers as the crisis unfolded. However, its real purpose was to support the USN in the detection and surveillance of Soviet submarines along the eastern seaboard. The Canadian destroyers were able to expertly locate and track their Soviet adversaries. In fact, they were so successful that they were able to discover two American submarines who were also tailing their targets. However, it was also at this time that the RCN realized their warships had no means to destroy the Soviet submarines if it was necessary. The World War II-era weapon platforms aboard most of its ships had exceedingly limited range which forced the destroyers to move dangerously close to its targets before they could be utilized. Just two years later at SLAMEX 2/64, the obsolescence of the Canadian warships became even more apparent. Advancements in propulsion technology had greatly increased the speed and range that submarines could operate

[42] Gordon Edwards, "Helicopters plays major roles in Canada's ASW fleet," *Canadian Defence Quarterly* Special Marketing Feature (Dec 1985 – Jan 1986): 64.

at. During the exercise, even the newly commissioned destroyers had trouble maintaining pace with the latest conventionally-powered submarine (SSK), let alone the nuclear-powered leviathans which had begun to patrol the North Atlantic.[43] The RCN's problems were however not confined to below the waves.

The Second World War clearly demonstrated the superiority of aircraft over undefended warships and the development of anti-ship missiles only skewed the advantage further towards aerial weaponry. Although the RCN was well-equipped to locate and track sub-surface targets, it severely lacked the capability to defend itself against aerial threats. Air defence capabilities can be divided into two types: point defence and area air defence. The former refers to a limited air defence capability generally used to protect a single warship. In contrast, area air defence systems provide defence for a wider area, thus allowing it to protect multiple ships from an array of aerial threats. While Canadian destroyers maintained point defence capabilities, the RCN lacked an area air defence capability after HMCS *Bonaventure* retired its obsolescent Banshee fighters in 1962 without replacements. This meant Canadian warships were vulnerable to large scale aerial attacks from an increasing wide variety of enemy aircraft and anti-ship missiles and were dependent on support from allied navies. The ramifications of such a capability gap was that the navy was no longer free to conduct its own operations and must instead operate in either a theatre with a low aerial threat (i.e. North Atlantic) or as part of a coalition task force.

The lack of air cover was the principal reason why Canadian warships were excluded from MC 70 in 1958, NATO's naval war plans in the North Sea in a conflict with the Soviet Bloc. Instead, the RCN was tasked to operate in the relatively safe confines of the western

[43] Richard Mayne, "Years of Crisis: The Canadian Navy in the 1960s," in *The Naval Service of Canada, 1910-2010: A Centennial Story*. ed. Rich Gimblett, (Toronto: Dundurn Press, 2009): 154.

Atlantic and to defend the SLOC between North America and Europe from Soviet submarines which have managed to escape from the Baltic Sea.[44] The defence of the SLOC was a strategically critical if underappreciated role for the RCN. Given that the bulk of NATO's military strength and industrial capability resided in the USA, it would have to be escorted across the Atlantic for deployment in continental Europe. NATO's military staff had predicted that Allied forces in Germany and France would not last more than three weeks in the face of the Soviet onslaught. [45] Therefore, it was imperative that reinforcements and supplies crossed the Atlantic quickly and safely. This was a task which the RCN was superbly equipped, for but its advantages were rapidly diminishing.

These grim realizations forced Vice Admiral Harry DeWolf (CNS 1956-1960) to take drastic measures to create a more proficient ASW force. While this was the traditional strength of the navy, it was also a marked departure from the general-purpose fleet which naval planners had envisioned only a decade ago. The high cost to acquire the specialized equipment and training necessary to be a proficient ASW force also meant that the RCN would be locked into this role for the foreseeable future. Nevertheless, when Vice Admiral DeWolf retired in 1960, the navy was in fair condition despite an aging fleet that needed to be replaced soon. While the situation was far from ideal, few could have foreseen the storm that was brewing on the horizon.

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[44] Richard Mayne, "Years of Crisis: The Canadian Navy in the 1960s," in *The Naval Service of Canada, 1910-2010: A Centennial Story*. ed. Rich Gimblett, (Toronto: Dundurn Press, 2009): 143.
[45] "Annex A – The Importance of the SLOC to Western Collective Security of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 61, Barney Danson Fonds, R13905-1415-0-E, LAC.

Chapter 1.2 – Integration of the Armed Forces and the Unification Crisis: The Navy's darkest years, 1963-1968

Just as the last warships from the 1950s shipbuilding program were beginning to enter service, the winds of politics shifted. In 1963, the Liberal Party under Lester B. Pearson returned to power on a platform centered around the expansion of social security programs. To fund the massive cost of the program, many government departments saw their funding slashed or frozen and were ordered to find additional savings where possible. As the single largest discretionary budgetary item, the defence budget was one of the logical sources for the required funds. [46] Despite the reduction in funding, the Canadian military was tasked to carry out an increasing number of responsibilities and commitments. The combination of reduced funding allocations as well as rising operational and personnel costs inevitably meant that less money would be available for the purchase of capital equipment needed to sustain the operational capability of the military.[47] It was with this backdrop that the newly appointed Minister of National Defence, Paul Hellyer, put forth plans to unify the Canadian military.

Young and ambitious, Hellyer was determined to make his mark on the defence portfolio which he viewed as a stepping stone for greater opportunities. On March 26, 1964, a new White Paper on Defence was tabled to codify the Government's new vision for the Canadian defence establishment. The centerpiece of the White Paper was the integration of the headquarter elements of the CA, RCN and RCAF which was the "…first step toward a single unified defence force for Canada."[48] Hellyer's initial comments on the ultimate unification of the services into a

[46] In fiscal year (FY) 1962-93, defence spending made up almost a quarter of total government expenditure. For FY 1963-64, the defence budget was cut by $150M, which equated to about 10% of the previous year's budget. Annex A – Figure 1: Defence Expenditure 1946 – 1984.
[47] Marc Milner, *Canada's Navy: The First Century,* (Toronto: University of Toronto Press, 1999), 236.
[48] Minister of National Defence, *1964 White Paper on Defence* (Ottawa: Queen's Printer and Controller of Stationary, 1964), 19.

single new defence force were vague and military officials were led to believe that only the support and administrative services would be merged. The service branches would remain as operationally autonomous organizations which reported to a singular military chief, similar to the US Joint Chief of Staffs structure. Hellyer stated that the integration of headquarter staff would free up $100 million annually while ten thousand personnel could be redeployed for other use.[49] Furthermore, the government promised that the money saved through integration would be re-invested in the military through the procurement of desperately needed new capital equipment.[50] The military chiefs had little choice but to reluctantly accept Hellyer's plan.

In addition to financial benefits, there was also a practical need to integrate and unify the command staffs of the elemental services. When Hellyer became the MND in April 1963, he was horrified to discover that not only had NATO and Canada-US continental defence commitments completely taken over the priorities of the Canadian military but each of the services had differing priorities, needs and beliefs of what constituted the greatest threat to Canada.[51] As the RCAF, RCN and CA were entirely autonomous institutions, cooperation between the services was largely achieved through hundreds of interservice committees. While several high-level ones existed to coordinate overall Canadian strategic directions and policies, it was an ineffective system which left Canada without a clear, cohesive defence policy.[52] The fractured structure of the military hierarchy also meant that backdoor dealings between the service chiefs were

[49] "Minutes of a Meeting of the Cabinet Committee on External Affairs and Defence," (March 24, 1964), Vol 84 File 5, 2, Paul Hellyer Fonds, MG32-B33, LAC.
[50] The White Paper on Defence stated that sufficient savings from unification would allow 25% of the defence budget to be allocated towards the procurement of capital equipment. Minister of National Defence, *1964 White Paper on Defence* (Ottawa: Queen's Printer and Controller of Stationary, 1964), 19.
[51] Paul Hellyer, *Damn the Torpedoes: My Fight to Unify Canada's Armed Forces*, (Toronto: McClelland & Stewart, 1990), 33.; Sarty, "A Navy of Necessity," 53.
[52]Minister of National Defence, *1964 White Paper on Defence,* (Ottawa: Queen's Printer and Controller of Stationary, 1964),18.

commonplace, especially for procurement-related matters.[53] It was normal practice for the generals and admirals to trade support for each other's projects to ensure that their own needs would be met in the future. The absence of a central decision-making body alone was enough to justify the restructuring of the Canadian military establishment.

Bill C-90, which effected the changes outlined above, was passed in the House of Commons on July 7th, 1964 and saw the three military chiefs replaced by a single Chief of Defence Staff (CDS) and the creation of the Canadian Forces Headquarters (CFHQ). Prior to integration, the RCAF, the RCN and the Canadian Army each maintained their own administrative and training systems as well as functional units such as medical and supply formations. The triplication of these services was a costly luxury which the military could no longer afford given the austerity measures that were implemented. The decision to amalgamate the administrative services and supply systems of the military was largely welcomed by politicians, generals and the public alike. Had Hellyer chosen to end the re-organization of the military at this point, he would haven been remembered as one of the greatest MNDs in Canadian history.[54] Instead, he chose to take this opportunity to not only re-establish civilian control over Canada's defence policies but also to reset the culture of the armed forces. The subsequent phases of integration resulted in a protracted and public confrontation between the defence establishment and the minister. In the end, Hellyer got his way while the military was broken by the traumatic experience.

[53] Hellyer, *Damn the Torpedoes*, 33.
[54] Jack Granatstein, "Revolt of the Admiral," *Canada's History* Vol 90, No. 5 (Oct/Nov 2010): 31.

The next phase of integration involved the amalgamation of Canada's military forces into six operational commands. [55] Questions soon emerged regarding the effects that the new arrangement would have on the operational capability of the military, especially those of the newly created Maritime Command (MARCOM). Unlike the army and air force which could more easily adjust to the new military structure and environment due to the interoperability of their skills and assets, naval assets and skills were unique to the service. The new military organization structure created by unification was a bureaucratic nightmare for military officials to navigate through. While the newly created Maritime Command retained operation control of Canada's warships, its dockyards were under the jurisdiction of Material Command and the training system was ceded to Training Command.[56] Furthermore, MARCOM did not have the ability to move personnel from ship to shore or vice versa as this fell under Personnel Command's area of responsibility.[57] As each of the commands were manned by personnel from all three former services, it was not uncommon for an army colonel to be in charge of a ship's armament or vice versa. The new command structure, which was highly chaotic and inefficient, was a bitter pill for all military officials to swallow. By now, it had become apparent that Hellyer's reorganization of the Canadian military extended well beyond administrative changes. Instead, his intentions were wholesale institutional changes which would have restructured the Canadian military into a fighting force similar to the US Marines. However, the most turbulent and destructive phase of unification had yet to come.

The final phase of unification involved Bill C-243, the Canadian Forces Reorganization Act, which received royal assent on February 1, 1968, following months of fierce debate both

[55] The six newly created commands created were Air Transport Command, Air Defence Command, Maritime Command, Material Command, Mobile Command, and Training Command.
[56] Granatstein, "Revolt of the Admiral," 28.
[57] Ibid, 28.

within Parliament and amongst the public. With the passing of the bill into law, the Royal Canadian Air Force, Canadian Army and the Royal Canadian Navy ceased to exist as individual military services and were merged into a single entity known as the Canadian Armed Forces. While the idea to unify Canada's three armed services had existed long before Hellyer's announcement, it had never been given serious consideration because it was considered a political impossibility due to the strong ties that serving soldiers and veterans had to their respective service identity.[58] One of Hellyer's objective for unification was the elimination of a soldier's loyalty to their branch of service and instead to identify with the Canadian Forces as a whole. He failed to understand the importance of identity and affiliation with a particular ship, squadron or regiment for servicemen; instead, he saw these emotional attachments as "old-world." Like the prime minister, Hellyer was a strong proponent of a distinct Canadian identity and saw it necessary to do away with the old customs of the British military, of which the RCN held dearest.

The admirals of the RCN fought extensively and valiantly against integration and unification, particularly the elimination of service identity and paid heavily for their actions. The ensuing crisis, termed the "Revolt of the Admirals," decimated the leadership of Canada's maritime service for years to come.[59] The first casualty was Vice Admiral Herbert Rayner, who opted to retire in July 1964 rather than continue to fight with Hellyer over integration.[60] The next was Rear Admiral Jeffry Brock, the Flag Officer, Atlantic Coast and heir apparent to Rayner. Brock was dismissed on August 5, 1964 because Hellyer felt uncomfortable with his "Old-World" values and believed he epitomized everything that was wrong with the RCN.[61] Two

[58] Hellyer, *Damn the Torpedoes*, 37.
[59] Granatstein, "Revolt of the Admiral," 28.
[60] Paul Hellyer to Herbert Rayner, (March 6, 1964), Vol 76, File 7 Paul Hellyer Fonds, MG32-B33, LAC.
[61] Milner, *Canada's Navy*, 240, 245.

weeks later, Commodore Alexander Fraser-Harris, the leading proponent of the General-Purpose Frigates opted to retire eight years before he was required to.[62] The unification process had barely begun, and three leading flag officers had already fallen. However, even more tumultuous times awaited the newly created MARCOM.

The fight against unification was then carried on by Rear Admiral William Landymore, whose spirited and public opposition to it made him the face of the "Revolt of the Admirals". Landymore's opposition to unification stemmed from his experiences during the Second World War where he learned the importance and tradition and loyalty to the service as he watched the men under his command give up their lives in service to the RCN.[63] Paul Hellyer's unification plan threatened this sacred belief and Landymore was determined to fight tooth and nail to protect the heritage of an institution which thousands have laid down their lives for. Over the next two years, he attacked the policy when and where he could. The confrontation between Landymore and Hellyer reached its tipping point on July 12, 1966.

On that fateful day, Hellyer asked Landymore to resign. When he refused, Landymore was sacked for "he has contravened service regulations by publicly opposing Government policy while in uniform."[64] His dismissal was preceded by the mass resignation of Vice Admiral Kenneth Dyer, Lieutenant General Robert Moncel, Air Chief Marshal Frank Miller, Lieutenant General Frank Fleury on July 4, 1966 in protest of the unilateral decisions Hellyer made with regards to unification. The final admiral of note, Rear Admiral Mickey Stirling, the Flag Officer,

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[62] Milner, *Canada's Navy*, 245.
[63] Robert Caldwell, "Rear Admiral William Landymore: The Silent Service Speaks Out," In *The Admirals: Canada's Senior Naval Leadership in the Twentieth Century*, edited by Michael Whitby, Richard Gimblett and Peter Haydon (Toronto: Dundurn Press, 2006): 279.
[64] "Statement by the Minister of National Defence," (19 July 1966), Vol 75 File 22, 1, Paul Hellyer Fonds, MG32-B33, LAC.

Pacific Coast also tendered his resignation on the same day.[65] With Landymore's removal, the last vocal opposition to unification within the military was silenced. This did not signify the end of the struggle against the policy; however, none spoke out with the same vigour and resolve as the dismissed admiral. The number of senior officers who resigned or were dismissed over unification was staggering. Between 1964 to 1966, seventy-eight out of a hundred thirty-five general and flag officers left the military. The situation had gotten so out of control that Lester Pearson later confided to Landymore that "If one more admiral had resigned, I was going to tell Hellyer to stop unification."[66]

The decimation of the naval establishment during the Unification Crisis had significant repercussions for MARCOM, especially at the policy level. The loss of so many leading admirals and naval officers during the unification process meant that there was no strong naval presence within the newly created military hierarchy to present and defend the needs of MARCOM.[67] As a result, the service once again fell to the bottom of Canada's military priorities. While not an immediate concern, the majority of MARCOM's vessels were built with an expected operational life of twenty years and in 1968, most of Canada's destroyers were nearing this threshold. However, there remained no talks about their replacements due to the hostility of the new prime minister towards the CAF which was further compounded by the lack of naval representation at NDHQ. Given that it took an average of eight years from conception to when a warship entered service, MARCOM was left with a very small window to begin the procurement of a replacement for its aging destroyers.

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[65] Milner, *Canada's Navy,* 252.
[66] Ibid, 256.
[67] R.B. Byers, "Canada and Maritime Defence: Past Problems, Future Challenges," *RCN in Transition, 1910-1985*, Edited by W.A.B Douglas, (Vancouver: UBC Press, 1988): 322.

The effects of unification were felt more immediately at the operational level. Beyond the loss of senior generals and admirals, thousands of officers and other ranks also left the service during this tumultuous period. It was later determined that between 1963 to 1966, 8 percent of all naval officers opted for early retirement, including 15 percent of Lieutenants (N) and Lieutenant Commanders which represented the future of the service.[68] In the eighteen months after integration began in 1964, over twenty-six thousand soldiers and sailors left the Canadian military, representing over 20 percent of its total strength.[69] Due to the mass exodus of personnel, MARCOM faced a shortage of manpower to man all its ships. It became common for a ship to be sent to sea with only 60 percent of its authorised strength or for personnel to spend months at sea at a time as they rotated between vessels. The tri-service nature of the new Canadian Forces also had a negative impact on operational capabilities. As Vice Admiral (ret'd) Nigel Brodeur recounted, there was an incident where a sailor on watch duty had gone overboard while at sea. His partner, who had recently transferred from the army was at a complete loss of what to do. Instead of ringing the overboard bell, he went to look for an NCO to report to. By then, it was far too late and the body of the sailor who had gone overboard was never recovered.[70] The experience of the Unification Crisis and the subsequent exodus of servicemen not only destroyed the morale of MARCOM, but also the professionalism and operational capability of the service.[71] As such, the navy spent much of the following years licking its wounds and rebuilding the capabilities it once possessed.

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[68] Milner, *Canada's Navy,* 256.; Nigel Brodeur, email to author, January 13, 2019.
[69] Desmond Morton, *Canada and War: A Military and Political History.* (Toronto: Butterworths Press, 1981), 186
[70] Nigel Brodeur, email to author, January 13, 2019.
[71] Robert Timbrell, "Rear Admiral Robert W. Timbrell, 1971-73," In *The Admirals: Canada's Senior Naval Leadership in the Twentieth Century*, edited by Michael Whitby, Richard Gimblett and Peter Haydon, (Toronto: Dundurn Press, 2006): 322

The legacy of integration and unification was dominated by the struggles for service identity, but the root causes of the event were economic and political considerations. As previously stated, the expansion of politically popular social welfare programs necessitated massive amounts of funding, a significant portion of which was drawn from the defence budget. Walter Gordon, the Minister of Finance, had pressed Hellyer to rationalize spending and to find savings where possible which became the raison d'etre for the latter to instigate integration and subsequently unification. The austerity measures introduced by the Pearson government in 1963 were quickly felt by all three services but its impact on the RCN's operational capabilities were the hardest given the service's small size and technical requirements.

The budget allocation for the RCN was traditionally by far the smallest of the three elemental services. Despite the increasingly expensive costs needed to operate a navy, its share of the defence budget averaged only 18 percent of annual defence expenditures for much of the 1960s.[72] In fiscal year (FY) 1960/61, the Department of National Defence was given a budget of $1.518 billion, of which only $333 million was allocated to the RCN. By FY 1970/71, the overall defence budget had been raised to $1.818 billion with $429 million devoted to MARCOM.[73] However, inflation had grown by an average of 2.68 percent annually during this ten-year period. As a result, the value of a dollar in 1970 was actually equal to 70 cent in 1960. When converted, the defence budget in 1970 was only valued at $1.272 billion in 1960 dollars. This meant that despite an increase of $300 million, the buying power of the CAF had actually decreased by $246 million. This equated to a decrease of $32.7 million in purchasing power of the navy during the decade. [74] Furthermore, spending on military capital equipment had actually fallen

[72] Annex A – Figure 1: Defence Expenditure 1946 - 1984
[73] G.R. Lindsey, "Conference on Maritime Forces," (January 20-21, 1972), Series X, Vol 68, 1, George Lindsey Fonds, MG 0005, LCMSDS.
[74] Calculated based on data from the Bank of Canada Inflation calculator.

significantly during the 1960s despite repeated assurance from the Government otherwise. In FY 1962-63, capital spending amounted to 21.6 percent of the defence budget; by FY 1968-69, it had fallen to 16.7 percent.[75]

The first casualty of the navy's fiscal constraints was the money allocated for capital equipment as this was determined to have the least immediate effect on the daily operations of the navy. This was merely a band-aid solution for its fiscal problems as the RCN sacrificed the long-term health of the service to make ends meet now. During the 1950s, it was standard practice for the RCN to replace its vessels on a ship-for-ship basis, whereby a warship was only retired when its replacement was available. This ensured that the service's capabilities would not be compromised due to a shortage of warships. However, the lack of funds meant that the RCN was no longer able to continue this practice and as a result, the navy lost twenty-five ships and welcomed only nine new ones during the 1960s.

Citing cost overruns, the General-Purpose Frigate program was cancelled in October 1963.[76] By December, after exhausting all other possibilities of meeting the new budgetary restrictions, Vice Admiral Herbert Rayner reluctantly ordered Operation Cutback. Twenty-two World War II-era destroyers which were previously in reserve status were decommissioned, all of the naval air reserve squadrons were stood down, and the entire RCN reserves reduced to just two thousand and seven hundred personnel.[77] Furthermore, the annual intake of Regular Officer Training Program candidates, which the majority of naval officers originated from was halved.[78] With the loss of so many critical assets and no replacements forthcoming, the RCN was

[75] Maas, *The Price of Alliance*, 32.
[76] The cost of the project soared from $264 million to $428 million within a year before it was cancelled. Milner, *Canada's Navy*, 239.
[77] Ibid, 239.
[78] Ibid, 239.

increasingly at risk of being too small to meet all of its NATO commitments. The loss of these assets was a huge blow not just to the operational capability of the RCN but also to its long-term sustainability. In just three short months, the future of Canada's navy became far bleaker.

Hellyer's promise that the savings from unification would be reinvested into the military did little to reverse the decline of the military's operational capability, particularly those of MARCOM. Despite the recommendations of the Brock Report (1961) which advocated a return to a balanced-fleet configuration, the strategic reality was that Canada's aging maritime forces was increasingly at risk of being unable to fulfill its core functions of anti-submarine warfare. It was recognized that MARCOM must invest all its resources to the continued development and modernization of its ASW capabilities which Hellyer agreed to. Studies conducted by MARCOM and allied navies concluded that while destroyers were effective ASW vessels, the best submarine hunter-killer was another submarine.[79] The RCN traditionally did not maintain a permanent submarine capability and instead loaned them from the Royal Navy or USN for training purposes. In 1960, there was a strong push by naval officials to acquire the USN's *Barbel*-class submarines. However, due to the high cost of these vessels, the Canadian government chose to acquire the cheaper *Oberon*-class submarines instead. The results were the acquisition of three *Oberon*-class submarines, four DDH-280 destroyers and two auxiliary oil replenishment (AOR) ships. Nevertheless, MARCOM's operational capabilities continued to decline.

Faced with both a severe manpower shortage and a dwindling operational budget, MARCOM decided in 1969 that the aircraft carrier HMCS *Bonaventure* would be

[79] Milner, *Canada's Navy*, 226.

decommissioned. This decision, which came less than two years after it had completed its controversial life extension refit, was largely due to financial reasons as the operating cost of the carrier and its air wing alone made up nearly a quarter of the navy's operational budget. [80] Although the loss of the carrier was a significant blow, it had become a luxury that the navy could no longer afford and was ultimately deemed acceptable as it allowed for five to six destroyers to be retained.

The events of the preceding years had left the CAF, particularly MARCOM battered, bruised and ill-prepared to face the challenges ahead. Compared to the start of the decade, MARCOM was in a dire situation as it found itself with considerably less ships, personnel and talent as well as aging destroyers that were technologically insufficient to face the threats of the new age. Though the impending arrival of DDH-280 destroyers represented a glimmer of hope for the future, the initial Trudeau years would offer no reprieve for the beleaguered military. Instead his eagerness to "shake things up" forced the CAF and MARCOM to once again dig in to fight for their survival.

[80] Milner, *Canada's Navy,* 229.

Chapter 2 – Political Idealism vs Strategic Realism: Canada's Foreign and Defence Policies under Pierre Trudeau, 1968 – 1977

"For Canada, NATO membership had an important symbolic meaning, but being a key player – really making a difference militarily, was too costly for too little return." – David Bercuson[81]

Just weeks after the Canadian Forces Reorganization Act came into effect, Pierre Elliot Trudeau succeeded Lester B. Pearson as the prime minister of Canada. He was one of the most brilliant, if divisive, individuals to hold the office. Amongst his many achievements, the repatriation of the constitution from Great Britain and the establishment of Canada as a bilingual nation stood out as events which defined his legacy. However, his record on defence and foreign affairs matters were marred by numerous controversies and widely derided as one of the darkest periods in Canadian military history.[82] It was clear from the onset that the worldviews of the new prime minister differed significantly from those of his predecessor. Soon after assuming office, Trudeau declared that everything was open to review; the longstanding foreign affairs and defence policies were no exception.

There were three distinct phases to Trudeau's foreign and defence policy during his tenure as prime minister.[83] The first, which took place from when he took office in 1968 to 1973, saw Trudeau attempt to re-invent Canada's defence and foreign policies. It was evident that the prime minister was not a strong supporter of the CAF or its existing priorities. He was also critical of Canada's participation in NATO and saw the alliance as an outdated relic from a past era. His attempt to implement a new direction for Canada and its armed forces was met with

[81] Tracy, *A Two-Edge Sword*, 121.
[82] Jack Granatstein, *Who Killed the Canadian Military?*. 3rd ed, (Toronto: HarperCollins Publishers Ltd, 2008), 124.
[83] Larry Stewart, *Canada's European Forces 1971-1980: A Defence Policy in Transition*, (Kingston: Queen's University Centre for International Relations, 1980), II.

significant opposition from the country's allies. Trudeau was initially unmoved by their concerns but his views of both NATO and the CAF would mature with time.

In the second phase, which lasted from 1973 to 1977, Trudeau reversed his course and invested billions in the CAF as he sought to reassure allies of the country's commitment to NATO. [84] This reversal came as the prime minister was forced to confront both the political ramifications of his early actions as well as the limitations of Canada's capacity for unilateral actions. More importantly, he gained a new sense of appreciation for the armed forces and the importance of a credible military to the advancement of other national policies and objectives. The last phase, which took place from 1978, onward was a return to a more apathetic attitude towards defence.[85] Nevertheless, during this brief window, the CAF began a complete re-armament program with the procurement of badly needed equipment such as the C1 Leopard Tanks, McDonnell-Douglas CF-188 Hornet fighters and the first phase of the Canadian Patrol Frigates program.

Chapter 2.1 – The Views of Pierre Elliot Trudeau

Prior to succeeding Lester B. Pearson as prime minister in 1968, Pierre Trudeau was a relative unknown in the scenes of Ottawa. He was first elected in 1965 and had only briefly served as cabinet minister for a year prior to his ascension to the top of the political hierarchy. His meteoric rise was a result of not only his charismatic personality and intelligence but also the reflection of a younger generation of Canadians who sought to bring tangible change to the world. For many, especially within the junior ranks of the Liberal Party and the bureaucracy,

[84] Stewart, *Canada's European Forces 1971-1980*, II.
[85] Ibid, II.

Trudeau represented a fresh voice and offered a vision that contrasted the existing policies which were increasingly perceived as stagnant and obsolete.[86]

For many first-time prime ministers, the political realms of foreign affairs and defence are often the most difficult to understand and master. This could largely be attributed to a combination of their lack of experience, the complexity of interstate relations and the hard fact that Canada has little influence over global events beyond what it could leverage in skilful diplomacy with more powerful nations through international organizations. Though domestic affairs are the primary concern of the government, foreign relations can have a large impact on the internal affairs of a country like Canada whose economy relies heavily on international trade and immigration. This was an aspect which Pierre Trudeau initially struggled to comprehend as he, unlike Pearson who was a career diplomat, had little appreciation for the intricacies of international relations when he took office. His inexperience and trademark enlightened idealism quickly led to clashes with NATO allies, particularly over the level of effort that Canada would put into collective defence.

The overriding objective of Canada's defence policy had long been to deter a conflict between the NATO and the Warsaw Pact. This did not change with the transition of leadership from Pearson to Trudeau but the two men differed on the means to achieve this end. Pearson recognized that as a middle power, Canada had very little influence in the formulation of great-power strategic policies or in the shaping of global events. Instead, he was a pragmatic internationalist who made significant use of Canada's soft power to maintain the strategic balance with the Warsaw Pact and prevent the escalation of local conflicts into a global

[86] Bothwell and Granatstein, *Pirouette*, 9.

flashpoints through international peacekeeping operations. However, in the pursuit of these strategic objectives, Canada's own interests were often sacrificed for the proverbial greater good.[87] The best-known example of this was the Suez Crisis, when Canada broke ranks from its traditional allies, Britain and France, to establish an UN-mandated peacekeeping operation to de-escalate the crisis. While Pearson's actions garnered Canada considerable prestige and international recognition, there were few tangible rewards for the country's efforts.

Trudeau did not dispute Pearson's concept of Canada as a "middle power" but, his approach as to what constituted an "effective power" differed drastically.[88] He saw the policies adopted by Pearson, particularly the overriding priority given to establishment of good relations with the USA and NATO as archaic.[89] While Trudeau agreed that NATO was needed in the wake of the Second World War, it had now outlived its purpose. Moreover, he believed that the European countries themselves, rather than Canada, should be responsible for the defence of their own territory as the continent recovered from the conflict. [90] Unlike Pearson, Trudeau believed that Canada's own interests should determine its foreign and defence policies.[91] He believed that for Canada to be taken seriously on the global stage, it must foster international credibility by setting and pursuing its own goals even if that should on occasion irritate its allies.[92] Trudeau came from an academic setting and as such, was open to the widest range of alternatives before a decision was reached. This included contentious unilateral decisions such as disassociation from NATO if it could contribute to international peace and stability.

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[87] Maas. *The Price of Alliance*, 36.
[88] Ivan Head and Pierre Elliot Trudeau, *The Canadian Way: Shaping Canada's Foreign Policy 1968-1984*. (Toronto: McClelland and Stewart, 1995), 7.
[89] Bothwell and Granatstein, *Pirouette*, 8.
[90] Frank Maas, "'We must take our Allies' Views into Account': Pierre Trudeau and the turn back to NATO in the mid-1970s." *International Journal* 71, No.2 (2016): 268-269.
[91] Maas, *The Price of Alliance*, 36.
[92] Head and Trudeau, *The Canadian Way*, 23.

Trudeau was not alone in his doubts about the continued utility of NATO. Several cabinet ministers under Pearson had privately made known their skepticism about the alliance. However, cabinet discussions on Canada's role in the world were always dominated by long time stalwarts of the international order such as Lester Pearson and his foreign minister, Paul Martin Sr.[93] With the retirement of Pearson and Martin Sr. relegated to the Senate, Trudeau and his revisionist supporters were finally free to alter Canada's policies as they saw fit. Spurred by the strong anti-war and anti-American sentiments stemming from the Vietnam War, there was widespread support against the continuation of the status quo. Once in office, Trudeau immediately began to chart a new course for Canada's defence and foreign policies. However, Trudeau would soon learn that change would not come as easily as he believed even if he cared little for the opinions of Canada's allies or the potential consequences during these early years.

Pierre Trudeau's desire to carve a new foreign and defence policy largely stemmed from his belief that the interests of the alliance had, in many respects eclipsed Canada's own interests.[94] As Paul Hellyer discovered in 1963, alliance priorities had come to effectively dictate Canada's defence policies and little had changed since. The bulk of the military was either permanently stationed or earmarked for deployment to Europe in times of hostilities while the defence of Canada and its sovereign territory remained an afterthought. The immediate defence of Canada and its sovereignty had been subsumed by the country's other alliance commitments in Europe as well as the obligation to assist the US in continental defence, which increasingly meant protection of the American nuclear arsenal. This also meant that NATO and the continental defence commitment with the USA continued to dictate the strategic direction and

[93] Bothwell and Granatstein, *Pirouette*,10.
[94] Ibid, 8.

equipment needs of the CAF. To the bureaucratic and political establishment, this arrangement while far from ideal, was accepted as the price to pay for collective defence. That, however, was not acceptable to the newly elected prime minister who firmly believed that Canadian political leadership should have the final say on the size, equipment, and mission of the military.[95]

The degree of control which NATO and the USA had over the development of Canada's own policies greatly disturbed Trudeau. In a speech to the Alberta Liberal Association on April 12, 1969, he declared that "Canada has no foreign policy except that flowing from NATO… and it is simply wrong to have a military alliance determine foreign policy… it should be your foreign policy which determines your military policy."[96] Furthermore, he was determined that these policies should not be dictated by the assumption that war with the Warsaw Pact was inevitable, as the only conclusion to such a conflict would be mutual destruction.[97] Instead, Trudeau and his allies believed that Canada's role in the world was to prevent the escalation of hostilities from reaching such a scenario. However, the strong American and NATO influences on the design of Canadian policies severely limited its influence as a middle power and made it nearly impossible for the country to advance its own interests outside of the alliance setting.

Trudeau also had little faith in the ability of military men to keep peace; in fact, he had a very low opinion of them, commenting that the Canadian military was a "waste of money and a haven for simple-minded and possibly dangerous conservatives."[98] In his opinion, the Canadian Armed Forces served little purpose other than as an expensive bargaining chip to be used in

[95] Ivan Head. "Canadian Defence Policy, A Review," (1969), Vol 74, File 16, 7, Barney Danson Fonds, R13905-1376-5-E, LAC.
[96] Bothwell and Granatstein, *Pirouette*, 26.
[97] Tracy, *A Two-Edge Sword*, 157.
[98] Milner, *Canada's Navy,* 263.

negotiations with the provinces or the country's allies.[99] Furthermore, Trudeau believed, as did many others, that war with the Warsaw Pact would quickly escalate into an apocalyptic nuclear war. As such, it made little sense to him to invest heavily in the military if it would be quickly wiped out at the onset of hostilities. On top of that, the garrison in West Germany, while costly to maintain and equip, was considered to be militarily insignificant as Canadian assets made only 4 percent of NATO's tactical air fleet and 1.5 percent of the total ground force.[100] The value of the contingent was largely symbolic in nature, representing a physical manifestation of Canada's commitment to the alliance.

From a pragmatic point of view, Canada's participation in NATO brought the nation few benefits. Despite repeated claims by officials from the Department of External Affairs (DEA) and DND that Canada's continued presence in Europe brought it influence within the alliance, they struggled to provide tangible examples when pressed by Trudeau. Unlike the Americans and British, whose garrisons were subsidized by the West German government, Canada had to shoulder this cost entirely. The cost to maintain the garrison in 1969 was $120 million CAD, which represented approximately seven percent of the entire defence budget.[101] The Canadian government had further contributed an additional $175 million over the years to the construction and maintenance of NATO common infrastructure.[102] Despite the hefty investment into NATO, defence purchases from Canada by its allies totalled only $1 million.[103] Furthermore, while Canada would refund the custom duties and sales tax of defence products imported from Europe by Canadian companies, this practice was not reciprocated by its European allies.[104] Canadian

[99] Bothwell and Granatstein, *Pirouette*, 235.
[100] Head and Trudeau, *The Canadian Way*, 78.
[101] Ibid, 78.
[102] Ibid, 78.
[103] Ibid, 78.
[104] Ibid, 78.

exports to Europe dropped from 25 percent to just 16 percent of the nation's total exports due to tariffs and other protectionist policies implemented by the EEC during the 1960s.[105] On the strategic level, Canada's opinions mattered little in the development of NATO policies which were largely dictated by the USA. Instead, Canada was viewed by its allies as a "good partner" that quietly carried out its responsibilities without complaint. It was evident to Trudeau that Canada's participation in NATO was not particularly beneficial and perhaps a new direction would yield better results.

Chapter 2.2 – A New Direction, 1968 – 1973

The NATO Alliance had long been in the crosshairs for Trudeau because it epitomized the Pearsonian policies and international order which Trudeau saw as old and archaic. In 1968, Canada's major contributions to NATO were the permanent deployment of a ten thousand men garrison to West Germany divided between three fighter squadrons and a mechanised combined-arms brigade while Canadian warships were assigned to STANAVFORLANT on rotational assignments.[106] While a sizable force, there was little expectation that the garrison would be able to hold off the hordes of mechanised Soviet divisions should hostilities occur. Instead, their presence was largely a symbolic gesture of Canada's commitment to NATO and to the defence of western Europe. However, for Trudeau, the garrison at best represented Canada's commitment to the alliance and at worst, a hostage to ensure continued compliance.[107] Once in power, Trudeau ordered a comprehensive review of Canada's defence and foreign policy with an emphasis on the European garrison and NATO.

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[105] Head and Trudeau, *The Canadian Way*, 78. The EEC is the predecessor to the modern-day European Union
[106] STANAVFORLANT stands for Standing Naval Force, Atlantic, a multi-national naval force created in 1968 to provide NATO with a maritime quick reaction force.
[107] "Leo Cadieux speech to the General Officers Symposium on The Role of the Canadian Forces in the Seventies." (May 7, 1970) Vol 3, File 10, 4, Pierre Trudeau Fonds, MG26-O11, LAC.

Soon after he became prime minister, Pierre Trudeau announced his intentions to withdraw the Canadian garrison in West Germany. However, this plan was poorly received within his cabinet. Both Leo Cadieux, the Minister of National Defence, and Mitchell Sharp, the Secretary of State for External Affairs (SSEA), threatened to resign over the issue. This forced Trudeau to defer the proposal until the review of Canada's defence and foreign policy was completed. In September 1969, a compromise was reached and the government announced that the garrison in Europe would be reduced from ten thousand to five thousand personnel by the end of 1970. The reductions were not well received by Canada's European allies who were constantly wary of any indications that their North American counterparts would abandon them to their fate; Trudeau's actions and comments would only serve to validate their fears. The Americans were similarly displeased by Canada's sudden announcements and sought to convince the prime minister to reverse his course but to no avail. [108]

This episode illustrated Trudeau's lack of understanding of international affairs at this stage of his tenure as prime minister. While Canada continued to publicly proclaim its support and solidarity with NATO, its actions did not match its words. The decision to reduce its forces in Europe suggested to the broader global community that there was a growing rift within NATO. This had the potential to greatly escalate the strategic situation, especially if the Soviet Union had perceived it as a sign that the USA would not come to the support of Europe if hostilities began. His subsequent unilateral decisions to reach out to Communist nations such as the People's Republic of China (1970), the Soviet Union (1971) and Cuba (1976) further drew

[108] Bothwell and Granatstein, *Pirouette*, 28.

the ire of its allies as Canada became a maverick within NATO. However, these opinions did little to deter Trudeau.

Despite the many public statements about a new era of Canadian defence and foreign policy by the prime minister, there was initially an expectation amongst senior parliamentarians and bureaucrats that the status quo would be maintained with only minor modifications to appease Trudeau. Even Trudeau himself privately confessed that he initially did not expect a wholesale change in policy if the existing ones were well-reasoned and helped to achieve Canada's strategic goals. [109] A review of the nation's foreign policy led by Norman Paterson concluded any conflict with the Warsaw Pact would likely be the result of strategic miscalculations as opposed to deliberate aggression and that the current position was in Canada's best interest. DND officials reached a similar conclusion in their review of Canadian defence policy. However, Trudeau rejected their advice because it essentially was a continuation of the status quo rather than the wide-ranging examination of policies that he wanted.[110] Unsatisfied with the advice given to him by the bureaucrats at DND and DEA, he turned to his confidant and foreign policy advisor, Ivan Head, to explore a new defence policy.

Head's report, titled *Canadian Defence Policy: A Review* was arguably the most important document in the formulation of Pierre Trudeau's foreign and defence policy during this period. While Mitchell Sharp was the face of Canada's foreign relations as the SSEA, it was Head who effectively directed Canadian policies as the prime minister's personal foreign policy advisor.[111] Furthermore, many of the positions advocated in this paper would be adopted by the

[109] Head and Trudeau, *The Canadian Way*, 23.
[110] Maas, *The Price of Alliance*, 39.
[111] Arthur Andrew, *The Rise and Fall of a Middle Power: Canadian Diplomacy from King to Mulroney*. (Toronto: James Lorimer &Co, 1993), 87.

1971 White Paper on Defence. The central argument of Head's review was that Canada's role in the world was not to be a fighter; rather, it should be a driver of world peace through the de-escalation of conflicts worldwide, funding peace initiatives and through peacekeeping operations.[112]

Although this was not an entirely new outlook on Canada's role in the world, it was the means by which this objective would be achieved that would prove to be highly controversial. Head contended that the CAF's force structure and active participation in NATO actually worked to destabilise the international strategic situation as opposed to de-escalating tensions.[113] Specifically, he targeted three components of the military contribution to NATO: (1) The CF-104 fighters in Germany which were armed with nuclear weapons and were perceived as a first-strike asset; (2) the tanks of 4 CMBG which were seen as an offensive asset that had no role to play in Canada or peacekeeping operations and should instead be withdrawn from service; (3) the goal of MARCOM's strategic ASW duties was to locate, harass and destroy Soviet nuclear ballistic submarines (SSBN) which formed the bulk of the USSR's second-strike capability.[114] Head reasoned that if the Soviet SSBNs were no longer able to maintain a credible second-strike capability due to effective ASW from MARCOM, it would tilt the strategic balance and undermine the nuclear deterrence which allowed peace to occur.[115] Furthermore, as weapons of war, these assets had no place in the constabulary operations within Canada which Trudeau and Head envisioned as the future of the military.

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[112] Ivan Head, "Canadian Defence Policy, A Review," (1969), Vol 74, File 16, 3-4, Barney Danson Fonds, R13905-1376-5-E, LAC.
[113] Ibid, 8-10.
[114] Ibid, 10.
[115] Ibid, 10.

Ivan Head proposed a drastic restructure of the CAF. The proposed reorganization of the forces in West Germany would see the garrison further reduced to a mere light infantry battalion and a squadron of fighters.[116] Most notably, heavy weapon platforms such as tanks and artillery pieces would be removed from service as they were not compatible with domestic operational requirements. Despite strong protests from both the CDS and the US Supreme Commander Allied - Europe (SACEUR), Head believed that the size and capabilities of the Canadian garrison in Germany mattered little to its allies; what truly mattered was the mere presence of Canadian soldiers for solidarity purposes.[117]

Head's arguments aligned strongly with those of Dr. Robert Sutherland, the director of the Defence Research Board, which was the research branch of the CAF. Sutherland was also a strong proponent of the belief that Canada's role in the world was to deter war and not to fight it. He recognised that Canada's contributions to NATO were militarily negligible in a conflict with the Warsaw Pact and their presence was instead to demonstrate Canada's continued political commitment to the alliance. He, too, argued that token contributions to NATO were more than sufficient.[118] These arguments strongly resonated with Pierre Trudeau, who personally opined that there was no need to maintain a military force in Europe if it would be wiped out at the start of hostilities by nuclear weapons.[119] This mistaken belief that token contributions were sufficient to please the allies would become the hallmark of Pierre Trudeau's defence policies during his early years.

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[116]Ivan Head, "Appendix A –Transitional Force Structure 1969-1972 of Canadian Defence Policy, A Review." (1969), Vol 74, File 16, 1, Barney Danson Fonds, R13905-1376-5-E, LAC.
[117] Ivan Head, "Canadian Defence Policy, A Review," (1969), Vol 74, File 16, 5, 11, Barney Danson Fonds, R13905-1376-5-E, LAC.
[118] Maas, *The Price of Alliance*, 11, 41.
[119] Ibid, 91.

This principle would be applied closer to home as well, in the continental defence partnership with the United States. Head recognized that the real key to peace was the strategic nuclear deterrence between the USA and USSR. While he was a strong supporter of the need to protect the USA's second-strike capability as a means to maintain the nuclear deterrence and credibility, Head did not believe it was Canada's responsibility to militarily support the Americans.[120] Once again, he believed that minimal contributions, this time in the form of airfields, advance warning radar sites and other non-military assets would be sufficient.[121] Similarly, the strategic ASW role of MARCOM in the North Atlantic should be curbed in favour of other domestic maritime roles. In essence, Head's proposal was to contribute minimally to NATO and North American defence because he saw these alliances as counterproductive to the maintenance of mutual nuclear deterrence between the two superpowers.

In the wake of Head's review of Canadian defence and foreign policies, two major events confirmed to Trudeau that his strategic re-orientation to sovereignty protection was correct. The first was the passage of the US tanker, SS *Manhattan*, through the Northwest Passage in the summer of 1969 without prior notice to or approval from Canadian authorities. This blatant violation of Canadian sovereignty by an American merchant vessel demonstrated that as the Arctic sea ice melted, Canada was increasingly vulnerable to incursions in its sovereign waters. The second event was the October Crisis in 1970 when the FLQ, a Quebec-based terrorist organization kidnapped James Cross, the British High Trade Commissioner to Canada and murdered Pierre Laporte, the provincial Minister of Labour. In response, Trudeau imposed the War Measures Act, the only time done during peacetime in Canadian history, which saw

[120] Ivan Head, "Canadian Defence Policy, A Review," (1969), Vol 74, File 16, 4, Barney Danson Fonds, R13905-1376-5-E, LAC.
[121] Ibid, 4.

Canadian soldiers deployed onto the streets of Quebec to maintain law and order. While the FLQ ceased to be a major domestic terrorism threat in the aftermath of the October Crisis, the underlying Quebec nationalism remained a problem which Trudeau would spend the rest of his tenure as prime minister trying to address.

The Trudeau government detailed the shift in Canada's defence policies with the release of the 1971 White Paper on Defence, aptly titled *Defence in the 70s.* This document was largely based on the positions advocated by Head in his review. The overarching goal of Canadian defence policy was the prevention of nuclear war through a combination of détente, arms control and disarmament, and contributions to a stable mutual deterrence.[122] To achieve this objective, the Canadian Armed Forces were assigned four core responsibilities, in order of priority: [123]

1. The protection of Canadian sovereignty
2. Defence of North America in cooperation with the USA
3. Fulfillment of NATO obligations
4. International peacekeeping

The Trudeau government also charged the CAF to be a positive social driver in Canada which entailed being a unifying force for Canadians, stimulating economic growth and promoting technological innovations. Most notably, *Defence in the 70s* stressed the importance of Canadian content in future procurement programs.[124]

The strategic objective and the associated responsibilities of the armed forces were largely unchanged from the 1964 White Paper on Defence with the major difference being the

[122] Minister of National Defence. *Defence in the 70s: White Paper on Defence* (Ottawa: Information Canada, 1971), 6.
[123] Ibid, 16.
[124] Ibid, 13-15.

prioritization of the protection of Canadian sovereignty over the fulfillment of its NATO obligations. While *Defence in the 70s* affirmed Canada's commitment to the NATO alliance, it was clear that its actions did not match its words. The document formalized the reduction of the Canadian garrison in West Germany from ten thousand to five thousand soldiers. Furthermore, Canadian heavy tanks and artillery systems would also be phased out in favour of a light vehicle while the air division was reduced and reorganized from a nuclear strike force to one which provided conventional air support.[125] From a maritime perspective, MARCOM would no longer be a dedicated ASW force and instead would be converted into a general-purpose fleet with a focus on sovereignty patrol.[126] It would however, continue to make its ships available to STANAVFORLANT and NATO naval exercises as necessary.

The change in Canada's strategic orientation was not well-received by its allies, but the government justified its new positions based on the belief that as Europe recovered from the Second World War, it should increasingly shoulder more of the burden of defence.[127] In a speech to the General Officers Symposium by Leo Cadieux on May 7, 1970, he stated that the government did not foresee a direct military threat to Canada. Instead, the main threat would result from conflicts in which the neighbouring USA might become embroiled. However, the government argued that "threats of this kind cannot be met by Canadian National Military Power alone; nor are they likely to be directly influenced by the details of the structure or posture of the Canadian Forces."[128] As a sovereign nation, Canada had the right to deploy, reconfigure and re-orient the military as the government saw fit. Regardless, as a member of a larger defence

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[125] Minister of National Defence. *Defence in the 70s: White Paper on Defence* (Ottawa: Information Canada, 1971), 35.
[126] Ibid, 28.
[127] Ibid, 5.
[128] "Leo Cadieux speech to the General Officers Symposium: The Role of the Canadian Forces in the Seventies." (May 7, 1970) Vol 3, File 10, 2, Pierre Trudeau Fonds, MG26-O11, LAC.

collective, the lack of consultation or consideration for the opinions of its allies remained alarming.

Chapter 2.3 – A Return to Normalcy, 1973 – 1975

The reversal of Trudeau's defence and foreign policies was not the result of a single event or sudden realization; instead, it was a gradual process born out of economical and political needs and circumstances. Since the end of the Second World War, Canada and the USA shared increasingly close relations, particularly in trade and the defence of the North American continent. Exports to the USA made up approximately 15 percent of Canada's entire GDP while Canadian and US military forces were operationally integrated through military agreements such as NATO and NORAD.[129] However, just like any normal relationship, there were both high and low points with Trudeau's first years in office undoubtedly representing one of the darkest moments. Differences of opinions on many matter between the prime minister and his US counterpart, Richard Nixon, were largely to blame. Trudeau's open opposition to the Vietnam War as well as Canada's unilateral decision to normalize relations with Communist nations had greatly displeased the Nixon administration. The catalyst for this chain of events was the passage of the New Economic Policy in 1971.

The United States' refusal to exempt Canada from increased duties under this new policy drove Trudeau to end Canada's overreliance on the Americans and instead seek to diversify its trade partners and relations; a shift that would become known as the Third Option. The natural alternative was to pursue closer trade relations with its European allies, specifically the EEC. Canada's attempts to engage the community for stronger trade relations began in earnest in 1973.

[129] Head and Trudeau, *The Canadian Way*, 265.

However, these preliminary efforts were met with cold shoulders and negotiations proved to be difficult. Prior to Pierre Trudeau's visit to its member nations in 1975, Marcel Cadieux, the ambassador to the EEC reported that the general sentiment from European diplomats was that "Canada should not expect favours from Europe if it is not prepared to shoulder the defence burden."[130] While Trudeau brushed off the comment as remarks from a few grumpy ambassadors and did not reflect the political reality, it was clear that Canada's allies had yet to forgive the decision to reduce the European garrison.[131]

As Frank Maas argued in *The Price for Alliance*, the turning point in Trudeau's understanding of the importance of a strong armed forces came after the meeting with the West German Chancellor Helmut Schmidt in March 1975 at Bonn.[132] West Germany was one of the most influential members of the EEC and its support was crucial if Canada were to secure the trade agreement that it desired. At this crucial meeting, Schmidt stressed to Trudeau the psycho-political importance of visible and tangible military contributions to NATO for West Germany. Schmidt stated that "A German farmer is not able to detect the identity of NATO aircraft flying overhead as their contrails stream behind them. Besides, he knows that those planes can flee westward as quickly as they can fly eastward. He recognizes the maple leaf on tanks and infantry vehicles, however, and knows that there is no escape for them in the event of war. These units are reassuring and important, whether or not there is a persuasive military role for them."[133] Although the abovementioned quote dealt specifically with the need for the CAF to maintain tanks in Europe, it was an intellectual argument which strongly resonated with Trudeau and convinced him of the importance of a strong and credible military to the advancement of

[130] Head and Trudeau, *The Canadian Way*, 272.
[131] Ibid, 272.
[132] Maas, *The Price of Alliance*, 91.
[133] Head and Trudeau, *The Canadian Way*, 273.

Canadian foreign policy objectives. Although Maas attributed this meeting as the breakthrough moment in the reversal of Trudeau's defence policies, officials within DND had long sensed that change might be forthcoming.

The initial Pierre Trudeau years were a continuation of the decade of darkness as his hostility towards the CAF and NATO, as well as his stubbornness in implementing a new defence policy resulted in a significant decline in Canada's standing amongst its allies. Yet, the accusation that Trudeau "had not the slightest interest in or appreciation of the Canadian Forces" by renowned historian Jack Granatstein was exaggerated.[134] Trudeau did come to appreciate the importance of the CAF, even if only because it contributed to the advancement of other Canadian policies and objectives. Nevertheless, it was under his watch that the CAF would undergo its largest re-armament program since the expansion of the regular forces in the 1950s to early 1960s. The acquisition of major weapon platforms such as the C1 Leopard Tank and CF-188 Hornet fighter greatly enhanced the capabilities of the Canadian military. The final major procurement program undertaken by the government was the CPF program. As MARCOM officials set out to begin the procurement for the next generation of Canadian warships, they found themselves in a dangerous new world.

[134] Jack Granatstein, *Who Killed the Canadian Military?* 3rd ed, (Toronto: HarperCollins Publishers Ltd, 2008), 97.

Chapter 3- The Strategic Trends of a Dangerous New World

"Those who have the capacity to use the sea routes in safety will survive. Those who have the capacity to interrupt this international intercourse will remain, as always in the past, in a position to achieve their means." – Rear Admiral (ret'd) Robert Timbrell, RCN[135]

In the three decades after the end of the Second World War, Canada's geopolitical and strategic reality was a paradox and one over which the nation had very little control. As a nation with limited military capabilities, it had neither the capacity to fight a war on its own or the influence in global affairs to prevent one. Therefore, it had to participate in a larger alliance such as NATO for collective defence against foreign threats and to amplify global influence. Yet, it was because of its participation in NATO that Canada would become involved in any conflict between the Western powers and the Warsaw Pact. Furthermore, owing to the geographical closeness to the USA, Canada would never be the target of a direct attack; however, it would undoubtedly be caught in the crossfire on any conflicts between the two global hegemonies.[136] As demonstrated in the previous chapter, the attempts by Pierre Trudeau to remove Canada from this conundrum proved to be futile. Instead, the Government chose to renew Canada's commitment as a contributing member of the NATO alliance.

The Canadian army garrison and air task force in West Germany, which was in the process of being re-equipped with the C1 Leopard Tanks and CF-188 Hornet fighter, may have been the most visible sign of the country's commitment to the NATO alliance. However, its most valuable contributions were at sea. While NATO predicted the most likely battlefront with the Warsaw Pact to be central Europe, the bulk of the Alliance's military and industrial capability

[135] Robert Timbrell. "On Canada's Maritime Defence Requirements," *Canadian Defence Quarterly* 6, No.4 (Spring 1977): 48.
[136] George Lindsey, "Strategic Trends in the 1970s and their Implications for Canadian Defence Policy," (May 20, 1970), file 17.5, 1, George Lindsey Fonds, 87/253, series 2, Directorate of History and Heritage. [Hereafter DHH].

resided across the Atlantic Ocean in North America. In times of hostilities, the massive amount of reinforcements and supplies necessary to mount the defence of Western Europe would have to be transported across by merchant shipping.[137] The protection of these vessels from destruction by Soviet submarines was one of the main responsibilities of SACLANT.[138] Canada's specialization in ASW made MARCOM a highly valuable asset for NATO.

Still, MARCOM's operational capabilities had declined significantly since the mid 1960s, as discussed in Chapter One. With the advent of nuclear propulsion and weaponry, the practicality and viability of the ASW role faced increased scrutiny as did the need for Canada to maintain such an expensive specialization whose costs were escalating exponentially. As successive governments debated the future of Canada's maritime forces, the strategic landscape continued to evolve at a rapid pace. When the Trudeau government once again embraced the NATO alliance in 1974/75, Canada's maritime forces were ill-equipped to counter the new threats. More importantly, the perpetual funding issue of the CAF that the Trudeau government thought it had previously addressed once again resurfaced and forced the prime minister, who had no other alternatives, to order a Defence Structure Review.

Chapter 3.1 – Soviet Naval Expansion and Policy

The foremost threat to NATO from a maritime perspective was posed by the unprecedent growth of the Soviet Navy. For much of Soviet history, the navy was an afterthought. [139] It had

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[137] The movement of war materials and reinforcements across the Atlantic to Western Europe was codenamed OP REFORGER and yearly exercises involving both American and Canadian soldiers were carried out for the majority of the Cold War.

[138] In 1976, the USSR possessed 319 submarines: 136 SSK, 40 SSN, 21 SSK armed with anti-shipping (AS) missile, 44 SSN with armed with AS missile and 44 SSBNs as permitted by the SALT I treaty. John Hudson. "Maritime Strategic Deterrence at the Conventional Level and Canada's Role in it." *Canadian Defence Quarterly* 4, No.4 (Spring 1977): 13.

[139] Gerry Skinner, "Notes on the Soviet Navy from a Political Perspective for NDC Course 30," (October 25, 1976), Series 13, File 16, 1, Nigel Brodeur Fonds, 2013/15, DHH.

played relatively minor roles in both the Soviet Revolution as well as the Second World War, the two conflicts which defined the development of the Soviet armed forces. The isolationist nature of the regime also meant that the navy played little part in Soviet foreign policy. However, this would change drastically in the 1950s as the Soviet leadership recognized the value of a powerful naval force both for defence and the advancement of its international interests.[140] As a result, the Soviet Navy underwent a long period of sustained growth from the 1960s which transformed it from a coastal defence force to a blue water navy capable of projecting Soviet might around the globe. At the height of its expansion during the 1960s and early 1970s, the Soviet Navy introduced a new class of warship or major weapon systems at an average rate of once every seven years.[141] Such growth was unheard of in the West and allowed the Soviets to rapidly close the capability gap with the USN and other NATO navies. Although the expansion of Soviet maritime forces was not a problem for Canada alone to contend with, it had significant implications on the force structure and priorities of MARCOM.

In the immediate aftermath of the Second World War, Soviet maritime policy had two major focuses: the development of a coastal defence force in conjunction with land-based assets to deter a seaborne invasion and the establishment of a large submarine fleet to disrupt NATO maritime activities in the Atlantic.[142] The latter was effectively a continuation of the unrestricted submarine warfare mounted by Germany during the two world wars. As the bulk of NATO's military and industrial capability was based in North America, the severance of the SLOC between the two continents would cripple the fighting capability of the NATO forces in Western Europe. By 1957, the Soviet Navy had grown into a significant fleet with approximately three

[140] J. Drent, "The Soviet Navy in the 1980s," *Canadian Defence Quarterly* 8, No.4 (Spring 1979): 37.
[141] S.T. Jessen. "Surface Vessels for the 1980s," *Canadian Defence Quarterly* 5, No.3 (Winter 1975): 26
[142] Drent, "The Soviet Navy in the 1980s," 36.

hundred submarines.[143] This force posed a significant threat to both the USN carrier strike groups, which were at the core of NATO's deterrence strategy and also to the alliance's ability to maintain the SLOC during times of hostilities. In response, NATO members, particularly Canada, invested heavily in the development of ASW forces.

The massive expansion of the Soviet Navy was also driven by the geography of the country.[144] The vastness of the USSR meant that naval bases are located far from each other and are virtually unsupportable by sea during times of hostilities. Of the four main Soviet fleets, only the Northern Fleet could expect unrestricted access to its bases at all times; the Baltic Fleet (Danish Strait), Black Sea Fleet (the Dardanelles) and Pacific Fleet (Strait of Japan) were all exposed to interdiction by enemy forces if war were to break out.[145] The Soviet military leadership were keenly aware of this problem as well as the fact that losses would not be easily replaceable. The large reserve of ships ensured that the fleets would remain combat effective even if they suffered significant losses. The Soviet Navy was largely manned by conscripts which created a very substantial ongoing training requirement as each class of new conscripts entered service and replaced their trained predecessors. This commitment, coupled with the frequent refits of the warships meant only a small portion of the Soviet Navy was combat effective at any time.[146] Nevertheless, the Soviet Navy had a formidable potential for the mobilization of large forces in wartime.

The expansion of Soviet maritime forces was not limited to the naval service. The USSR's merchant and fishing fleets also grew exponentially and by 1980, were the sixth and

[143] Tracy, *A Two-Edge Sword* 107.
[144] Drent, "The Soviet Navy in the 1980s," 37.
[145] Ibid, 37.
[146] Ibid, 37.

fifth largest such fleets in the world respectively.[147] The expansion of both the military and commercial fleet allowed both Nikita Khrushchev and Leonid Brezhnev to make significant use of Soviet maritime assets to expand Soviet influence globally.[148] While not military in nature, these maritime activities still posed a significant threat to Canadian and NATO interests. Soviet merchant shipping was used to deliver arms to groups which aligned with the USSR in proxy wars which ran counter to the objectives of Canadian defence policies. Conversely, the Soviet fishing fleets were known to act as covers for Soviet submarines operating off the North American coast. Furthermore, Soviet fishermen were harvesting fish stocks from Canadian waters at an alarming and unsustainable rate. This was a major concern for the Canadian government and led fishery patrols to become one of the new priorities of MARCOM when its primary mission shifted to sovereignty operations.

Whereas the Soviet maritime forces were growing in the 1960s, those of the NATO alliance were in decline. At the onset of the Cold War, NATO's conventional maritime assets outnumbered and were technologically far superior to their Warsaw Pact counterparts. More importantly, the Americans maintained a clear advantage in strategic nuclear weapons over the USSR so any shortcoming of the conventional forces on the Central Front could be compensated by the overwhelming nuclear arsenal. The Alliance's reliance on nuclear weapons coupled with the Mutually Assured Destruction doctrine led warships to be severely undervalued in the planning of NATO grand strategy. Any East-West conflict was expected to quickly escalate into an all-out nuclear war thus ASW forces whose main purpose was to sustain a long-term conflict

[147] Drent, "The Soviet Navy in the 1980s," 36.
[148] Ibid, 37.

would be irrelevant. For this reason, few nations saw the need to invest large amounts of money for assets which were believed to have little practical use.

As the USSR reached nuclear parity with the USA in the late 1960s, NATO adopted a new NATO grand strategy to reflect this change to the strategic situation. The new doctrine, named flexible or graduated response called for NATO forces to respond to Soviet aggression with a similar level of force.[149] This strategy stemmed from the belief that neither side would risk a general nuclear war with a first strike. Instead, the usage of nuclear weapons would likely be the result of escalations from a conventional conflict. By responding to Soviet aggression with a similar level instead of greater level of force, it would theoretically discourage the pre-emptive use of nuclear weapons. For the doctrine to be effective, it required NATO members to maintain large conventional forces. This posed a significant problem for the Alliance's military leadership, particularly SACLANT, as they did not have enough assets to meet all of NATO's strategic requirements.[150] The severe shortage of Allied maritime forces, particularly escort vessels such as destroyers and frigates, for the reasons listed above was alarming. While Alliance members had little appetite to increase defence expenditures at a time when inflation was rising drastically and there were strong societal pushes to increase social welfare services, most complied. Ironically, as NATO was set to rebuild the capabilities of its conventional forces in the late 1960s, Canada was on the opposite course.[151]

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[149] "Annex A – The Importance of the SLOC to Western Collective Security of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 55-57, Barney Danson Fonds, R13905-1415-0-E, LAC.
[150] Sokolsky, *A Question of Balance*, 373.
[151] Joel Sokolsky. "Canada and the Cold War at Sea, 1945-68." in *The RCN in Transition: 1910-1985*. Edited by W.A.B Douglas. (Vancouver: University of British Columbia, 1988): 226.

Chapter 3.2 – The Advent of the Nuclear Age at Sea

Much like the building of the first dreadnought battleship with its highspeed turbine engines and all-big-gun armament in 1905-06, the introduction of nuclear propulsion and weaponry revolutionized naval warfare from the late 1950s onward. On September 30, 1954, *USS Nautilus*, the first warship powered by nuclear energy in history entered service with the USN. Just three years later, the Soviets responded with the launch of its own SSN, the *K-3*. Nuclear submarines held a number of advantages compared to conventional submarines which made them a menace for ASW forces. SSNs could travel much faster and further without the need to refuel and were also much more difficult to detect using acoustic sensors because they were much quieter.

The threat, moreover, increased exponentially with the fitting of submarine-launched ballistic missiles (SLBM) to the nuclear submarine, thereby creating a new class of submarines, the SSBNs. The world's first SSBN, *USS George Washington*, entered service in December 1959 which was followed shortly after by the Soviet's Hotel-class SSBNs.[152] These early SSBNs carried ballistic missiles with a range of 350-700 nautical miles which was sufficient to reach important inland targets. As a result, it became even more important that NATO's ASW forces could locate and eliminate enemy SSBNs before they reached attack range. The Soviets caught up to US and British SSBN capabilities with the Yankee and Delta-class SSBNs that began to enter service in the late 1960s and early 1970s. These were truly strategic weapons which carried SLBMs with a range of thousands of miles.[153] Though SSBNs are a platform capable of

[152] Soviet submarines were only given number designations by the Soviet Navy and the names of the ship classes were initially unknown to NATO. As such, phonetic names were assigned by NATO to differentiate between different ship classes.
[153] George Lindsey, "Canadian Maritime Strategy and Naval Roles – Presentation to CFSC Toronto," (January 26, 1981), Series 10, Vol 69, 7, George Lindsey Fonds, MG005, LCMSDS.

performing both first and second-strike functions, it was widely perceived as a second-strike system because of its a first-strike survivability and the ability to retaliate with its own nuclear weapons.[154] As to be discussed in Chapter Four, there was significant discourse among academics, politicians, and the military on how Canada should counter this new threat.

The proliferation of nuclear weapons had significant influence on the posturing and composition of NATO and ultimately, Canada's military forces. NATO analysts concluded that there were four possible scenarios of hostilities with the Soviet Union: a state of heightened global tension short of a full-scale war; a conventional war, a limited-nuclear war and an unlimited nuclear war.[155] Each scenario posed a very different set of requirements for MARCOM's operational capability. In an unlimited nuclear war scenario, there was very little that MARCOM could do as the destruction of Soviet SSBNs off the coast of North America may temporarily spare NATO second-strike assets or major civilian centres but would be meaningless on a strategic level. Instead, it was the responsibility of Canada and its allies to prevent this scenario by presenting a credible deterrence to Soviet aggression.[156]

The adoption of the flexible response doctrine mentioned above did not preclude either the Alliance or the Warsaw Pact from the use of nuclear weapons; instead, it merely provided NATO commanders with a wider range of responses as opposed to the unrestricted use of nuclear weapons in the event of a Soviet invasion.[157] The by-product of the flexible response doctrine was an increased emphasis on the buildup of conventional forces and assets. More

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[154] George Lindsey, "DRAE Report No. 5 - Canadian Maritime Strategy: Should the emphasis be changed?" (July 1969), Series 1, Vol. 1, 11, George Lindsey Fonds, MG005, LCMSDS.
[155]"The Strategic Situation at Sea: Combat Requirements and Capabilities - Presentation to Senate Subcommittee on National Defence," (March 2, 1982), Series 10, Vol 70, 5, George Lindsey Fonds MG0005, LCMSDS.
[156] George Lindsey, "Maritime Forces and Total War," Series 2 File 20.21, 18, George Lindsey Fonds, 87/253, DHH.
[157] George Lindsey, "Maritime Forces and Limited War," Series 2 File 20.22, 1, George Lindsey Fonds, 87/253, DHH.

importantly, it acknowledged the possibility of a prolonged conventional war with the Warsaw Pact. Studies by NATO staff on this possibility highlighted the importance of keeping the SLOC between North America and Western Europe open.

To sustain a prolonged conflict would require tens of thousands of reinforcement personnel and millions of tons of supplies, the majority of which would have to be moved by commercial shipping. This remained the preferred mode of transportation for NATO planners as a single container ship could transport forty thousand metric tons of supplies compared to a mere hundred-fifty tons by the largest aircraft of the time. As an example, three cargo ships carried enough supplies to sustain an armoured division for an entire month.[158] However, the new strategy also posed significant challenges into the defence of shipping. The emergence of satellites meant that the vastness of the oceans was no longer a refuge for large groups of ships.[159] This made it easier for submarines to locate and interdict their targets which only further emphasised NATO's need for adequate numbers of modern escorts. These developments had significant implications for MARCOM if it was to continue with the ASW/escort role.

In a hypothetical Third Battle of the Atlantic, MARCOM's roles would likely have resembled the first two battles in 1915-1918 and 1939-1945, albeit with newer technologies. The biggest threat to the continuation of the ASW/escort role had shifted to the potential use of nuclear weaponry. The use of tactical nuclear weapons at sea was more likely than their employment on land as there were virtually no concerns with civilian collateral damage or the

[158] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 63, Barney Danson Fonds, R13905-1415-0-E, LAC.
[159] "The Strategic Situation at Sea: Combat Requirements and Capabilities - Presentation to Senate Subcommittee on National Defence," (March 2, 1982), Series 10, Vol 70, 3, George Lindsey Fonds MG0005, LCMSDS.

violation of the sovereign territories which might otherwise escalate the conflict.[160] One possible use of nuclear weapons by the Soviets was to destroy the convoys carrying supplies and reinforcements across the Atlantic. The natural countermeasure would be to spread out the convoys so that a single nuclear weapon would not destroy all the ships. Paradoxically, this also made convoys highly exposed to attacks by conventional submarines which, as experience in the two world wars had shown, were highly capable in stealthy attacks on single ships when the defending forces were not nearby. Soviet tactical nuclear weapons, moreover, could severely damage or destroy the base and port facilities needed to operate the escort forces and commercial shipping, and to load and unload the merchant vessels. [161] The addition of nuclear technologies greatly complicated the situation which MARCOM contended with in the formulation of Canada's maritime defence policy.

Chapter 3.3 - The 1975 Defence Structure Review

The bane of Canadian defence planning and policy had been the lack of long-term stable and secure funding. As previously mentioned, the unification of the Canadian Forces was a decision largely driven by the search for financial savings. While the immediate economies from the leaner force structure allowed for major procurement programs such as the four DDH-280 *Tribal*-class destroyers and two *Protecteur*-class AOR ships to proceed, it did little to resolve the perpetual funding problems which plagued the Canadian military. In 1970, Trudeau matched the pay of soldiers with those of the bureaucracy. While the decision was widely celebrated by the rank and file, it also caused personnel costs to skyrocket at a time when the defence budget had

[160] George Lindsey, "Maritime Forces and Limited War," Series 2 File 20.22, 1, George Lindsey Fonds, 87/253, DHH.
[161] George Lindsey, "DRAE Report No. 5 - Canadian Maritime Strategy: Should the emphasis be changed?" (July 1969), Series 1, Vol. 1, 11, George Lindsey Fonds, MG005, LCMSDS.

been frozen. However, the biggest threat to the defence program was the rapidly rising inflation during the late 1960s and early 70s which plunged the CAF into yet another financial crisis.

The economics of defence are a critical if unappreciated aspect in the formulation of Canadian defence policy. While political considerations determined the objectives and priorities of the defence program as well as the means to meet them, economic considerations determined what could be afforded and what would be the most cost-effective way to achieve the goals.[162] Between FY 1968/69 and FY 1974/75, DND's budget allocation rose sharply from $1.75 billion to $2.51 billion. The 43 percent increase in defence funding in peacetime was unprecedented; however, it was barely enough to keep pace with inflation which correspondingly had grew by nearly 40 percent during this same period. More importantly, despite significant increases in government revenue and expenditure, the military's share of the total federal budget dropped from 17.8 percent to 8.6 percent.[163] Had defence funding been maintained at the same level prior to FY 1968/69, DND's budget would have amounted to approximately $5 billion and the financial crisis could have been avoided.

In the fall of 1973, Cabinet agreed to a new funding model for the Canadian Forces which saw the defence budget increased by 7 percent annually for the next five years in order to meet the responsibilities and objectives outlined in *Defence in the 70s*. However, global events outside of Canada's control rendered this substantial increase to defence funding insufficient almost overnight.[164] The 1973 Oil Crisis caused by the oil embargo imposed by OAPEC in response to Western support for Israel during the Yom Kippur War caused inflation to grow at

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[162] Dan Middlemiss, "Economic Consideration in the Development of the Canadian Navy since 1945" in *The RCN in Transition: 1910-1985*. Edited by W.A.B Douglas. (Vancouver: University of British Columbia, 1988): 255.
[163] Annex A – Figure 1: Defence Expenditure 1946 – 1984.
[164] "Memo to Cabinet, Financing the Defence Program from 1975-76 to 1979-80," (October 13, 1974), Series 2 File 14.4, 2, 7, George Lindsey Fonds, 87/253, DHH.

double-digit rates. By October 1974, only a year after it was implemented, it was evident that the new funding formula was insufficient to maintain the Canadian Forces. Rapidly rising operational and personnel costs took up most of the defence budget in FY 1973-74 which left virtually no money to procure capital equipment to maintain the fighting capability of the three elemental services.[165] This development posed a significant problem for the Trudeau government who had committed to refitting the CAF with equipment more suitable for its sovereignty-first priorities.

The financial problems of DND could have been easily resolved if its lack of funding was limited to the procurement of new equipment by postponing the purchase for several years. However, this was not an option as DND faced a $500 million shortfall for the 1975-76 Fiscal Year just to retain the existing force structure.[166] Cabinet was forced to make a difficult choice to either institute another round of personnel reduction or to increase funding. One of the alternatives explored at this time was to institute another series of cuts to personnel level which would have reduced the strength of the Canadian Forces from 83,000 down to 73,000 soldiers. This proposal was unacceptable to the CDS Gen. Jacques Dextraze, who publicly warned that any further cuts would compromise the military's ability to carry out its core functions and responsibilities.[167] The proposed forced reductions would have had significant implications for MARCOM had it been adopted. On the Atlantic Coast where the bulk of MARCOM's forces were stationed, the impact would have been less consequential as the austerity measures would result only in a 10 percent drop in surveillance capability due to a smaller operating budget and a

[165] Annex A - Figure 2: RCN/MARCOM Expenditure 1961/62 to 1983/84.
[166] "Annex D of Memo to Cabinet, Financing the Defence Program from 1975-76 to 1979-80," (October 13, 1974), Series 2 File 14.4, 2, George Lindsey Fonds, 87/253, DHH.
[167] Maas, *The Price of Alliance*, 88.

shortfall of sailors.[168] The real impact would have been felt by the Pacific squadron as five of its seven destroyers would have to operate at reduced strength; ultimately translating into a 15 percent drop in ship patrol capabilities.[169] Given the already minimal assets and capabilities stationed on Canada's Pacific Coast, this reduction would have devastating effect on the ability of MARCOM to carry out ASW and fishery patrols in the Pacific. Ultimately, this option was abandoned because the effects on the overall defence capability was too great. Instead, a compromise was reach and the strength of the military was reduced to 78,000 personnel as a temporary response to the fiscal crisis.

A third alternative was to further cut back on NATO commitments. However, this too was rejected due to the massive implications it would have on the overall strategic situation, Canada's relationship with its allies, and the commitment to collective security that was foundational to the country's defence and foreign policies.[170] With no other options available, Pierre Trudeau ordered a Defence Structure Review (DSR) to re-examine the roles and responsibilities of the Canadian Forces as well as the necessary force structure to fulfill them.[171]

The first phase of review centered around five strategic questions about the operational capabilities of the CAF, three of which pertained to the roles of MARCOM: [172]

1. Should Canada maintain the capability to deploy forces to Europe and support them in combat during wartime?
2. Should Canada be able to compel submarines in Canadian water to surface when ordered including the ability to sink them as a last resort if they refuse to?

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[168] "Annex D of Memo to Cabinet, Financing the Defence Program from 1975-76 to 1979-80," (October 13, 1974), Series 2 File 14.4, 2, George Lindsey Fonds, 87/253, DHH.
[169] Ibid, 2.
[170] "Memo to Cabinet, Financing the Defence Program from 1975-76 to 1979-80," (October 13, 1974), Series 2 File 14.4, 18, George Lindsey Fonds, 87/253, DHH.
[171] "Memo to Cabinet, The Defence Program – the Tasks," (February 6, 1975), Vol 6460, Cab Doc 78-75, 1, Privy Council Office Fonds, RG2-B-2, LAC.
[172] Ibid, 2.

3. Is it important for Canada to contribute to surveillance for intel or other reasons of potentially hostile submarine activities?

These questions had significant implications on the design of Canadian defence and foreign policies as they largely concerned Canada's NATO responsibilities. Though the Trudeau government announced its commitment to remain within the NATO alliance in *Defence in the 70s*, there were significant doubts as to whether the CAF had the capability to carry out both its domestic and NATO functions given the limited resources, manpower and financial envelope it was allocated.

At the end of Phase I, the DSR concluded that Canada should:

1. Continue the deployment of Canadian forces to Western Europe in times of hostility, including provisions for escort protection during transit
2. Maintain the capability to compel submarines in Canadian waters to surface when ordered
3. Continue surveillance of hostile submarine activities to maintain an intelligence picture of what is occurring in Canadian waters.[173]

In addition to these strategic capabilities, the DSR listed fifteen roles which the CAF must be capable of completing.

The tasks assigned to MARCOM fell under three umbrella categories: sovereignty, North American defence and NATO. The DSR confirmed the objectives in *Defence in the 70s* and outlined specific tasks which needed to be fulfilled by MARCOM. The two main tasks associated with the sovereignty role were to 1) ensure adequate surveillance capability of Canadian territory, airspace and sea approaches and 2) reinforce civil authorities in the

[173] "Memo to Cabinet, The Defence Program – the Tasks," (February 6, 1975), Vol 6460, Cab Doc 78-75, 3, Privy Council Office Fonds, RG2-B-2, LAC.

enforcement and compliance of Canadian laws.[174] Both tasks entailed operations of low-intensity, but were extremely draining on the limited assets of MARCOM due to the frequency with which they needed to be conducted. The difficulties faced by MARCOM were amplified by the need to meet another set of responsibilities concurrently.

Although ranked lower in priority than the sovereignty tasks, the tasks for the defence of North America and NATO responsibilities were much more demanding in terms of equipment and training. The foremost objective was to sustain the confidence of the USA and other allies which was a marked departure from Trudeau's stance when he first became prime minister. The 1975 DSR acknowledged that "Canada's participation in collective security arrangements with other states not only defends the values we share with our friends but, equally, it serves the interest of Canada's national security. If collective arrangements are to remain a useful option for all, each member state must remain confident that a collective response to common problems is clearly more conducive to international peace and stability than unilateral action."[175] A second paramount objective associated with NATO was to ensure that the development of Allied policies took into account Canada's interests and needs.[176] For Canada to be able to exert influence in the development of alliance grand strategy, it must be perceived by other Alliance members to be carrying an appropriate share of NATO's collective defence activities.[177]

The DSR listed three main operational objectives for MARCOM related to NATO and North American Defence. The first was to guard against a surprise attack on North America.[178]

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[174] "Memo to Cabinet, The Defence Program – the Tasks," (February 6, 1975), Vol 6460, Cab Doc 78-75, 2, Privy Council Office Fonds, RG2-B-2, LAC.
[175] Ibid, 6.
[176] Ibid, 6.
[177] Ibid, 7.
[178] Ibid, 4.

In this capacity, the role of the CAF was to be on the lookout for signs of a potential attack on the USA. From a naval perspective, this entailed surface and sub-surface surveillance of Canadian waters for Soviet surface vessels or submarines. This could be conducted in conjunction with the sovereignty patrols previously discussed. An associated task was to contribute to the prevention of attacks aimed at US-land based second strike assets.[179] As previously mentioned, global peace and stability was predicated on mutual nuclear deterrence between the USA and the USSR. If this balance was disrupted, the consequences were potentially cataclysmic.

The final operational task assigned to MARCOM was to prevent or contain attacks against NATO.[180] The central concept of the Alliance was mutual defence with each member expected to contribute to the collective combat capability. Canada's maritime contributions, despite Trudeau's strategic re-orientation in 1970, had remained largely unchanged. Nevertheless, the decision to continue to participate in the strategic ASW/ escort role remained a controversial topic in Cabinet as its members were split on the necessity to ensure that the SLOC between North America and Western Europe remained open during wartime. The more nationalist-inclined members argued that Canada had no obligation to fulfil this function and that if MARCOM needed new ships, it should only be for sovereignty-related purposes.[181] Other members argued that as a member of a collective defence arrangement, it had an obligation to come to the defence of all its allies which included maintaining the SLOC.[182] Unlike in 1970,

[179] "Memo to Cabinet, The Defence Program – the Tasks," (February 6, 1975), Vol 6460, Cab Doc 78-75, 5, Privy Council Office Fonds, RG2-B-2, LAC.
[180] Ibid, 6.
[181] Bothwell and Granatstein, *Pirouette*, 253.
[182] Ibid, 253.

Trudeau accepted that both strategic ASW and maintaining the SLOC were essential aspects of Canada's defence policy.

Phase II of the Defence Structure Review examined the force structure necessary to fulfill the tasks stated in Phase I. The size of MARCOM's fleet was largely determined by the threat level which Canada could be expected to face, the level of commitment required from the service and the intensity of these activities.[183] A vessel can only conduct one role in one location at any time; therefore, the number of vessels which MARCOM operated would also have a significant impact on the capabilities of the service. Rear Admiral (ret'd) Robert Timbrell made the case that Canada needed a significantly larger fleet if it was to be an effective naval power that was capable of fulfilling all its assigned responsibilities. He proposed a fleet of thirty-six destroyers, ten submarines and four AOR ships as an appropriate fleet size for Canada.[184] However, this was an extremely expensive proposition given that two dozen new warships needed to be acquired. In addition, it would necessitate a massive increase to MARCOM's funding to cover the increase in personnel and operating costs, lifecycle costs, and the infrastructure expansion necessary to support Timbrell's proposed fleet. However, at the policy level, this was never an option that was seriously considered by senior DND officials or by Cabinet.

DND studies demonstrated that to fulfil both the sovereignty and NATO role in peacetime, the fleet would need a minimum of twenty-six destroyers. In wartime, this figure rose to thirty warships.[185] However, based on the personnel staffing level, available infrastructure and defence envelope, MARCOM only had the capability to support a fleet of twenty-four

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[183] "Annex E – Fleet Sizing of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 123, Barney Danson Fonds, R13905-1415-0-E, LAC.
[184] Timbrell, "On Canada's Maritime Defence Requirements," 49.
[185] "Annex E – Fleet Sizing of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 125, Barney Danson Fonds, R13905-1415-0-E, LAC.

destroyers. Amongst the proposed fleet, only twenty would be operational while four would be held in reserves until they were needed due to fiscal restrictions. This would become the final fleet figure which was agreed upon for the CPF project.[186] The shortfall in ships put considerable stress on the operational capability of MARCOM which due to the duality of functions already had an extremely high operational tempo.

In 1977, MARCOM possessed twenty active destroyers with three more in reserve status that could be activated within ninety days. However, due to refits, training and NATO secondment, not all of the ships would be immediately available for operation if hostilities broke out suddenly. Canada had agreed to permanently provide one destroyer to STANAVFORLANT on a rotational basis and up to four in times of rising tension.[187] Furthermore, in order to maintain its proficiency in ASW, MARCOM determined that it was necessary to devote half of its at-sea times for combat training. This meant that at any given time, 25 percent of MARCOM's ships were at sea on training cruises.[188] The biggest obstacle to the availability of Canadian destroyers, however, was the lengthy maintenance cycles of the ships.

The maintenance schedule for MARCOM's warship operated in a 48-month cycle. Once every four years, a destroyer would receive a 26-week major refit, 4-additional weeks of shore time followed by a 10-week sea trial period before it was returned to service.[189] This meant that at any given time, 20 percent of the destroyer fleet would be out of service. In addition to the major refits, each vessel received a 3-week maintenance every quarter while shore leave was also

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[186] "Annex E – Fleet Sizing of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 131, Barney Danson Fonds, R13905-1415-0-E, LAC.
[187]"Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 17, Barney Danson Fonds, R13905-1415-0-E, LAC.
[188] "Annex E – Fleet Sizing of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 123, Barney Danson Fonds, R13905-1415-0-E, LAC.
[189] Ibid, 125.

allocated monthly to improve the morale of the crews. Thus, during a three-month period, a destroyer would not be available for operations for an additional thirty-seven days. As such, unless sufficient warning was given prior to the initiation of hostilities, the operational capability of MARCOM would be severely compromised. Although this situation was far from ideal, it was the reality with which MARCOM had to contend.

With the completion of the Defence Structure Review, Cabinet directed the Minister of National Defence to prepare preliminary studies for a future ship replacement program on November 20, 1975 which marked the beginning for the Ship Replacement Program (SRP).[190] Over the next two years, MARCOM officials laboured through a difficult process to define the requirements for the next generation of Canadian warships. The process was complicated by the duality of the navy's functions as well as the intense debates which occurred within MARCOM over the future of the service. In December 1977, Barney Danson secured cabinet's approval to proceed with the project which formally initiated the CPF program.

[190] The SRP did not become the CPF project until 1977 when it was decided that Canada would acquire patrol frigates.

Chapter 4 – A New Beginning: Defining the Requirements of the Canadian Patrol Frigates, 1975 – 1977

"We may assert that a state bounded by the sea, which does not have a navy corresponding to its importance in the world, thereby shows its economic weakness. Thus, each ship of a navy is a relative indication of the level of development of science, technology and industry in a given country and an indicator of its real military might."[191] – Admiral Sergey Gorshkov, Admiral of the Fleet of the USSR

The quote by Admiral Goshkov highlighted the importance of a credible navy not just for the defence of the nation but also as a symbol of political and economic strength. Trudeau realized in 1975 that the token contribution of Canadian assets and personnel to NATO was insufficient to sustain the confidence of its allies, which was further undermined by the dismal state of the CAF. Instead, the contributions must be tangible, modern and capable to achieve the desired results. The majority of the ships in the fleet were at or nearing the end of their expected twenty-years operational life with no replacements in sight. The degradation of MARCOM was so complete that in 1980, an officer remarked that "in a real war the best the Canadian navy could hope for was to be trapped in Halifax harbour by mines: with any luck, by the time Americans arrived to sweep the mines, the war might be over."[192] The government's decision to proceed with the Ship Replacement Program (SRP) which eventually became the Canadian Patrol Frigate Program, was long overdue.

As the SRP got underway, the burning question which needed to be addressed was what type of warship should the government procure? *Defence in the 70s* established that the protection of Canadian sovereignty was now the foremost task of MARCOM. However, the

[191] Quote attributed to the Soviet Admiral Sergei Gorshkov. D.B. Bindernagel, "Planning for Future Ship Requirements," Canadian Defence Quarterly 14, No.2 (1984): 23.
[192] Milner, *Canada's Navy*, 262.

change in the service's primary mission did not mean the elimination or reduction of its other commitments. The prime objective of CAF remained to contribute to the deterrence of both conventional and nuclear war in conjunction with its NATO allies.[193] Furthermore, despite Trudeau's prior aversion of the Alliance and the strategic ASW role which had been assigned to MARCOM, he made it clear that the government had no intentions of abandoning these responsibilities. This created a duality of roles for MARCOM, one which could not be easily addressed because each required a very different ship to fulfill.

The infrequency and prohibitively expensive costs of major naval procurement programs meant that the decision made by the Trudeau government would have grave implications for Canada's maritime policies, and MARCOM's operational capability for decades to come.[194] In December 1977 after much deliberation, the Trudeau government announced its intention to procure six new patrol frigates for MARCOM. The purpose of this program was to replace the six remaining *St. Laurent*-class destroyers which had entered service beginning in 1955 and was intended to be the first phase of a larger project to replace the remainder of Canada's aging fleet. The procurement of warships is a massive undertaking which requires many years of planning and preparation before the ships enter service. The experience of previous DND-administered procurement programs left much to be desired and a new procurement strategy was implemented for the CPF project to ensure the failures of the past did not resurface. The decision to acquire large ASW-focused warships – the new frigates would be nearly twice the size of the destroyers they were replacing – was a decision which would have been unfathomable only several years prior and further demonstrated the maturation of Pierre Trudeau as prime minister.

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[193] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 7, Barney Danson Fonds, R13905-1415-0-E, LAC.
[194] Ibid, 29.

Chapter 4.1 – A Two-Edged Sword: The Duality of Canada's Maritime Role Under Pierre Trudeau

For much of its history, the foremost responsibility of the RCN and its successor formation, MARCOM was anti-submarine warfare. At first, this was due to operational necessity as Germany's unrestricted submarine policies in the First and Second World War forced the RCN to devote all its resources to counter this threat. This trend continued in the early post-war era as the Soviet Navy adopted the German's submarine focus and had rapidly built up its underwater fleet.[195] However, with the advent of nuclear weaponry and ballistic missiles, the threat posed by submarines had completely changed. In addition to the tactical threat posed by submarines, there was now a strategic dimension involved. SSBNs had the capability to devastate its targets from hundreds of miles away and were virtually unstoppable. SSBNs were also considered the most effective second-strike platform of the nuclear triad (bombers, ICBMs and SLBMs) and thus were perceived as the foundation of the mutual nuclear deterrence which allowed détente to take hold. As such, there was a growing belief amongst policy advisors, academics and politicians that MARCOM's strategic ASW orientation was a highly expensive but increasingly obsolete specialization which did not serve Canadian interests well.[196]

There was significant discourse between the more alliance-oriented defence officials and domestic-oriented academics on the future role of MARCOM. The tactical ASW role had long been accepted by Canadian military leaders and defence officials without question.[197] It was what originally provided the RCN the justification it needed to press for more warships in the 1950s. In the subsequent years, significant investments had been made to ensure that MARCOM

[195] George Lindsey, "DRAE Report No. 5 - Canadian Maritime Strategy: Should the emphasis be changed?" (July 1969), Series 1, Vol. 1, 1, George Lindsey Fonds, MG005, LCMSDS.
[196] Ibid. 1.
[197] Ibid, 1.

was still one of the leading ASW forces in the world despite the many problems it faced. Furthermore, it was Canada's most valuable contribution to NATO and the only legitimate justification for the continued investment in Canada's naval service. For the academic community, the country's strict adherence to strategic ASW was perplexing given the evolution of strategic nuclear weapons and their effects on the conduct of future conflicts. Furthermore, the practicality or usefulness of the policy had never been subjected to serious strategic analysis. Dr. John McLin, one of Canada's leading defence commenters at the time, bluntly stated "No compelling justification was given of the strategy upon which the anti-submarine capability was based; no effective answer was given, either, to those who questioned whether the particular collection of ships and aircrafts assembled by the early 1960s for conducting ASW operation represented a well-considered policy."[198]

The case against the continuation of Canada's strategic ASW role largely took form in three arguments. The first was that the number of SLBMs that the Soviets possessed was miniscule in comparison to its stockpile of ICBMs. If the latter cannot be stopped, what was the point in neutralizing the former?[199] The second argument revolved around the fact that SSBNs represented the Soviet's most effective second-strike platform and the need for both NATO and the Warsaw Pact to both maintain a credible retaliatory capability which was the foundation of the nuclear balance. If Canada's strategic ASW mission were to be successful, it would mean that the Soviet's second-strike capability had been rendered ineffective and thus the loss of its nuclear deterrence credibility.[200] In such a situation, the strategic balance would be tipped in favour of the USA and NATO which would force the USSR to resort to more extreme measures

[198] George Lindsey, "DRAE Report No. 5 - Canadian Maritime Strategy: Should the emphasis be changed?" (July 1969), Series 1, Vol. 1, 1, George Lindsey Fonds, MG005, LCMSDS.
[199] George Lindsey, "Maritime Forces and Total War," Series 2 File 20.21, 3, George Lindsey Fonds, 87/253, DHH.
[200] Ibid, 3.

to restore the balance. The third argument against the conduct of strategic ASW was that the technical difficulties and exorbitant costs necessary to maintain the capability to detect, locate and destroy Soviet SSBNs were too great in comparison to the meagre return.[201]

Trudeau's senior advisor, Ivan Head, presented a similar argument in *Canadian Defence Policy: A Review* where he argued that the ASW operations conducted by MARCOM were counterintuitive to the preservation of the strategic nuclear balance. If Soviet SSBNs no longer posed a credible second-strike capability, it could alter the balance of power and threaten the stability of mutual nuclear deterrence.[202] Instead, he proposed the reorganization of MARCOM into what effectively was a glorified constabulary focused on the protection of national sovereignty. Under this proposal, MARCOM would be reduced to a fleet of twelve destroyers and two AOR ships while the number of naval personnel would be nearly halved from eleven thousand to just six thousand sailors.[203] Although Head recognized the importance of strategic ASW to the protection of the USA's own second strike capability, he was unconvinced of the need for Canada to contribute.[204]

Pierre Trudeau himself was skeptical of Canada's continued participation in the ASW/escort role because it would only be useful in a drawn-out conventional war. Such a scenario was considered unlikely given the proliferation of nuclear arms by both hegemonic powers.[205] During a briefing by the Director-General of Operations, Maritime on May 20, 1969, he posed the question "if it was assumed that Canadian destroyers could closely identify and

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[201] George Lindsey, "Maritime Forces and Total War," Series 2 File 20.21, 3, George Lindsey Fonds, 87/253, DHH.
[202] Ivan Head. "Canadian Defence Policy, A Review," (1969), Vol 74, File 16, 9, Barney Danson Fonds, R13905-1376-5-E, LAC.
[203] Ibid, 3.
[204] Ibid, 4.
[205] Joel Sokolsky. *A Question of Balance*, 367.

track Soviet submarines and if it were assumed that no offensive action would be taken by Canadian destroyers, then what value would there be in acquiring knowledge of the submarine's location?"[206] Furthermore, he challenged that "destroyers only become totally effective if they can attack and destroy. If Canadian destroyers attacked in the first instance without warning then the allies would have instigated a nuclear attack. That possibility must then be ruled out. If destroyers were attacking submarines, then it must be assumed that a nuclear exchange through ICBMs or bombers had already taken place. At that point it would be difficult to maintain that there was any deterrent value in the destroyer program…"[207] With no valid justification for the continuation of the ASW role, Trudeau and his advisors increasingly focused their attention on a new domestic role for the nation's maritime forces.

The sovereignty role envisioned by Trudeau for MARCOM was comprised of two functions: surveillance and control. Surveillance referred to the detection and identification of potentially hostile entities to gather intelligence of what is occurring in Canada's landmass, airspace and waters. Control referred to the appropriate enforcement actions to ensure that Canadian laws and regulations were respected.[208] The major challenges to Canadian control over the waters it declared as sovereign and which it exercised jurisdiction over were increased illegal exploitation of natural resources such as fish stocks and mineral resources on the seabed, the unwanted or unannounced presence of foreign vessels in the High Arctic and the disregard of Canadian laws and regulations by commercial vessels.[209] The responsibility to combat these violations of Canadian sovereignty were generally within the purview of civilian agencies such

[206] Bothwell and Granatstein, *Pirouette*, 252.
[207] Ibid, 252.
[208] Minister of National Defence, *Defence in the 70s: White Paper on Defence* (Ottawa: Information Canada, 1971), 17.
[209] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 9, Barney Danson Fonds, R13905-1415-0-E, LAC.

as the Department of Fisheries and Environment (DFE) and the Canadian Coast Guard (CCG). MARCOM's duty was to support them in the enforcement of Canadian laws and if necessary, to take over these responsibilities.[210]

Canada is by default a maritime nation due to its geography and is heavily dependent on the seas for its economic wellbeing. Approximately a quarter of Canada's GNP was generated by trade, with over half of these goods transported by merchant shipping.[211] The volume of goods moved by seaborne shipping in 1973 totalled approximately two hundred million tons and was valued at $60 billion dollars.[212] An average of sixty-four major oceangoing merchant ships entered and departed Canadian seaports each day to move these goods.[213] Canada was also one of the largest seafood exporters in the world. Furthermore, like most other Western nations at the time, Canada was dependent on imported oil to meet its energy needs, to the tune of twenty-three million tons of oil annually.[214] Canada's dependency on the seas meant that its economy was extremely vulnerable to interference and influences by hostile forces. Should Canada fail to effectively exercise its sovereignty, it was expected that the USN would take over in order to assure American security. This was considered a politically unacceptable situation as it would undermine Canada's claims of jurisdiction over ocean areas adjacent to its coasts.[215]

The vastness of Canada made it a logistical and operational nightmare to maintain constant surveillance over its territories and sovereign waters. This challenge was exacerbated by

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[210] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 19, Barney Danson Fonds, R13905-1415-0-E, LAC.
[211] A.G. Schwartz, "Who's Guarding the Coast?," *Canadian Defence Quarterly* 15, No.3 (Winter 1985/86): 20.
[212] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 7, Barney Danson Fonds, R13905-1415-0-E, LAC.
[213] Ibid, 7.
[214] Naval Officers Association of Canada, "A Paper on the Replacement of Canada's Naval Ships," (November 1, 1977), Vol 588, File 70607, 1, Pierre Trudeau Fonds, MG26-07, LAC.
[215] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 27, Barney Danson Fonds, R13905-1415-0-E, LAC.

the Trudeau government's international leadership in asserting jurisdiction over zones far beyond the twelve-mile limit of territorial waters. In 1970, the Trudeau government passed the Arctic Waters Pollution Prevention Act which created a one-hundred-mile pollution control zone in Canadian Arctic waters with the enforcement of this act tasked to MARCOM. This was followed by the expansion of the Economic Exclusive Zone from three miles off the coast to twelve miles in 1973, which was further expanded to two hundred miles offshore in 1977. Within a single decade, the area MARCOM was responsible for patrolling had increased immensely yet no additional resources were allocated to the service.[216] As the Canadian government continued to increase the waters it claimed as its own, the matter of sovereignty became more important as its claims were not recognized by international laws.

Another legal matter which needed to be resolved was the ownership of resources such as minerals and oil on the seabed. International laws on this matter were unclear and while the technology to locate and extract these resources had not yet fully matured, it was expected that a fierce race to secure and exploit these reserves would occur in the near future. Canada likely could not depend on its allies such as the USA as they were more likely to be adversaries in the competition for the extraction of natural resources from the sea floor.[217] Furthermore, if Canada was unable to effectively maintain surface and sub-surface control over Canadian waters and was instead reliant on allies to fill the capability gap, it would significantly weaken its claims.[218] If

[216] The area which MARCOM was required to patrol was equivalent to the size of British Columbia, Alberta and Saskatchewan combined. G.L. Edward. "The 200-Mile Economic Zone: New Territory, New Commitment, New Worries." *Canadian Defence Quarterly* 6, No.3 (Winter 1976/77), 32.
[217] "Change in Emphasis in the Future, Canadian Maritime Effort," (Feb 27, 1969), Series 2, File 20.6, 1, George Lindsey Fonds, 87/253, DHH.
[218] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 17, Barney Danson Fonds, R13905-1415-0-E, LAC.

Canada wished to retain effective control over its claimed territory, it must actively patrol and enforce its jurisdiction within these waters.

In testimony before the Lafond Commission in 1983, the Commissioner of the Canadian Coast Guard, Vice Admiral (ret'd) A.L. Collier, testified that the current "[CCG] ships are not even built for enforcement of our national laws."[219] None of its ships were armed and only thirty-seven of fifty ships had the range to operate two hundred miles from the Canadian coast.[220] Furthermore, CCG crews were civilians who had little experience in the enforcement of Canadian law. In short, the coast guard was grossly ill-equipped to effectively protect Canadian sovereign waters and as such, the responsibility fell to MARCOM. However, the dismal state of MARCOM meant that it was only marginally better suited for this responsibility than the coast guard.

Canada's Atlantic patrol area alone totalled approximately 1.6 million square miles. [221] This vast area was patrolled by a mere twelve destroyers, of which only four were on station at any given time. In 1977, the former commander of MARCOM, Rear Admiral (ret'd) Robert Timbrell lambasted the government's sovereignty patrol policy as a sham. The monthly patrols undertaken by MARCOM's warships did little to enforce Canadian control over the waters it claimed or to deter the actions of foreign states in them.[222] The infrequency of these patrols meant that foreign vessels could exploit the natural resources and leave without ever being detected by Canadian authorities. Instead, these patrols only contributed to the wearing out of the ships and crew. The patrols in the High Arctic were particularly damaging as the destroyers'

[219] Schwartz, "Who's Guarding the Coast?," 20.
[220] Ibid, 20.
[221] Naval Officers Association of Canada, "A Paper on the Replacement of Canada's Naval Ships," (November 1, 1977), Vol 588, File 70607, 5, Pierre Trudeau Fonds, MG26-07, LAC.
[222] Timbrell, "On Canada's Maritime Defence Requirements," 47.

hulls were not designed for operations in ice. The constant need to be at sea also put a massive strain on the manpower of MARCOM. In 1977, Canada's maritime service was comprised of approximately nine thousand regular force sailors and three thousand reservists, of which six and a half thousand were committed for sea duty.[223] The high operational tempo meant that ships were either sent on patrol understaffed or sailors were constantly rotated amongst ships to ensure that minimal crew numbers were met. As such, there were few opportunities for shore leave or for land-based training which contributed to a precipitous drop in morale.[224]

In peacetime, Canada's main naval NATO commitments were to assign ships to STANAVFORLANT on a rotational basis and to conduct surveillance patrols to ensure that Soviet submarines were unable to carry out surprise attacks on American nuclear assets. In times of tensions and hostilities, Canadian maritime assets would be placed under the command of NATO's Supreme Allied Commander – Atlantic (SACLANT), a USN admiral with a multi-national staff that included Canadian officers based in Virginia, who would then distribute the ships to lower-level commands as operational needs dictated. The commander of MARCOM would also act as the NATO Commander, Canadian Atlantic Sub-Area. Despite Trudeau's initial desire for change, the technical limitations of most of the Canadian ships meant that there were only a few roles that they were capable of fulfilling. MARCOM retained its original NATO responsibilities only because it lacked the ability to effectively contribute to collective defence through other means and the refusal of the government to invest in the requisite equipment to do so.

[223] Naval Officers Association of Canada, "A Paper on the Replacement of Canada's Naval Ships," (November 1, 1977), Vol 588, File 70607, 3, Pierre Trudeau Fonds, MG26-07, LAC.
[224] Ibid, 3.

Contrary to the opinions held by some, the sovereignty patrols undertaken by Canadian warships in support of the coast guard and other government departments did in fact have significant military value as they allowed MARCOM to gain intelligence on the surface and sub-surface activities carried out by foreign nations in Canadian waters. Both American and Soviet nuclear submarines were known to traverse in the waters of the High Arctic without prior disclosure to Canadian authorities. The movement of the latter was particularly important as knowledge of the movement of Soviet SSBNs was a vital part of Canada's NATO responsibilities. In peacetime, Soviet submarines had the right to remain submerged in the waters along the North American coast indefinitely due to the principle of freedom of the seas.[225] As sea denial was not an option, the only thing which NATO forces could do about Soviet submarines was to maintain constant surveillance to ensure that they were not in a position to launch a sudden attack.[226] The monitoring of Soviet fishing fleets in conjunction with DFE was another particularly important task because as previously mentioned, these vessels were known to assist Soviet submarines operating off the Atlantic coast. The level of effort, set at 370 ships days annually, highlighted the importance of this task.[227]

The duality of Canada's maritime roles was confirmed by the 1975 Defence Structure Review. This posed a significant problem for MARCOM as it sought to define the requirements of its new warships, largely because they fundamentally required two different types of vessels. For the protection of Canadian sovereignty, a lightly armed medium-sized patrol ship was considered to be most suitable for the role. However, such a vessel had no warfighting capability

[225] George Lindsey, "Maritime Forces and Total War," Series 2 File 20.21, 9, George Lindsey Fonds, 87/253, DHH.
[226] Ibid, 11.
[227] A ship day is a measure of effort towards a particular role. In this context, MARCOM has committed to dedicate 370 days worth of time for its warships to conduct fishery patrol. "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 19, Barney Danson Fonds, R13905-1415-0-E, LAC.

nor did it contribute the overall NATO deterrence capability.[228] Conversely, larger combat-capable destroyers designed to carry out the NATO responsibilities were unsuitable for mundane sovereignty patrols as it represented an inefficient use of valuable assets.[229] The new warships which the Trudeau government sought to acquire through the SRP would need to be capable of completing both roles and ignited a number of interesting debates on how best to address this conundrum.

Chapter 4.2 – Competing Visions: The Debates Surrounding Canada's Next Warships

The central problem in the acquisition of new warships was how best to address the operational requirements of the service. An examination of the *Canadian Defence Quarterly*, the professional journal of the Canadian Armed Forces revealed a number of submissions by serving naval officers on the course they believed MARCOM should pursue. Two of the most prominent officers were Lieutenant Commanders S.T. Jessen and R.H. Thomas. Both argued that given the limited fiscal envelope and the strategic situation, Canada had no choice but to consider the procurement of smaller, multi-purpose ships as opposed to dedicated ASW ships.[230] While less capable than a specialized vessel, general-purpose vessels would have the operational flexibility and capabilities to conduct both sovereignty patrols and conduct ASW operations at a moderately effective level.

Lieutenant Commander Jessen's argument centered around the fact that large ASW destroyers were not cost-effective for the sovereignty patrols to which the government gave

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[228] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 19, Barney Danson Fonds, R13905-1415-0-E, LAC
[229] Jessen, "Surface Vessels for the 1980s," 26.
[230]Jessen, "Surface Vessels for the 1980s," 29; R.H. Thomas. "Ships for the Eighties." *Canadian Defence Quarterly* 2, No. 2 (1972): 18.

priority.[231] He supported that priority, citing the view of some analysts that strategic ASW patrols destabilized deterrence by threatening the Soviet second strike capabilities (see Chapter 4.1). Furthermore, the existing warships which required crews of 230 for the older destroyers and 280 for the new DDH 280s, were extremely expensive to operate for low-intensity sovereignty missions.[232] DND had committed to providing DFE with 370 ships days of patrol annually in addition to the service's own training days, NATO deterrence patrols and other commitments, leading to very high operating costs. In FY 1974-75, MARCOM's personnel and operating cost made up 92 percent of the service's budget which left a meagre 8 percent for capital purchase. It would have been impossible for MARCOM to acquire new warships had the trend continued unless additional drastic measures were taken. By FY 1977/78 when the CPF project was approved, MARCOM's spending on capital equipment had scantly improved to 12 percent of the service's budget.[233] A medium-sized general-purpose vessel could complete the same task much more effectively at a lower cost.

Lieutenant Commander Thomas, by contrast, noted that the trend was for warships to become larger to accommodate new sensors and weapons, with the result that they were capable of fulfilling more responsibilities.[234] Thus, although dramatic increases in the cost of each ship meant fewer vessels could be procured, these fewer ships could carry out the roles of larger numbers of earlier and less capable ships.[235] Certainly MARCOM's limited financial envelope meant that it could only acquire a limited number of highly advanced modern warships. There

[231] Jessen, "Surface Vessels for the 1980s," 26.
[232] The daily operating cost, including personnel costs, ranged from $17,900 for the DDH 205 to $24,800 for the DDH 280s. G.R. Lindsey. G.R. Lindsey, "Conference on Maritime Forces January," (20-21, 1972), Series X, Vol 68, 3, George Lindsey Fonds, MG 0005, LCMSDS.
[233] Annex A - Figure 2: RCN/MARCOM Expenditure 1961/62 to 1983/84.
[234] Thomas, "Ships for the Eighties," 15.
[235] The cost a warship increased from $25M per ship for the DDH 205s to approximately $150M for each CFPs

was, however, a limit to the trade-off for quality over quantity: a single ship, no matter how capable, can only be in one place at any given time. With the vast expanse of waters that MARCOM was required to patrol, the number of ships available was a major factor in the design of Canada's maritime policies.

Lieutenant Commander Thomas cited the British Type 21 frigate as a possible design that met Canada's operational requirements.[236] It was a medium sized general-purpose frigate with a displacement of approximately 2750 tons, had the requisite range and was able to carry a helicopter, which was a core component of MARCOM's ASW capability. However, it was never considered a serious option because it did not meet the specifications which will be outlined in Chapter 4.3. Instead, studies conducted by DND suggested that a variant of the USN's *Oliver Hazard Perry*-class frigates (FFG-7) was the only vessel which met both the service's needs and budget.[237]

Cabinet was also interested in the acquisition of a smaller vessel as the replacement for the aging destroyers and instructed defence minister Danson to investigate this possibility for the Ship Replacement Program in 1975. In its submission to Cabinet in November 1977, DND examined three alternatives: a fleet entirely comprised of sovereignty-patrol vessels, a fleet of warships, or a mixed fleet. Military officers, however, were unreservedly opposed to the acquisition of patrol ships for MARCOM, stating that "As lightly armed patrol ships cannot perform any tasks in which hostile action is expected or contribute to deterrence, the patrol vessels would be in addition to and not a replacement for the minimum combat capable fleet

[236] Thomas, "Ships for the Eighties," 18.
[237] Haydon, "Choosing the Right Fleet Mix," 69.

required."[238] Furthermore, "The employment of patrol vessels for sovereignty does not exploit the flexibility of warships and in fact, wastes the spare capacity of the ships that is available in peace." [239] The mixed fleet option was also dismissed because of the substantially higher infrastructure costs necessary to operate and maintain two different types of vessels.[240] As such, it was determined that only a fleet of warships was capable of meeting all of Canada's needs within the existing fiscal envelope.

The decision on whether to design and build the proposed warship in Canada or to procure it from a foreign shipyard was the source of much contention. There were several advantages with procuring an off-the-shelf design from abroad. First, they entailed less risk because the design was mature and, in many cases, had already seen service with another navy. This meant that all the costs were known and the only expenditure would be to modify the design to meet Canada's requirements. Second, Canada would benefit from an established supply chain for spare parts. Third, the vessel would be interoperable with other allied ships. Lastly, the ships would be able to enter service much sooner, without the years of lead time required for design in Canada and the development of the necessary shipyard capacity and expertise. For these reasons, an off-the-shelf design was the preferred option amongst military officers.

Others had doubts as to the capability of Canadian industry to carry out this momentous task. The Minister of State for Science and Technology (MOSST) Judd Buchanan was strongly opposed to the design and construction of warships in Canada. He argued that due to the cuts in the navy's technical branches since the mid 1960s, and the insufficiency of navy orders to sustain

[238] "Annex B – Considerations of Smaller Ships for Sovereignty Purpose of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 97, Barney Danson Fonds, R13905-1415-0-E, LAC.
[239] Ibid, 97.
[240] Ibid, 97.

the Canadian shipbuilding industry, neither DND nor industry retained the necessary managerial and technical expertise to conduct such a project.[241] He argued that "from a Canadian industrial standpoint…. this course of action makes little, if any sense. No Canadian company possesses the breadth of skills to undertake on its own the design, development and integration of the communications sensors and weapons system required for a modern fighting vessel of this type."[242] Furthermore, he stated that while such a product would appear to be Canadian, it would instead be an amalgam of foreign technology and equipment which did little to promote or develop Canadian industries.[243] Instead, he advocated for Canada to work with interested NATO partners to design and develop the frigate. He argued that such a course of action would not only lower costs due to a larger ship class but it would improve support capabilities and potentially lead to export orders which would sustain the industry in the long term.[244] Despite Minister Buchanan's opposition to the plan, for a variety of political and pragmatic reasons, Cabinet chose to proceed in a very different direction.

In a discussion paper submitted to Cabinet in October 1977, the Department of Industry, Trade and Commerce presented a case for the ships to be built in Canada. The CPF project would create or sustain three thousand jobs in the shipyards and even more in the supply chains necessary to serve the project; these economic activities would be lost if the ships were built abroad.[245] The built-in Canada option would contribute an additional $549.8 million in economic

[241] Judd Buchanan to Barney Danson, "Proposed Marine Patrol Frigate Requirement," (Nov 11, 1977), Vol 75 File 17, 1-2, Barney Danson Fonds, R13905-1396-0-E, LAC.
[242] Ibid, 3.
[243] Ibid, 4.
[244] Ibid, 3.
[245] "Appendix 4 - Impact of Government Procurement Policy on Navy Replacement Program: An Economic Analysis of The Canadian Shipbuilding & Repair Industry (ITC -18-77DP)," (October 5, 1977), Vol 75, File 17, 2, Barney Danson Fonds, R13905-1396-0-E, LAC.

benefits within Canada compared to the built offshore option.[246] It would also generate an additional $53.9 million in tax revenue and save the government $29.7 million in unemployment insurance payments for a net total of $83.6 million.[247] Furthermore, as Cabinet debated how to proceed with the CPF project, the state of the Canadian shipbuilding industry undoubtedly played a role in their decision-making. Due to a global recession and a large drop in demand for new commercial ships, the outlook of the Canadian shipbuilding industry was very bleak and likely would have collapsed in the near future without government intervention.

DND similarly supported the built-in-Canada option for pragmatic reasons.[248] Although procurement of a proven design from another country would be cheaper and deliver warships sooner, DND officials argued that there were over-riding disadvantages.[249] First, there would be little benefit for the Canadian economy and industrial capacity.[250] Since the Second World War, when the Canadian navy had great difficulty obtaining the latest equipment from Britain and the United States, or space in their shipyards for construction or refits beyond the capacity of Canada's industry, the Canadian government, and in particular, the RCN/MARCOM, had been keen to maintain a domestic shipbuilding and repair industry which it could turn to in times of crisis. Secondly, DND was worried about the downstream effect should a foreign warship be procured, particularly for refits and repairs. Lifecycle costs amounted to over half of the total project cost and if these needed to be carried out by foreign dockyards due to specialized parts or

[246] "Appendix 4 - Impact of Government Procurement Policy on Navy Replacement Program: An Economic Analysis of The Canadian Shipbuilding & Repair Industry (ITC -18-77DP)," (October 5, 1977), Vol 75, File 17, 6, Barney Danson Fonds, R13905-1396-0-E, LAC.
[247] Ibid, 4.
[248] DMEM, "DND Position Paper: Foreign versus Canadian Build Canadian Patrol Frigate Project," (Nov 8, 1977), 11900-CPF-901 (8166), 5, Project Management Office Canadian Patrol Frigate Fonds, R112-702-1-E, LAC. Acquired through ATIP.
[249] Ibid, 4.
[250] Ibid, 1.

facilities, the cost estimates could rise significantly. Last, ships designed for a foreign navy were less likely to meet specific Canadian requirements. The seas of the North Atlantic and High Arctic feature unique environmental factors which if not properly addressed would have significant impact on the operational capability of the frigates.[251] Based on these factors, DND recommended that unless a foreign design met Canadian requirements at a significantly lower cost, the Government should pursue a domestically designed and built warship.

When questioned by his Cabinet colleagues on why DND preferred a domestically designed warship over an off-the shelf option, Barney Danson replied that existing designs would be at least 5-10 years old before construction started which would make them 13-18 years old even before the ships entered service.[252] The rapid pace at which technology advanced meant that the ship would be obsolete even quicker and there would be major complications in securing the necessary logistical support to sustain the ships over the course of the 25-year life cycle.[253] Furthermore, these designs were not built to Canadian specifications and would require substantial modifications in order to suit MARCOM's needs.[254] There were also political reasons why the next generation of MARCOM's warships should be designed and built within Canada and these will be explored in the next chapter.

The journey to develop the SOR for the Canadian Patrol Frigates was long and arduous as evident by the many competing visions on how MARCOM and DND should proceed with the program. However, the debates examined in this subchapter constituted only a small portion of

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[251] "Appendix 1 of Annex B – Environmental factors affecting ship characteristics of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 101, Barney Danson Fonds, R13905-1415-0-E, LAC.
[252] Dan Mainguy, "Memo to Cabinet - Ship Replacement Program: The Reason for the $63M," (December 20, 1977), Vol 75, File 17, 2, Barney Danson Fonds, R13905-1396-0-E, LAC.
LAC.
[253] Ibid, 2.
[254] Ibid, 3.

the overall discussions surrounding the direction of the SRP. The many voices from relevant stakeholders as well as military and political considerations resulted in a lengthy consultation period before the requirements of the CPFs were finally defined and presented to Cabinet in 1977.

Chapter 4.3 – The Requirements of the Canadian Patrol Frigates

The most important office in the formulation of the SOR of the Canadian Patrol Frigates was the Chief of Maritime Operations and Doctrine (CMDO) which in 1977, was held by Rear Admiral Charles Thomas.[255] This was not an easy task and the debates on the direction of the program, particularly whether Canada should acquire sovereignty vessels or patrol frigates, weighed heavily on the CMDO and his staff. The limited financial envelope of DND and MARCOM meant that it could only afford to acquire one type of vessel. In its submission to Cabinet in November 1977, DND unequivocally stated its opposition to the acquisition of sovereignty vessels to replace its destroyer fleet. Instead, it recommended the acquisition of a large frigate, stating that "although the first priority on the use of Canadian maritime forces in peacetime is the protection of Canadian sovereignty, the basic character of these forces must be determined by their NATO deterrence and combat roles."[256] The most interesting aspect in the preparation of the SOR by CMDO was how similar the requirements for both a sovereignty vessel and a patrol frigate were.

There were a number of essential capabilities for Canada's surface combatants regardless of the option chosen by Cabinet. The first was the ability to exert its presence in an area for a

[255] The SOR is not the technical requirements of the CPFs. Instead, they are just broad parameters which the bidders for the project have to meet. As to be detailed later, the CPF program requires the contractors to come up with solutions to meet DND's operational requirements.
[256] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 13, Barney Danson Fonds, R13905-1415-0-E, LAC.

prolonged period of time.[257] Given the vast expanse of waters for which MARCOM was responsible, this meant that the vessel had to possess both excellent endurance and range as well as the ability to operate in all the environmental conditions within its area of operation (AO).[258] The vastness of MARCOM's AO also meant that its ships had to be capable of operating at relatively high speeds in order to quickly respond to situations anywhere in Canadian waters. Furthermore, it also had to have the ability to escort or shadow other surface vessels and be sufficiently armed to respond when challenged.[259] Another mandatory requirement was to be capable of carrying the large CH-124 Sea King helicopter (and any future replacements, which would likely be at least as large) and operate the aircraft in all-weather conditions. This was vital as helicopters magnified the area which could be patrolled by a single vessel by a factor of fifteen times compared to a vessel without one.[260]

The sovereignty role assigned to MARCOM in *Defence in the 70s* required the navy to, amongst other duties, provide back-up for civilian enforcement agencies, conduct fishery patrols and prevent the exploitation of natural resources within Canada. This meant that at the minimum, a patrol vessel needed to be able to operate in all sea conditions found in Canadian waters as well as be able to keep pace with commercial cargo and fishing vessels.[261] Additionally, the 1975 DSR also affirmed that as part of the sovereignty role, MARCOM's vessels should be capable of detecting, tracking and if necessary, sinking hostile submarines operating in the nation's

[257]"Appendix 2 of Annex E – Canadian Surface Ship Requirement for Sovereignty, Surveillance, and Deterrence in Peacetime of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 139, Barney Danson Fonds, R13905-1415-0-E, LAC.
[258] Ibid, 139.
[259] Ibid, 139.
[260] "Annex B – Considerations of Smaller Ships for Sovereignty Purpose of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 95, Barney Danson Fonds, R13905-1415-0-E, LAC.
[261] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 2, Barney Danson Fonds, R13905-1415-0-E, LAC.

sovereign waters.[262] To be able to effectively meet all these requirements, a sovereignty patrol ship needed to be able to attain a maximum speed of 30 knots, including the ability to perform all assigned tasks at 25 knots in conditions up to and including Sea State 5. [263] Other operational requirements included the endurance to be on patrol for up to two weeks at a distance of five hundred nautical miles away from its base and the ability to act as a scene commander to direct the operations of other ships, helicopters and aircraft in the area. This required the ship to possess a moderate command and control capability. A sovereignty patrol vessel was not expected to be an effective submarine hunter-killer. Instead, it would carry basic sensory equipment to locate, identify and track both surface and subsurface vessels that had already been detected by other means such as aircraft or SOSUS.[264] To be able to achieve all the stated capabilities, it would require a vessel with a displacement of at least 3200 tons. In broad terms, the requirements for an effective sovereignty patrol vessel were essentially those of a scaled down warship.

The requirements for a surface combatant while similar to a sovereignty vessel, were much more stringent due to the wider breadth of responsibilities it was expected to fulfill and the higher intensity of these activities. In order to be an effective convoy escort vessel, the ship must be able to at least keep pace with the vessels it was protecting. Most commercial vessels were capable of maintaining 25 knots in conditions up to sea state 5 due to their massive size which meant that the speed requirement of a surface warship suitable for the ASW/escort role was 28 knots in sea state 2 and 25 knots at sea state 5.[265] The trans-Atlantic nature of its escort roles also

[262] "Memo to Cabinet, The Defence Program – the Tasks," (February 6, 1975), Vol 6460, Cab Doc 78-75, 6, Privy Council Office Fonds, RG2-B-2, LAC.
[263] "Appendix 2 of Annex B – Statement of Requirement for a Fully Effective Sovereignty Patrol Ship of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 103, 105, Barney Danson Fonds, R13905-1415-0-E, LAC.
[264] Ibid, 105.
[265] Annex C – Ship Characteristics.

meant that a frigate was required to have significantly longer endurance than a patrol vessel. As such, it needed to have the storage facility to carry stores and supplies for up to ninety days.

The main difference between a sovereignty patrol ship and a combat-capable frigate rested in its onboard sensory suites and weaponry. The former carried basic sensors and limited armament for self-defence. In contrast, a patrol frigate primarily designed as an ASW vessel needed to be able to actively detect, locate and identify subsurface threats without the assistance of other systems. This required a specialized sensory suite that included an array of hull-mounted and towed sonar systems. To engage the threats it identified, it became necessary for the vessel to carry ASW weaponry on-board. Furthermore, while the ASW/ convoy escort function was the primary role of MARCOM, its warships must also have the flexibility to conduct other assignments as SACLANT's needs dictated. In order to be effective warship in a modern war and not be a hindrance to the other ships in the task force, the frigate was required to possess sufficient anti-air and anti-surface weaponry to capably defend itself from missiles and other threats. In order to house all of the requisite weapons, sensors and electronic systems, it required a vessel with a minimum displacement of approximately four thousand tons.[266]

The large size requirement for Canada's newest warships was also determined by the environment in which they were expected to operate. The North Atlantic is a perilous region where for up to 60 percent of the year, Sea State 4 is the most common condition which meant high winds, rough seas, low visibility as well as sub-zero temperatures.[267] The RCN's experience in the Second World War demonstrated that small vessels such as corvettes which had a displacement of approximately one thousand tons, were technically capable of operating in such

[266] Annex C – Ship Characteristics.
[267] "Annex B – Considerations of Smaller Ships for Sovereignty Purpose of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 95, Barney Danson Fonds, R13905-1415-0-E, LAC.

conditions. However, they were also battered by these conditions which made it a horrifying and debilitating experience for its sailors. Studies conducted by the RCN and MARCOM in subsequent years suggested that much larger warships were necessary to function effectively in these conditions. A small patrol vessel with a displacement of approximately two thousand tons would start to lose its effectiveness in Sea State 4 with significant decline once it reached Sea State 5.[268] Comparatively, a warship with a displacement of four thousand tons would also start to lose effectiveness in the same conditions; albeit, the decline would be less drastic because of the greater stability of the larger hull.

These findings were confirmed by the Future Ship Study conducted by the CMDO in 1980. Its examination of the authoritative *Jane's Fighting Ship* (1979-80 edition) revealed that most nations believed that a warship in the 3500-4200-ton range to be minimal size necessary for the protection of their SLOC based on the vessels which were built or acquired by major navies during the 1970s.[269] The study also reinforced the argument that a large and well-armed warship was the only vessel which met all of Canada's operational requirements. A vessel which lacked self-defence capabilities against aerial, surface or subsurface threats would be a liability rather than an asset as it would distract other ships in the task force from completing their primary mission.[270] Furthermore, warships with only a short-range self-defence capability would be of limited use unless it was perfectly positioned between the attacker and its target. In contrast, a warship with a long-range weapons capability would not only be able to provide sufficient

[268] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 95, Barney Danson Fonds, R13905-1415-0-E, LAC.
[269] Nigel Brodeur, "Warships Options for Canada – Excerpt from Future Ship Study," (1980), 3. Acquired from Nigel Brodeur.
[270] Ibid, 1.

protection for other vessels, but also offered a degree of deterrence that less capable ships could not.[271]

The differences in capabilities between a sovereignty patrol ship and a modern warship were significant. The former was limited to operations in Canadian waters or areas of low risk of hostile activity due to its lack of offensive and defensive capabilities. This meant that a sovereignty patrol vessel could not participate in NATO operations nor could it contribute to the overall deterrence capability of the alliance. [272] In contrast, a patrol frigate, whose minimum requirements exceeded those of the patrol vessel, was capable of completing both the sovereignty patrols tasked by the government as well as Canada's NATO responsibilities. It would have the range and endurance to operate far from its base, and carry the sensors, electronic systems and weaponry to operate in nearly all theatres and to perform a multitude of roles.

In September 1977, Cabinet finally accepted the argument that warships had the flexibility to conduct both NATO and sovereignty responsibilities while dedicated patrol vessels could not.[273] The cost difference between the two designs was another factor which helped to convince Cabinet to procure patrol frigates. A sovereignty patrol vessel which met Canada's requirements was estimated to cost about $93 million per ship; in contrast, a surface combatant would have cost approximately $139 million each (both in 1977 figures).[274] Given the relatively minor difference in cost but the large gap in capabilities, it was apparent that the acquisition of a

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[271] Nigel Brodeur, "Warships Options for Canada – Excerpt from Future Ship Study," (1980), 1. Acquired from Nigel Brodeur.
[272] "Annex B – Considerations of Smaller Ships for Sovereignty Purpose of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74 File 1, 97, Barney Danson Fonds, R13905-1415-0-E, LAC.
[273] Peter Haydon. "From Uncertainty to Maturity, 1968-1979" in *The Naval Service of Canada, 1910-2010*. Edited by Rich Gimblett, (Toronto: Dundurn Books 2009), 173.
[274] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 97, Barney Danson Fonds, R13905-1415-0-E, LAC.

warship would be the most cost-effective means for MARCOM to fulfill its responsibilities. The name, the Canadian Patrol Frigates, reflected the dual functions of Canada's newest warship.

Chapter 4.4 – The CPF Procurement Strategy

On December 22, 1977, the Pierre Trudeau government announced its decision to procure six new warships, termed the Canadian Patrol Frigates for MARCOM. The government chose to designate the new warships as frigates because they were designed for a specific mission profile, which in this case was anti-submarine warfare. In comparison, a destroyer was considered to be more of a general-purpose warship which also possessed a significant anti-air capability.[275] Furthermore, the CPFs lacked the C3 (Command, Control and Communication) suite found on the DDH-280 destroyers. Nevertheless, they were to be massive warships as at a length of 134m with a displacement of 4200t, it would be larger than many World War I-era light cruisers and were of comparable size to the DDH-280 destroyers.[276] The procurement of the CPFs was a landmark event in Canadian military history as this was the first naval procurement program since the end of the Second World War that was not designed and managed by the Canadian navy. Instead, the domestic shipbuilding industry took on the lead role in the design, system integration and construction of Canada's latest warships.

The new procurement strategy was introduced in response to the experience of the DDH-280 programs and other navy-major procurement projects.[277] In previous DND-directed shipbuilding programs, significant cost overruns and delays were incurred because they operated

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[275] "Question and Answer – Charles LaPointe at the signing of the CPF contract with SJSDD," (August 18, 1983), Vol 165, File 1, 6, Romeo LeBlanc Fonds, R12069-65-1-E, LAC.
[276] The CPFs were larger ships dimension-wise; the *Tribal*-class destroyers had a higher displacement due to the command and control center as well as a larger helicopter hanger.
[277] The CPF project also occurred concurrently with the air force's New Fighter Project which meant that cashflow was extremely tight and any cost overruns with either project would inevitably affect the other. DND, *CPF Project Completion Report*, 21.

on a "cost-plus" basis. The initial funding request was only for the base ship which was designed by the Director General Maritime Engineering and Maintenance (DGMEM) and his staff. DND officials would then return to Cabinet at later dates to request additional funds in order to bring the ship to operational standards.[278] In addition to being the customer, MARCOM also functioned as the architects for the ships and was responsible for the acquisition of key components such as weapons, electronic systems, and software packages which were supplied to the shipbuilders for construction and integration. This allowed the navy to make unlimited modifications to the designs in pursuit of the best ship to meet the service's operational requirements.[279] Although the final products were technological marvels and top-of-the-line warships, there were large financial over-runs, delays in completion, and thus political costs. In the case of the DDH-280 destroyers, which was the final major naval procurement program undertaken by DND officials, they were not fully operational until four years after they were delivered.[280]

The experiences of the General-Purpose Frigate program, HMCS *Bonaventure* refit and DDH 280 destroyer program led to very little trust in the ability of the navy to manage another major procurement program.[281] The sentiment echoed by major stakeholders such as Cabinet, and the Treasury Board, was "no more till you convince us you can procure equipment without delays, cost overruns & embarrassing us."[282] As such, a new procurement strategy was adopted for the CPF project and incorporated a number of new key features to ensure the failures of the

[278] Ed Healey, "Patrol Frigate Procurement Strategy." *Frontline Defence* Vol 14, No.2 (2017). https://defence.frontline.online/article/2017/2/6946-Patrol-Frigate-Procurement-Strategies
[279] Bowering. "Military/Naval Procurement in Canada: A Flawed Process," 2.
[280] Healey, "Patrol Frigate Procurement Strategy."
[281] Ibid.
[282] Ed Healey, Email to author, July 26, 2020.

past did not resurface. The project was divided into two phases: Project Definition (PD) and Project Implementation (PI). [283]

One of the major problems which plagued past procurement programs was that the project requirements were not explicitly defined. John Shepard, who was the project manager for both the *Protecteur*-class AOR ships and the CPF program at Saint John Shipbuilding (SJSDD) recalled that the former suffered from a lack of clarity on what the navy wanted which resulted in significant delays as the two sides negotiated a compromise to the technical problems. The CPF project had no such problems as the contract and stated requirements left no room for misunderstanding.[284] This was the result of a thorough project definition stage undertaken by the CPF Project Management Office.

When Barney Danson submitted DND's memo to cabinet in 1977 on the Ship Replacement Program, he requested $63M to conduct a Project Definition competition for the project. The purpose of the competition was to identify two potential contractors who would proceed to the Contract Definition stage, where $20 million would be provided to each to develop not only the final ship designs but the total support package necessary to operate and sustain the vessels through their life cycles. This was known as "Total Package Procurement" and entailed all the supporting infrastructure such as training facilities and manuals to be included without additional capital expenditure in addition to the delivery of six fully operational ships.[285] Some of the key deliverables which the Prime Contractor was responsible for included a Personnel Training Facility, a Gunnery Support Facility, a Propulsion Training Centre and a

[283] Refer to Chapter 0.2 for the nine steps of government procurement. PD consists of Steps 1-7; PI are Steps 8-9.
[284] John Shepard interviewed by Roger Chiasson, *Canadian Naval Technical History Association* 8-C17, (2007-2008): 11.
[285] Healey, "Patrol Frigate Procurement Strategy."

Combat Systems Training Centre.[286] As life cycle and support costs made up half of the project cost, it was imperative that post-delivery expenditures were accounted for to avoid the very large increments in costs of past projects. The implementation of the CPF procurement strategy undoubtedly made the process far more challenging for the potential Prime Contractor. Nevertheless, it helped DND to present a fully costed, defined and supported proposal to Cabinet and ensured that the cost of the CPFs would be within the stated budget.

Pierre Trudeau, as well as several other cabinet ministers, questioned the need to spend such a large amount of money for this purpose.[287] Romeo LeBlanc, the Minister of Fisheries and Environment, was displeased by the request as Cabinet had previously said that it did not have $1 million to spare for the construction of small ships to alleviate unemployment in the Atlantic provinces.[288] Minister Danson replied that it was necessary to ensure the project proceeded without the costly delays and cost overruns which plagued past programs.[289] Modern warships are extremely complex vehicles, consisting of over two hundred major and two thousand minor systems which must be operational and effective over the course of its 25-year operational life.[290] Furthermore, the CPF project was conducted at the same time as the New Fighter Project which meant that the cashflow of DND was extremely limited and overruns in either programs would affect the other as well, thus necessitating the need for a fully costed proposal.

A second notable aspect of the new procurement strategy was that the Prime Contractor would assume Total Systems Responsibility for the project. The concept of Total Systems

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[286] DND, *CPF Project Completion Report*, 9.
[287] "Cabinet Conclusion (51-77CBM)," (November 15, 1977), Vol 26843, 27, RG2 Series A-5-a, LAC.
[288] Ibid, 27.
[289] Ibid, 27.
[290] "Discussion Paper – Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 169, Barney Danson Fonds, R13905-1415-0-E, LAC.

Responsibility meant that the contractor, instead of the government, would assume responsibility for all aspects of the project from design, systems selection, project schedule and cost.[291] Due to the complexity in the design and integration of systems aboard a modern warship, it would not be possible to modify or exchange systems once the design had been finalized. This would prevent the past practice where naval design staffs were constantly making changes to the ship design even after construction began to incorporate new equipment and capabilities. In order to give the Canadian industry the greatest freedom to develop its proposal, the project operated under a Design to Cost principle. In practice, this meant that interested parties were only given minimum parameters for their proposals such as the project budget, the number of ships to be acquired and the basic capabilities desired from the vessels.[292]

The Request for Proposals (RFP) were issued to the Canadian industry in August 1978 and asked interested contractors to submit two proposals: one for Source Qualification and other for Contract Definition. The former required the contractor to detail its methods of meeting the government's technical, management, industrial benefits, contractual and costing requirements of the project. The latter asked them to outline how it would approach the competitive Contract Definition (CD) phase which would be used to develop comprehensive proposals for the ship system design, production, quality assurance, product support, program management and Canadian industrial benefit.[293] It also provided bidders with three options for source qualification: 1) Procuring the ship entirely offshore; 2) Acquire a foreign design to build in

[291] Department of Supplies and Services Canada, "Request for Proposal for Canadian Patrol Frigate," Vol 74, File 12, 6, Barney Danson Fonds, R13905-1372-8-E, LAC.
[292] Healey, "Patrol Frigate Procurement Strategy."
[293] Department of Supplies and Services Canada, "Request for Proposal for Canadian Patrol Frigate," Vol 74, File 12, 6, Barney Danson Fonds, R13905-1372-8-E, LAC.

Canada; 3) have the Canadian industry design and build the ships under DND's direction.[294] A fourth option, whereby DND officials would design the ships in partnership with the domestic industry and then build them in Canada, was not included in the final RFP because the degradation of DND's design and project management capability, which was a result of the manpower reductions from earlier in the decade meant that the defence department only possessed a minimal capability to administer such a program. It also did not align with the Government's desire to use the program to stimulate the growth of critical managerial and design skills in the Canadian shipbuilding industry necessary for its revitalization and long-term sustainability.

Five parties expressed initial interest and responded to the RFP. They were Genstar Marine Ltd, Pratt and Whitney Aircraft of Canada, a consortium led by Litton Systems with Davie Shipyard and Canadian Vickers, a consortium led by Sperry Rand Canada with Saint John Shipbuilding and Drydocks and Marine Industries Ltd and lastly, a consortium led by Canada Steamships Line Ltd. in conjunction with the Italian shipbuilder Cantieri Navali del Tirreno Riuniti.[295] In August 1981, this was whittled down to two finalists, a consortium led by Saint John Shipbuilding, and the other led by SCAN Marine. As illustrated in the next chapter, the selection of the finalists for the project was fraught with political interference and as a result, the victor of the CPF competition would not be announced until June 1983.

[294] Department of Supplies and Services Canada, "Request for Proposal for Canadian Patrol Frigate," Vol 74, File 12, 7, Barney Danson Fonds, R13905-1372-8-E, LAC.
[295] "Five bidders compete to build navy frigates." *Globe and Mail* (August 2, 1978): B3

Chapter 5 – A Vessel of Politics: Political Considerations and the Procurement of the CPFs

"The procurement of military weapons and equipment in Canada has often been controlled by partisan political considerations – not by a clear desire to increase the capability of the military."[296] – Aaron Plamondon

In February 1982, Vice Admiral Andrew Fulton, the commander of MARCOM invited the prime minister and his children to visit the fleet in Halifax. Over the course of two days, the group participated in a tour of both the HMCS *Iroquois* and HMCS *Okanagan*. As the excursion came to its end, Pierre Trudeau invited the admiral to meet with him the next time he was in Ottawa. Several months passed before Vice Admiral Fulton met with the prime minister to present a photo album from the excursion. At the end of the meeting as Trudeau ushered Fulton to the door, he said "Admiral, you will get your ships."[297] This anecdote, while lighthearted, was the cumulation of many years of work by defence officials leading to the procurement of the Canadian Patrol Frigates. Previous chapters detailed the demise of Canada's navy in the 1960s, the chaos of Pierre Trudeau's early years as prime minister and the new strategic landscape which navy officials faced as they defined the requirements of Canada's latest warships. The final aspect which has yet to be examined was the reason why the Trudeau government approved the project. This chapter will illustrate that although the decision to procure the Canadian Patrol Frigates was rooted in clear military needs, it was driven by political considerations.

[296] Plamondon. *The Politics of Procurement*, preface IX.
[297] Andrew Fulton. "Vice Admiral Andrew Fulton, 1980-83." In *The Admirals: Canada's Senior Naval Leadership in the Twentieth Century* edited by Michael Whitby, Richard Gimblett and Peter Haydon (Toronto: Dundurn Press, 2006): 333.

One of the overlooked aspects of *Defence in the 70s* was the use of the Canadian Armed Forces to produce socio-economic benefits for the country.[298] The procurement of equipment for the military had long been used by the government as a tool for economic growth, but the importance of industrial and regional benefits (IRB) increased significantly more under Trudeau. Notably, even as the rest of his foreign and defence policy fluctuated between 1969 to 1975, Trudeau's commitment to use the military for the betterment of Canada remained steadfast. He was even willing to consider the procurement of new aircraft and warships. However, this was always done under the context of promoting economic growth and not to increase the capabilities of its armed forces.[299]

When the defence minister Barney Danson announced the government's decision to acquire six frigates in December 1977, he stated that "… we have directed that the shipbuilding program optimise the fullest utilisation of Canadian industrial capability. There is, in Canada, a large number of firms engaged in the design and manufacture of mechanical and electronic systems for ships. Such firms in concert with Canadian shipyards and ship design agencies could provide the expertise required for the design and production phase of this shipbuilding program."[300] This point would be emphasized by members of Trudeau's cabinet throughout the project.

On June 29, 1983, when the victor of the competition for the CPF program was announced, Danson's successor, Gilles Lamontagne stated that "As the naval modernization program continues, hand in glove with the continuing modernization of Canadian industry, it is

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[298] Minister of National Defence. *Defence in the 70s: White Paper on Defence* (Ottawa: Information Canada, 1971), 14.
[299] Bothwell and Granatstein, *Pirouette*, 235.
[300] "Announcement by the Minister of National Defence on the DND Ship Replacement Program." (Dec 22, 1977), Vol 74, File 16, 3-4, Barney Danson Fonds, R13905-1372-8-E, LAC.

essential that the vital skills required are developed in a number of centres of excellence. Our overall maritime re-equipment program is therefore designed to develop and maintain modern capabilities and skills across Canada."[301] Jean-Jacque Blais, the Minister of Supply and Services (MSS) whose statement followed Lamontagne's, emphasized the fact that the project would create thirty thousand person-years of employment and that two-thirds of the project would be fulfilled by domestic firms.[302] This point was further reinforced by Charles Lapointe, who had recently succeeded Blais as the MSS, on August 18, 1983 at the signing of the contract for the CPFs in Saint John.[303] As this chapter will demonstrate, the design of the CPF project was heavily shaped by political considerations in order to maximize industrial development objectives that would be favourable to the government.

Chapter 5.1 – The Development of Canada's Indigenous Electronics Industry

The Trudeau government was eager to make use of the opportunity presented by the procurement of the Canadian Patrol Frigates to further the development of domestic industries. Modern warships are a collection of highly complex electronic and mechanical systems which requires numerous specialized technologies and capabilities to construct. The CPFs, which contained two hundred major electronic systems and two thousand minor subsystems were regarded as the perfect vessel to achieve this goal. One of the sectors which the government sought to expand was its indigenous electronics industry, as electronic systems was one of the fastest growing industries in the world with special emphasis placed on the creation of a systems integration capability. In 1977, the global industry was valued at $100 billion, 10 percent of

[301] Gilles Lamontagne, "Statement announcing the awarding of the CPF project," (June 29, 1983), Vol 213 File 1, 3-4, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[302] "Notes for a Statement by Jean-Jacque Blais on the Approval of the Project for the Construction of 6 Patrol Frigates," (June 29, 1983), Vol 165, File 1, 1, Romeo LeBlanc Fonds, R12069-65-1-E, LAC.
[303] "Notes for a Statement by Charles Lapointe on the signing of a contract with SJSDD for the construction of Six Patrol Frigates," (August 18, 1983), Vol 165, File 1, 1, Romeo LeBlanc Fonds, R12069-65-1-E, LAC.

which was from computer-based electronic systems alone.[304] In Canada, this subsector grew by 26 percent from the previous year.[305] The development of an electronic systems integration capability was of particular interest to the government not only because of its industrial and economic potential to create well-paying jobs but also because of its application in a number of secondary fields such as energy management, communications, and defence. However, growth in this field was dependent not on the amount of investment into production capability but on the continued accrual of knowledge and experience.[306]

The Minister of State for Science and Technology (MOSST) Judd Buchanan was especially keen to use the Canadian Patrol Frigate program to promote the development of the indigenous electronics industry. In 1978, the Department of Industry, Trade and Commerce identified the lack of a systems integration capability as one of the two major inhibitors in the growth of the fledging Canadian electronics industry. The other was domination of the field by foreign owned companies.[307] Due to the wide-ranging application and the sensitive nature of these technologies, there were already increasingly stringent restrictions on the export of these goods and capabilities by the countries of origin. If Canada was to maintain its status as a global leader in high technology, it was imperative that it devised the means to produce the required capabilities domestically which could not occur without positive government intervention.[308]

During the formulation of the Request for Proposal for the CPF project in 1978, Buchanan and Jack Horner, the Minister of Industry, Trade and Commerce, submitted a series of

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[304] Judd Buchanan. "Appendix 1 of Memo to Ministers – Canadian Patrol Frigate Program," Vol 74, File 12, 1, Barney Danson Fonds, R13905-1372-8-E, LAC.
[305] Ibid, 1.
[306] Ibid, 1.
[307] Judd Buchanan, "Memo to Cabinet – DND Ship Replacement Program: Establishment of a Canadian-controlled Electronics Systems Capability," (May 3, 1978). Vol 74, File 12, 1, Barney Danson Fonds, R13905-1372-8-E, LAC.
[308] Judd Buchanan. "Memo to Ministers – Canadian Patrol Frigate Program," Vol 74, File 12, 2, Barney Danson Fonds, R13905-1372-8-E, LAC.

memos to Cabinet to press for stronger language on the requirement for a Canadian-controlled firm to undertake the electronic systems integration aboard the Canadian Patrol Frigates. Systems integration was a key component of the project which made up nearly half of the project cost.[309] Buchanan acknowledged that an explicit demand for the systems integration to be completed by a Canadian-controlled company would lead to increased costs and decreased competition for the CPF program. However, he contended that the potential economic and industrial benefits were more than enough to justify the increased expenditure.[310] Furthermore, while systems integration was a vital component of the warships and failures by the contractor could derail the entire project, he believed that there were sufficient competencies within the Canadian electronics industry to meet the demands of the CPFs.[311]

DND, and to a lesser extent, DSS were opposed to the requirement that a Canadian-controlled firm be responsible for the electronic systems integrations for the CPFs. C.R. Nixon, the long-time Deputy Minister of National Defence had significant reservations about the use of the CPF program as a vehicle for the development of a Canadian systems integration capability and for other high technology purposes because it offered no guarantees that the industries created through the project would be sustainable without continued government intervention.[312] Furthermore, it would have significant implications for the management of the CPF project. The requirement not only added another level of constraints to an already complex shipbuilding

[309] "Briefing for the Honourable Romeo LeBlanc." (June 20, 1983). Vol 213 File 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[310] Judd Buchanan, "Memo to Cabinet – DND Ship Replacement Program: Establishment of a Canadian-controlled Electronics Systems Capability," (May 3, 1978). Vol 74, File 12, 2, Barney Danson Fonds, R13905-1372-8-E, LAC.
[311] Judd Buchanan, "Memo to Ministers – Canadian Patrol Frigate Program," Vol 74, File 12, 2, Barney Danson Fonds, R13905-1372-8-E, LAC.
[312] C.R. Nixon to Barney Danson, "Reaction to the Proposal to direct the involvement of Canadian-controlled firms in the Field of Electronics Systems Integration and Areas of High Technology in the Canadian Patrol Frigate Program" (May 24, 1978), Vol 74, File 12, 1, Barney Danson Fonds, R13905-1372-8-E, LAC.

program, but it also inhibited proposals based on foreign designs which in turn affected the competitive nature of the project and the ability for DND/DSS to procure a warship that met all the operational requirements at the lowest possible price.[313] Such a ban in foreign participation on the systems integration aspect of the project could potentially trigger international repercussions.[314]

Rear Admiral Jock Allen, the Associate ADM (Mat) concurred with Nixon and argued that such a Canadian content requirement went against the principle idea of letting the shipbuilding industry come up with the best designs and procurement strategy. It would have a significant impact on the formation of industry consortia as it would effectively force shipbuilders to collaborate with firms that had little experience in systems integration because of a government directive and would result in considerable unnecessary risks to the project. [315] Rear Admiral Allen recommended that if such a provision was to be mandated, it would be better to forego the RFP and instead to opt for a "DND-controlled engineering design and project control."[316] Cabinet was unswayed by the objections posed by DND officials, with ministers agreeing that the integration of at least two of the major electronic systems must be completed by a Canadian-controlled firm.[317] The requirement for a Canadian-based company to be responsible for the integration of major electronic systems over the objection of defence officials, was a clear example of how government political interests superseded those of the military.

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[313] C.R. Nixon to Barney Danson, "Reaction to the Proposal to direct the involvement of Canadian-controlled firms in the Field of Electronics Systems Integration and Areas of High Technology in the Canadian Patrol Frigate Program" (May 24, 1978), Vol 74, File 12, 2, Barney Danson Fonds, R13905-1372-8-E, LAC.
[314] Ibid, 2.
[315] J. Allen, "Aide Memoire to Minister of National Defence on Canadian Patrol Frigate Program," (April 21, 1978), Vol 74, File 12, 1, Barney Danson Fonds, R13905-1372-8-E, LAC.
[316] Ibid, 1.
[317] "Cabinet Conclusion - DND Ship Replacement Program: Establishing of a Canadian-Controlled Electronics Systems capability (27-78CBM)," (June 1, 1978), Vol 26844, 15, RG2 Series A-5-a, LAC.

Chapter 5.2 – The Revival of Canada's Shipbuilding Industry

Canada remains one of a select few nations that does not have a national shipyard system and instead relies on public-private programs for the construction of its warships. This means that the government acts as both a client and a patron of the shipbuilding industry.[318] Since the Second World War, the Canadian government had slowly nurtured an indigenous industry to ensure that its shipbuilding and maintenance needs were met. The RCN, in particular was eager to maintain a strong industry which could be quickly mobilized in times of emergencies. The massive shipbuilding program which took place after the Korean War epitomized this partnership. However, this arrangement also led the industry to be reliant on the Government for new contracts. Historically, the domestic shipbuilding industry subsisted largely on Government contracts as well as domestic commercial cargo vessels and fishing trawlers.[319] The Robertson Report commissioned by the Canadian Shipbuilding and Ship Repair Association (CSSRA) in 1970 stated that new construction work made up 50-60 percent of a shipyard's work between 1958-69. DND's share of new construction ranged from 2 to 32 percent during this period with an annual average of 18 percent.[320] Therefore, while naval constructions alone were insufficient to sustain the industry, it nevertheless represented an important source of revenue for the industry. With the commissioning of the final DDH-280 destroyer in 1973, the construction of warships in Canada ceased.

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[318] Michael Hennessy. "Some Observations on Canada's Experience Building Warships". *Canadian Naval Review* 12, No.4 (2017), 4-5.
[319] "Jack Horner, "Discussion Paper - The Canadian Shipbuilding and Repair Industry (ITC-18-77-DP)," (October 5, 1977), Vol 75 File 17, 1, Barney Danson Fonds, R13905-1396-0-E, LAC.
[320] DMEM, "DND Position Paper: Foreign versus Canadian Build Canadian Patrol Frigate Project," (Nov 8, 1977), 11900-CPF-901 (8166), 5, Project Management Office Canadian Patrol Frigate Fonds, R112-702-1-E, LAC. Acquired through ATIP.

The decline of the Canadian shipbuilding industry was the result of several factors, one of which was the lack of new military contracts due to fiscal austerity measures imposed on the Canadian Forces by the Pierre Trudeau government. The shortfall in funding, as explored in Chapter Three had been a persistent problem for the Canadian military that disproportionally affected MARCOM. Ideally, capital investment should make up half of MARCOM's budget to ensure that its equipment was modern and operationally effective. However, this level was never reached as the services prioritized its operational needs first amidst the many budget cuts during the 1960s and the procurement of new warships became a luxury rather than a requirement. The capital equipment budget averaged only 25 percent of total naval expenditure for much of the decade. Under Trudeau, MARCOM's budget for capital equipment funding fell to dangerously low levels. In FY1969-70, MARCOM's capital expenditure made up 26 percent of the navy's budget on account of the ongoing procurement of the DDH 280s and the *Protecteur*-class AOR ships. [321] By FY1975-76, this dropped to 9 percent, as inflation caused personnel and operating costs to soar.[322]

Globally, shipbuilding was a highly competitive but largely unprofitable enterprise. Most shipbuilders were dependent on government subsidies and protectionist measures such as tariffs or import restrictions to remain competitive and viable. From 1971 to 1975, there was a surge in demand for new commercial cargo vessels and 70 percent of all tonnage construction in 1974 – 1976 in Canada was marked for export.[323] The 1973 Oil Crisis, mentioned in Chapter Three as the catalyst for the 1975 Defence Structure Review, led a large number of businesses to

[321] Annex A - Figure 2: RCN/MARCOM Expenditure 1961/62 to 1983/84.
[322] Ibid.
[323] Jack Horner, "Discussion Paper - The Canadian Shipbuilding and Repair Industry (ITC-18-77-DP)," (October 5, 1977), Vol 75 File 17, 1, Barney Danson Fonds, R13905-1396-0-E, LAC.

reconsider their shipping needs.[324] This in turn resulted in a drastic reduction in new orders while numerous existing orders were cancelled. Competition for the few available contracts became fierce and the Canadian shipbuilding industry suffered immensely. Shipbuilding was a labour-intensive industry and the high cost of labour made Canadian shipyards uncompetitive on the global stage. The labour cost of a ship built in Canada could cost up to $20 per man-hour compared to $2 to $3 in a shipyard in South Korea.[325] As such, even the 25 percent tariff on imported vessels and a 20 percent subsidy to Canadian shipbuilders was insufficient to compete with foreign competitors.

In most countries, government subsidies covered over 30 percent of production costs in order to attract contracts for their national shipyards. In Canada, this was initially set at 50 and 40 percent for trawlers and commercial vessels respectively during the early 1960s.[326] However, as the argument that a strong domestic shipbuilding industry was necessary for national security reasons lost political appeal, these subsidies were reduced significantly. The Shipbuilding Industry Assistance Program (SIAP) introduced by the Trudeau government in 1975, provided only a 14 percent subsidy for orders placed that year. The value of the subsidy was planned to decrease by 1 percent annually until it reached 12 percent in 1977. However, in March 1977, it was raised to 20 percent in an emergency measure to prevent the mass layoff of workers as a large number of orders were completed concurrently at multiple shipyards.[327]

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[324] "Appendix 3 – Government Assistance to Shipbuilding of The Canadian Shipbuilding and Repair Industry (ITC-18-77-DP)," (October 5, 1977), Vol 75 File 17, 2, Barney Danson Fonds, R13905-1396-0-E, LAC.
[325] Jack Horner, "Discussion Paper - The Canadian Shipbuilding and Repair Industry (ITC-18-77-DP)," (October 5, 1977), Vol 75 File 17, 14, Barney Danson Fonds, R13905-1396-0-E, LAC.
[326] "Appendix 3 – Government Assistance to Shipbuilding of The Canadian Shipbuilding and Repair Industry (ITC-18-77-DP)," (October 5, 1977), Vol 75 File 17, 1, Barney Danson Fonds, R13905-1396-0-E, LAC.
[327] Ibid, 1.

Studies by DOI suggested that to maintain the level of employment at fourteen thousand workers, the industry would require a minimum of $350 million annually in new orders. The $70 million subsidy provided by SIAP reduced the requirement to $280 million which allowed the government to stave off the collapse of the industry and prevent the loss of thousands of positions. Nevertheless, the outlook remained bleak. As the Project Definition phase of the CPF program took place, the industry subsisted on lesser orders such as oil rigs and small vessels. By June 1983, when the Prime Contractor for the CPF project was announced, the situation was critical as only two shipyards had any construction work scheduled for beyond November of that year.[328] The collapse of Canada's shipbuilding industry led Vice Admiral (ret'd) J.C. O'Brien to lament "I see our navy being starved to death because Canada has abdicated its responsibility of maintaining a self-sufficient industrial base from which to produce the necessary equipment."[329]

Admittedly, the Canadian shipbuilding industry was a relatively minor contributor to the economy, accounting for 0.2 percent of the GNP.[330] In 1976, the industry employed approximately fifteen thousand people which amounted to just 1 percent of all construction positions in Canada.[331] While it supported an additional forty-five hundred positions through its supply chains, it was hardly a core industry which the government should devote resources to sustain. However, from a public policy perspective, the survival of the Canadian shipbuilding industry was vital for both national security and political reasons. DND relied heavily on civilian shipyards to assist in ship refits and repairs, as its own facilities were unable to keep up with

[328] "Industrial Benefits and Federal Government Ship Requirements, 1983 to 1992," (May 16, 1983), Vol 213 File 1, 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[329] Gerald Porter. *In Retreat: The Canadian Forces in the Trudeau Years*. (Ottawa: Deneau & Greenberg, 1978), 74-75.
[330] Jack Horner, "Discussion Paper - The Canadian Shipbuilding and Repair Industry (ITC-18-77-DP)," (October 5, 1977), Vol 75 File 17, 1, Barney Danson Fonds, R13905-1396-0-E, LAC.
[331] Ibid, 1.

demand.[332] Despite such needs, it was ultimately political considerations that made the need to keep the domestic industry afloat a necessity.

The shipbuilding industry had a disproportionate impact on several regions. Many of the major Canadian shipyards were located in the Maritime Provinces, Quebec and British Columbia in communities which otherwise had few other well-paying alternatives.[333] The unemployment rate in the Maritime Provinces, Quebec and British Columbia ranged from 7 to 12 percent and the collapse of the shipbuilding industry would have caused a significant ripple effect. [334] There were also wider economic consequences as shipyards supported many secondary industries, most notably the steel industry centered around Hamilton and the Niagara Peninsula. Pierre Trudeau's return to power in 1980 was largely based on the strong showing of the party in these regions which created a need to create economic benefits in exchange for continued political support.

The decline of the Canadian shipbuilding industry had significant impact on the CPF program. It was common practice in the industry to lay off workers between shipbuilding projects. Furthermore, unlike other nations, senior staff members and technicians were not retained, leaving the shipyards to deteriorate after each project. [335] This meant that each time a shipbuilding program was initiated, significant time and expenditure were required to rebuild expertise and refurbish the physical plant. The large gaps between the various naval shipbuilding programs of the 1950s and 60s, the DDH 280 destroyers, and the CPFs meant that a substantial

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[332] DMEM, "DND Position Paper: Foreign versus Canadian Build Canadian Patrol Frigate Project," (Nov 8, 1977), 11900-CPF-901 (8166), 5, Project Management Office Canadian Patrol Frigate Fonds, R112-702-1-E, LAC. Acquired through ATIP.
[333] Jack Horner, "Discussion Paper - The Canadian Shipbuilding and Repair Industry (ITC-18-77-DP)," (October 5, 1977), Vol 75 File 17, 5, Barney Danson Fonds, R13905-1396-0-E, LAC.
[334] "Appendix 4 - Impact of Government Procurement Policy on Navy Replacement Program: An Economic Analysis of The Canadian Shipbuilding & Repair Industry (ITC -18-77-DP)," (October 5, 1977), Vol 75, File 17, 3, Barney Danson Fonds, R13905-1396-0-E, LAC.
[335] Michael Hennessy. "Some Observations on Canada's Experience Building Warships". *Canadian Naval Review* 12, No.4 (2017), 6.

amount of talent was lost during the intervening years. The degradation of these essential capabilities and infrastructure was what prompted the Minister Judd Buchanan to argue that it was inconceivable for DND and the Canadian shipbuilding industry to carry out such a project in 1977.[336]

The prolonged depressed state of the shipbuilding industry also meant significant investments and time were necessary to prepare the shipyards for the construction of the CPFs. Due to a dearth of contracts for traditional commercial and government ships between 1977 to 1983, most of Canada's major shipyards had been reconfigured for the construction of oil rigs and small support vessels. As such, significant retooling was necessary to reconfigure the chosen shipyard to construct a large warship such as the CPF. Government studies predicted that based on the economic conditions and sustained demands from the energy sector, the earliest that construction could commence in a Canadian shipyard would be 1985 even if the CPF contract was to be awarded in 1983.[337] The Trudeau government willingly accepted this delay as it ensured that the warships would be designed and built within Canada.[338]

Chapter 5.3 – The CPF Bid Evaluation

On August 15, 1981, Jean-Jacques Blais, the Minister of Supplies and Services, announced that Scan Marine (SCAN) based in Montreal, QC and Saint John Shipbuilding (SJSDD) from Saint John, NB as the two finalists who would proceed to the Contract Definition Stage of the CPF Program. The selection of the two consortia was not without significant

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[336] Judd Buchanan to Barney Danson, "Proposed Marine Patrol Frigate Requirement," (Nov 11, 1977), Vol 75 File 17, 3, Barney Danson Fonds, R13905-1396-0-E, LAC.
[337] "Industrial Benefits and Federal Government Ship Requirements, 1983 to 1992," (May 16, 1983), Vol 213 File 1, 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[338] J.K. Wilson. "The Politics and Economics of Shipbuilding in Canada: Lessons for Naval Planning." (MDS Assignment, Canadian Forces College, 2009), 30.

political drama. In 1979, the CPF PMO recommended the selection of the consortia led by Litton and Sperry to proceed to the Contract Definition Stage. However, this plan went awry with the defeat of the Joe Clark government in March 1980. When Pierre Trudeau and the Liberal Party returned to power, the new Minister of Supply and Services, Jean-Jacques Blais notified the five contenders for the CPF project that they were insufficiently Canadian and would be given one month to adjust their bids to comply with the new requirements.[339]

Several of the leading contenders for the project, Sperry, Litton and Pratt & Whitney, made significant changes to remain in the process. Litton turned over the Prime Contractor position to its partnered shipyard, Canadian Vickers from Montreal.[340] Pratt & Whitney, who did not partner with any Canadian shipyard instead created a company, 99299 Quebec LTE, which later became Scan Marine, to become its candidate for Prime Contractor position. Lastly, Sperry made a similar change to its proposal with its major subcontractor, Saint John Shipbuilding who became the lead in its proposal.[341] Furthermore, Sperry created a wholly owned subsidiary, Paramax Electronics, to be responsible for the integration of electronic systems in order to strengthen the Canadian content of its proposal. As the PMO prepared to resubmit its recommendations, a lobbyist for Pratt & Whitney contended that the bid by Vickers should be disqualified due to a conflict of interest as Vickers-Stanwyck, a partially-owned subsidiary of Canadian Vickers, had hired T.A. Arnott, the first project manager of the CPF program as its new president. Though his employment had been approved by the government's conflict of interest office, Trudeau's cabinet made it clear that it would not approve of Vickers'

[339] Ed Healey, Email to author, September 1, 2020.
[340] Carey French. "Shipyards withdraw from groups bidding on frigate." *The Globe and Mail* (December 23, 1978): B2.
[341] Ibid, B2.

involvement. [342] As a result, SCAN replaced Vickers as one of the finalists to participate in the final phase of the competition for the CPFs.

During the Contract Definition stage, which took place over the course of fifteen months, the two-finalist consortia each received $20 million to develop not just the final designs of the warship but also detailed management plans, industrial benefits distribution proposals and lifecycle support arrangements. To ensure the transfer of critical design and managerial skills from DND to the shipbuilding firms, the Contract Definition stage operated under a "negative guidance" basis whereby the PMO would comment and advise the shipbuilders on problems in their submissions but would not provide solutions to them. In practice, DND officials would reject a concept or proposal without explanation or how to fix it to their liking, much to the displeasure of the shipyards' design staffs.[343] The final submissions were due on October 2, 1982 which was then assessed by a committee from DND, DSS, DOI and other relevant government departments. Notably, the PMO, recognizing the inherently biased nature of the office chose to abstain from the evaluation process and instead relied on naval officers not associated with the project to conduct the evaluation of the technical elements of the bids.[344]

The bids from SCAN and SJSDD were assessed based on their compliance with the project and government requirements, the risks involved in their proposal, and the ability of the consortium to undertake the project.[345] The specific areas in which the bids were evaluated were: the operational capability of the proposed warship, the ship design, the integrated logistics plan, the industrial benefits distribution plan, the financial soundness of the bidding consortium and

[342] Ed Healey, Email to author, September 1, 2020.
[343] John Shepard interviewed by Roger Chiasson, 8.
[344] Ed Healey, Email to author, July 26, 2020.
[345] D.S. Wright. "Assessment Note on Maritime Surface Ship Requirement – Canadian Patrol Frigate Project." (May 11, 1983) Vol 213 File 1, 4, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.

the management plan and team.[346] In nearly every aspect evaluated, SJSDD's bid was equal to or superior compared to those of its competitor. SJSDD's bid was especially strong in two key determinants: overall project risk and cost.[347]

The risk management factor was one of critical concerns of the CPF PMO. As previously mentioned in Chapter 4.4, the confidence of Cabinet, other government departments and the public in DND's ability to manage major procurement programs was already exceedingly low. The Trudeau government had already witnessed the cost overruns in the HMCS *Bonaventur*e refit and the acquisition of the CP-140 Aurora LRPA turn into political embarrassments under their watch; a third failed project would only cement DND's legacy of failures with devastating consequences for MARCOM. Both SCAN and SJSDD were mandated as part of their bids to make arrangements for large and comprehensive insurance policies which would cover the ships against all risks until their delivery; this ensured that the Government would be financially compensated if the program went awry.[348] However, no such guarantees were available to the navy if the ships failed to be delivered.

The bulk of Canada's surface warships – all but the four DDH 280s -- were near the end of their expected life. Not only were the destroyers operationally obsolete but both operating and maintenance costs had spiralled due to the advanced age of the vessels as well as the lack of readily available spare parts. Comprehensive Destroyer Life Extension (DELEX) refits, which started with the original St.-Laurent class destroyers in the late 1970s, extended the life of the destroyers by another decade. These refits were largely a desperation measure to extend the life

[346] Annex B - SJSDD vs SCAN Proposal Evaluation Summary.
[347] Ibid.
[348] Healey, "Patrol Frigate Procurement Strategy."

of vessels that were now more than twenty years old until the CPFs could enter service.[349] In the event the CPF project collapsed, a new shipbuilding program would have to be initiated thereby further delaying the delivery of MARCOM's latest warships by several more years. In such a scenario, the impact on the operational capability of MARCOM would be disastrous, and for this reason, the risk assessment was a critical factor in the bid evaluation.

The difference in the risks associated with SJSDD and SCAN's proposals were glaring as illustrated in Annex B. Nearly every aspect of SCAN's bid were judged to be of high risk with only the projected operational capability of the ships and the integrated logistics plan considered to be of medium risk. In contrast, SJSDD's proposal was rated to be of significantly lower risk with several elements (ship design and integrated logistics plan) deemed to be of low risk.[350] Furthermore, not only was SJSDD's bid considered to be of lower risk but it would provide the warships at a significantly lower cost.

The CPF project operated under a two-tier pricing system. The target price was the price which the Prime Contractor would strive to keep while the ceiling price acted as a hard cap for the project. A reward system was established based on the final cost of the project.[351] If the cost of the project was below the target price, the prime contractor would receive 20 percent of the savings under the target price as a bonus. Conversely, 20 percent of the overage would be deducted as a penalty if the target price was exceeded. Lastly, if the final cost exceeded the ceiling price, the contractor would receive no profit.[352] SCAN Marine's final proposal called for

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[349] Richard Greenwood. "An Engineer's Outline of Canadian Naval History, Part III (1970-2014)," *Canadian Military History* 23, No.3&4, (2014): 278.
[350] Annex B - SJSDD vs SCAN Proposal Evaluation Summary.
[351] "Question and Answer – Charles LaPointe at the signing of the CPF contract with SJSDD," (August 18, 1983), Vol 165, File 1, 12, Romeo LeBlanc Fonds, R12069-65-1-E, LAC. The pricing incentive was later removed in June 1994 with the signing of the Overall Amending Agreement. DND, *CPF Project Completion Report*, 12.
[352] Ibid, 12.

a target price of $5.791 billion and a ceiling price of $6.062 billion. By contrast, SJSDD's target price was $4.702 billion with a ceiling price of $5.373 billion.[353] The difference between the two offers was nearly $1 billion at the target price and $671 million at the ceiling price.

As part of the submissions for the CPF contract, SCAN and SJSDD were both asked to detail the cost and industrial benefit breakdown for alternative construction arrangements. Both bidders presented three possible construction options for the CPF PMO's consideration: (1) to build all six ships in a single shipyard, (2) three ships each in the Atlantic Provinces and Quebec, and lastly, (3) two ships each in shipyards located in the Atlantic provinces, Quebec and British Columbia.[354] From a project management perspective, there were no significant advantages to be gained from choosing either Options Two or Three other than to more equally distribute industrial and regional benefits (IRB). Not only would the government have to pay a significant construction premium, it would introduce unnecessary management burdens and risks as more parties became involved in the project.[355] However, their inclusion demonstrated that the distribution of IRBs was a top priority for Cabinet.

The distribution of industrial and regional benefits among the four primary Canadian regions was the most contentious issue in the CPF program because it was largely political in nature.[356] Given the immense monetary value and the socio-industrial potential of the project, it should be of no surprise that the CPF commanded significant political attention. One senior official involved in the project recalled that he would receive numerous phone calls or meeting

[353] "Canadian Patrol Frigate, Supplement to Memo to Cabinet (256-83MC)," (May 11, 1983), Vol 213, File 1, 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[354] Ibid, 2.
[355] "Canadian Patrol Frigate – Additional Analysis," (June 10, 1983), Vol 213, File 1, 3, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[356] The four regions of Canada are the Atlantic provinces (NB, NS and NFLD), Quebec, Ontario and the West (MB, AB, SK and BC).

requests from Member of Parliaments eager to have their constituents participate in the project.[357] The project was designed to provide maximum industrial benefits for Canadian businesses and as such, at least 65 percent of contents in the ships had to be Canadian. [358] Furthermore, if components needed to be acquired from a foreign source, the value of those parts would have to be offset by creating economic benefits of equal value within Canada. Another requirement of the CPF project was that the economic benefits generated from the project must equal to 100 percent of the project cost.[359] After it had won the competition, SJSDD committed to offset the $700 million worth of equipment and supplies it would acquire from abroad with additional Canadian contents and services.

The only advantage that SCAN held over SJSDD was in the value of its proposed IRB package. SCAN's bid proposed to generate $2.535 billion in industrial benefits compared to $2.373 billion for SJSDD. However, it heavily favoured Quebec where SCAN was based and where much of the design, construction and systems integration would occur. The IRB distribution of its single shipyard option by region was as follow: $1.569 billion for Quebec, $149 million for the Atlantic provinces, $669 million for Ontario and $148 million for the Western provinces. In contrast, SJSDD's proposal was much more balanced: $710 million for Quebec, $887 million for the Atlantic provinces, $695 million for Ontario and $91 million for the Western provinces. The IRB breakdown for the two-and-three-shipyard options for both consortia can be found in Annex D. [360] SJSDD's bid was assessed to not only be significantly cheaper than SCAN whilst being far less risky, it would provide more evenly distributed benefits

[357] Ed Healey, Email to author, July 26, 2020.
[358] "Briefing for the Honourable Romeo LeBlanc." (June 20, 1983). Vol 213 File 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[359] Williams. *Reinventing Canadian Defence Procurement,* 64.
[360] Annex D - Construction Options and IRB Distributions.

under its IRB proposal. On June 29, 1983, defence minister Gilles Lamontagne, announced SJSDD as the victor of the CPF competition and that construction of the warships would be split between shipyards in Saint John and in Quebec.[361]

DND officials had noted that while the decision to select SJSDD as the Prime Contractor and to build all the ships in Saint John would be the most cost-effective and least risky option, it would inevitably lead to significant backlash from Quebec as the difference in industrial benefits were enormous.[362] SCAN's single shipyard option would have produced $1.198 billion in IRB for Quebec compared to just $640 million in SJSDD's proposal. The resulting $558 million shortfall in industrial benefits for Quebec was deemed to be politically unacceptable for reasons which will be discussed later. However, as SCAN's proposal cost $709 million more than SJSDD's, it was not a viable alternative and attention then turned to the two-shipyard option. Saint John Shipbuilding's two-shipyard option would have seen half of the frigates built in its own drydock in Saint John, NB whilst the other three would be subcontracted to a Quebec-based shipyard. The arrangement would entail a $57 million construction premium. However, it would also largely bridge the IRB difference between the competitors to a mere $83 million, a price that the government was more than willing to pay. [363] The decision to split the construction of the vessels between two different shipyards despite the added premiums and additional risks it posed to the project once again demonstrated that political considerations were the foremost concern to Cabinet during the CPF project.

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[361] Gilles Lamontagne, "Statement announcing the awarding of the CPF project," (June 29, 1983), Vol 213 File 1, 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[362] "Canadian Patrol Frigate, Supplement to Memo to Cabinet (256-83MC)," (May 11, 1983), Vol 213, File 1, 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[363] M.C. Nelson, "Aide-Memoire for the Minister - Possible Socio-Economic Benefits for Saint John, N.B. if the Implementation Contract for the Canadian Patrol Frigates Program is awarded to a local company," Vol 213, File 1, 3, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.

Chapter 5.4 – The Quebec Caucus Crisis

Trudeau's return to power in the 1980 was largely due to gains in Ontario and the Atlantic provinces, but it was support in Quebec, long the bedrock for the Liberal Party, which made victory possible. Between 1965 and 1980, the party won no less than fifty-six seats in the province during federal elections.[364] The significance of Quebec to Trudeau was more than just its importance to the stability of his government or the fact that he was born there. Pierre Trudeau was a fervent federalist who was determined to keep the province a part of Canada.[365] Despite the defeat of the referendum for sovereignty association proposed by the Parti-Québecois provincial government in May 1980, the intensely nationalist premier René Lévesque still enjoyed great popularity and led a determined campaign against Trudeau's repatriation of the Canadian constitution in 1982 that sharpened tensions between Quebec and "the rest of Canada." Trudeau was acutely aware of the need to demonstrate the benefits of federalism, and the procurement of the Canadian Patrol Frigates was a clear opportunity.

Indeed, the procurement of the Canadian Patrol Frigates led to a full-blown political crisis which has largely gone unnoticed in Canadian history. While details are scant, it was a widely known fact amongst those familiar with the scene in Ottawa that the decision to award the contract for the CPFs to SJSDD had nearly led to a revolt of the Quebec caucus of the Liberal Party. At this point, there are two different narratives over what occurred. A senior naval official recalled that in a desperate final attempt, SCAN lowered its bid to match those of SJSSD within a day of the bids being opened. [366] This last-ditch maneuver was deemed to be in violation of the conditions of the tender by Treasury Board officials and resulted in SCAN Marine's bid to be

[364] Based on an examination of the results of Canadian federal elections from 1964 to 1980.
[365] Bothwell and Granatstein, *Pirouette*, 6-7.
[366] Milner, *Canada's Navy,* 289.

deemed non-compliant.[367] However, another equally well-placed participant in the CPF project maintained that this did not occur and that the decision to select Saint John Shipbuilding was based purely on the merit of its proposal.[368] In May 1983, when it became apparent that SJSDD was the far superior option, the Cabinet Committee, Foreign and Defence Policy requested an additional analysis to be completed by the Committee of Deputy Ministers, Foreign and Defence Policy on the distribution of industrial benefits.[369] It was evident that Cabinet was aware of the impending political fallout given how strongly the MPs from Quebec and the provincial media advocated for SCAN to be awarded the contract the warships, particularly since the difference in IRB for the province between SJSDD and SCAN's bids were significant.[370] DND officials were keenly aware of the political situation and used it to their advantage.

At the time, there were two other major maritime projects which were in development alongside with the CPF program: the Tribal Refit and Update Modernisation Program (TRUMP) refit for the DDH 280 destroyers and the construction of the Type 1200 Icebreaker for the Department of Transport. The former had been in development since 1977 and was intended to convert the four *Tribal*-class destroyers into area-air defence warships to fulfill a sorely needed capability gap. The value of the program was estimated at $1.4 billion and would have provided an additional $160 million in industrial benefits to the region in which it was awarded and would significantly narrow the IRB difference between the two proposals for the CPFs. The idea to link the CPF project and the TRUMP refit was the brainchild of Hans Hendell, a member of the

[367] Milner, *Canada's Navy,* 289.
[368] Ed Healey. Email to author. September 1, 2020.
[369] Committee of Deputy Minister, "Canadian Patrol Frigate: Additional Analysis," (June 10, 1983), Vol 213, File 1, 3, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[370] The difference in IRB between SJSDD and SCAN's bids for Quebec was $850 million and $400 million for the one shipyard and two shipyard options respectively. Annex D - Construction Options and IRB Distributions.

CMDO staff.[371] Hendell's proposal was that the region which lost the CPF program would be awarded the contract for the DDH 280 destroyer refit while the construction of the icebreakers would be reserved for a west coast shipyard.[372] This was a politically acceptable solution as it ensured that all regions of Canada would benefit from the government's shipbuilding programs.

Upon learning of the decision to award the contract to SJSDD, the Quebec caucus of the Liberal Party was furious and threatened to defect from the party, a move which would have triggered the collapse of the Trudeau government.[373] It did not matter that the province stood to gain the most from the distribution of industrial and regional benefits in SJSDD's plan, the mere fact that the Quebec-based SCAN Marine was not the victor of the competition had them livid.[374] In response, a number of measures were adopted by DND officials and recommended to Cabinet to placate the party's Quebec caucus. The TRUMP program was awarded to Litton Canada and completed by Davie, a Quebec-based shipyard. Furthermore, it was decided that the construction of three of the CPFs would be subcontracted to Versatile Vickers Inc. who then further subcontracted MIL shipyards to do the construction to ensure that Quebec received a share of the construction jobs. This decision resulted in a myriad of technical and legal problems which plagued the project long after the Trudeau government had left power.

After the decision to split the construction equally between Quebec and Saint John was agreed upon, Rear Admiral Ed Healey, the Project Manager of the CPF project at the time was approached by Andre Ouellet, the Minister of Labour about the feasibility of further subdividing

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[371] Milner, *Canada's Navy,* 289.
[372] "Annex G – Public Affairs Consideration of Canadian Patrol Frigate: Additional Analysis." (June 10, 1983), Vol 213, File 1, 1-2, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.
[373] Milner, *Canada's Navy* Milner, *Canada's Navy,* 289.
[374] Ed Healey, Email to author, July 26, 2020. By both the value of economic benefits and person/year employment, Quebec far exceeded the other provinces and regions of Canada. Refer to Annex D - Construction Options and IRB Distributions.

the construction of the three Quebec frigates between two shipyards. This was an inadvisable and costly proposition which from a project management perspective, made little sense as it added additional risks and costs to the program for no tangible gains. However, Minister Ouellet had made it clear that if the project were to receive approval from the Treasury Board, it would have to be to be implemented.[375] This arrangement, which cost an additional $40 million, was problematic as no additional funds were given to address this unforeseen complication. SJSDD was still expected to complete the project within the agreed to price ceiling and would be held liable for the failure to abide to the terms of the contract even if it was not at fault. [376] Fortunately for both the navy and SJSDD, any potential crisis was averted when the two Quebec shipyards, MIL and Davie, merged together in 1986.

The split nature of the construction of the Canadian Patrol Frigates nevertheless resulted in significant manufacturing delays. Build times for a ship class were generally supposed to decrease with each subsequent ship as the builders learned from past experience. When SJSDD began the construction of the lead ship in 1987, the drawings of the ships had yet to be finalized and as a result, production had to be halted until the designs caught up.[377] However, as construction of the CPFs was completed simultaneously in two different shipyards, the same mistakes were repeated by MIL-Davie when the latter began construction. According to John Shepard, the Project Manager at SJSDD, the construction of the CPFs took an additional eight to nine million man-hours to complete as a result.[378]

[375] Ed Healey, Email to author, July 27, 2020.
[376] John Shepard interviewed by Roger Chiasson, 7.
[377] Ibid, 8.
[378] Ibid, 8.

The decision to subcontract the construction of the CPFs also led to a number of legal issues which involved the Prime Contractor (SJSDD), sub-contactor (Versatile Vickers and its successor, MIL-DAVIE) and the Canadian government. Between 1983 to 1993, SJSDD (now renamed SJSL) initiated a number of claims against the Crown for a sum in excess of $800 million to recoup additional costs as a result of and not limited to uncompensated design changes, interference with subcontractors, unanticipated development work and wrongful interpretation of contract. Furthermore, the relationship between SJSL and MIL-Davie had deteriorated significantly. [379] In 1991, SJSL sought to terminate the subcontract with MIL-Davie for non-performance in addition to the growing cost overruns. Although both matters were eventually resolved, they would not have occurred if not for the original decision to subcontract the construction of three of the CPFs to a Quebec-based company for political reasons. Learning from this experience, the six follow-on frigates of Phase II were awarded to SJSL without competition in 1988.

This episode clearly demonstrated the enormous amount of influence that Quebec wielded in Canadian politics as well as the lengths to which the government was willing to go to placate the province. The Canadian government had initially paid a $57 million premium for the construction of the warships to be completed by two shipyards.[380] Paramax Electronics, which was responsible for the integration of major electronic systems aboard the CPFs, were also based in Quebec to create a high technology industrial capability in the province. However, neither was enough for the Quebec Liberal Caucus. To prevent the looming crisis, the Trudeau government took additional steps to satisfy the demands of its party members at the cost of significant

[379] DND, *CPF Project Completion Report*, 12.
[380] Annex B - SJSDD vs SCAN Proposal Evaluation Summary.

problems downstream. Fortunately for all parties involved, the resolution was to everyone's satisfaction. The Trudeau government survived a major internal crisis while the Province of Quebec gained significant economical benefits from the CPF project. MARCOM also received far more than they initially bargained for. Not only did they receive six top-of-the-line patrol frigates, but the DDH-280 destroyers were modernised and converted to area-air defence destroyers to fill an important capability gap.

Conclusion – A Marriage of Intersecting Needs

The first Canadian Patrol Frigate did not enter service until 1992, nearly a full decade after the events stated in this thesis and fifteen years after the project was first initiated. Despite the long timeline, the procurement of these warships was arguably the most successful Canadian military procurement project to date. Not only were twelve state-of-the-art frigates, designed and built in Canada to meet the country's specific needs, delivered to MARCOM but the project was completed well below the ceiling price and more important, all of the IRB goals had been exceeded.[381] To make this an even more important achievement was the difficult circumstances, both political and strategic, in which the project began. Over the course of the 1960s and early 1970s, just when important changes in NATO strategy and the rapid evolution of military technology demanded close government attention and the commitment of new resources, Canada's navy had slipped into obsolescence due to more pressing government priorities and widespread apathy towards the military. It was not until 1975 that the position of the Trudeau government shifted due to a confluence of international and domestic political developments to which the procurement of the CPFs provided an effective recourse.

As this thesis has demonstrated, the fate of Canada's military and especially its maritime service because of the long lead times and substantial resources required to build warships, are tied to the support of their political masters. In a democratic society, this was expected; what was unexcepted, was the pervasiveness of interference by domestic political considerations in the formulation of Canada's defence policies and the long-lasting impact that they would have. In the late 1940s, the RCN began its transition into a specialized ASW fleet due to the strategic

[381] DND, *CPF Project Completion Report*, 20-21.

situation which the fledging NATO alliance faced. In the years that followed, the state of the navy waxed and waned, following the tide of political interest in defence. However, the apathy that stemmed from concept of the "fireproof house" and the invulnerability of Canada from credible threats meant that the RCN was in a constant struggle to maintain its capabilities in ASW in a world that was rapidly evolving.

In the years which preceded the initiation of the CPF project, MARCOM became mired in a decade of darkness that was the result of political mismanagement. The decision by the Pearson government to expand social security services in 1964, which was highly popular politically, became the primary catalyst for the integration of the armed forces and later, unification. The ensuing Unification Crisis, an event manufactured by Paul Hellyer as he unilaterally sought to impose his vision on a military establishment that was reluctant to accept it, shattered the military and especially the navy. Meanwhile, the first years of Pierre Trudeau's tenure was hardly better for the beleaguered CAF as the new prime minister was hostile to the military and its preoccupation with NATO. Instead, he was determined to re-orient the CAF to serve the nation's interests at home at the expense of Canada's relationship with its allies.

The fortunes of MARCOM finally changed in 1975, once again for political reasons. Relations with the United States, Canada's principal trade partner, were strained at a time of an international economic downturn. The attempts by the Trudeau government to establish closer trade relationships with the EEC had been stalled due to the perception that Canada was unwilling to contribute to the collective defence of NATO. As Helmut Schmidt made it clear, "no tanks, no trade."[382] To sustain the confidence of its allies, given the material state of the

[382] Maas, *The Price of Alliance*, 107.

CAF, required more than just tanks but also new fighters and warships. The acquisition of the latter could not have come at a more opportune time for Trudeau, as in addition to the military need for new warships, there was a glaring domestic requirement to both rebuild the shipbuilding industry, then in crisis, and to promote broader industrial growth. As noted in Chapter Five, the Contract Definition phase of the CPF project was largely shaped by these considerations. From the new procurement strategy, which saw Canadian shipbuilders take charge of the project in an effort to avoid the political scandals that had been caused of projects managed by DND, to the IRBs policies and the significant premiums paid to ensure that the ships would be built in Canada with maximum Canadian content, all of this was done to fulfill the political objectives of the Trudeau government. The Canadians Patrol Frigates are undeniably the products of an intersection of military and political needs.

Annex A - Figure 1: Defence Expenditure 1946 - 1984

Fiscal Year Ending March 31	GNP ($000)	Annual Inflation (%)	Total Federal Expenditure ($000)	Total DND Expenditure ($000)	Total Navy Expenditure ($000)
1950	$ 18,491,000		$ 2,448,616	$ 384,879	$ 73,400
1951	$ 21,640,000	7.44%	$ 2,901,242	$ 782,457	$ 99,900
1952	$ 24,588,000	10.77%	$ 3,732,875	$ 1,415,474	$ 182,400
1953	$ 25,833,000	-2.08%	$ 4,337,276	$ 1,882,418	$ 260,300
1954	$ 25,918,000	0.00%	$ 4,350,522	$ 1,805,915	$ 289,000
1955	$ 28,528,000	0.00%	$ 4,275,363	$ 1,665,969	$ 304,200
1956	$ 32,058,000	0.71%	$ 4,433,128	$ 1,750,112	$ 340,800
1957	$ 33,513,000	2.82%	$ 4,849,035	$ 1,759,426	$ 326,700
1958	$ 34,777,000	2.74%	$ 5,087,411	$ 1,668,463	$ 295,000
1959	$ 36,846,000	2.00%	$ 5,364,040	$ 1,424,741	$ 273,000
1960	$ 38,359,000	1.31%	$ 5,702,861	$ 1,516,572	$ 255,800
1961	$ 42,927,000	1.29%	$ 5,958,101	$ 1,517,531	$ 245,500
1962	$ 42,927,000	0.00%	$ 6,520,646	$ 1,626,104	$ 272,000
1963	$ 45,978,000	1.91%	$ 6,570,342	$ 1,571,044	$ 269,400
1964	$ 50,280,000	1.88%	$ 6,872,402	$ 1,683,471	$ 298,000
1965	$ 55,364,000	1.84%	$ 7,218,275	$ 1,535,635	$ 272,500
1966	$ 61,828,000	3.01%	$ 7,734,796	$ 1,548,447	$ 275,000
1967	$ 66,109,000	3.51%	$ 8,779,681	$ 1,640,378	$ 305,700
1968	$ 72,586,000	4.52%	$ 9,824,081	$ 1,751,598	$ 281,600
1969	$ 79,815,000	3.78%	$ 10,738,956	$ 1,760,796	$ 377,200
1970	$ 85,685,000	5.21%	$ 11,921,595	$ 1,788,428	$ 373,900
1971	$ 94,450,000	0.99%	$ 13,183,144	$ 1,817,876	$ 401,100
1972	$ 105,234,000	4.90%	$ 14,840,865	$ 1,895,175	$ 415,600
1973	$ 123,560,000	5.61%	$ 18,340,000	$ 1,932,246	$ 402,300
1974	$ 147,528,000	9.29%	$ 22,551,000	$ 2,231,983	$ 431,000
1975	$ 165,343,000	11.74%	$ 29,213,000	$ 2,511,873	$ 457,800
1976	$ 191,857,000	9.78%	$ 33,978,000	$ 2,973,680	$ 393,200
1977	$ 210,189,000	6.27%	$ 39,011,000	$ 3,371,199	$ 424,900
1978	$ 232,211,000	9.01%	$ 42,902,000	$ 3,770,980	$ 522,100
1979	$ 364,279,000	8.55%	$ 46,923,000	$ 4,108,027	$ 580,000
1980	$ 297,556,000	9.71%	$ 52,364,000	$ 4,389,289	$ 556,500
1981	$ 339,797,000	12.20%	$ 62,378,000	$ 5,077,076	$ 680,600
1982	$ 358,302,000	11.30%	$ 67,474,000	$ 6,027,729	$ 781,500
1983	$ 390,310,000	8.24%	$ 78,276,000	$ 6,991,964	$ 953,300
1984	$ 428,500,000	5.49%	$ 88,615,000	$ 7,972,241	$ 1,157,300

* Inflation calculated using Bank of Canada's inflation calculator

** All other figures are from Dan Middlemiss' "Economic Consideration in the Development of the Canadian Navy since 1945" in *The RCN in Transition: 1910-1985*.

Annex A - Figure 2: RCN/MARCOM Expenditure 1961/62 to 1983/84

Fiscal Year Ending March 31	Total Navy Expenditure ($000)	Personnel ($000)	Percentage of Total Budget	Operating ($000)	Percentage of Total Budget	Capital Equipment ($000)	Percentage of Total Budget
1962	$333,000			$272,000	82%	$61,000	18%
1963	$332,000			$271,000	82%	$61,000	18%
1964	$376,000			$295,000	78%	$81,000	22%
1965	$342,000			$273,000	80%	$69,000	20%
1966	$345,000			$275,000	80%	$70,000	20%
1967	$385,000			$306,000	79%	$79,000	21%
1968	$398,000			$282,000	71%	$116,000	29%
1969	$377,200	$174,112	46%	$116,095	31%	$86,946	23%
1970	$373,900	$170,853	46%	$106,694	29%	$96,390	26%
1971	$401,100	$185,791	46%	$111,648	28%	$103,693	26%
1972	$415,600	$206,354	50%	$121,103	29%	$88,172	21%
1973	$402,300	$219,571	55%	$125,449	31%	$57,249	14%
1974	$431,000	$232,146	54%	$146,899	34%	$51,971	12%
1975	$457,800	$290,587	63%	$130,770	29%	$36,395	8%
1976	$393,200	$252,108	64%	$106,057	27%	$35,046	9%
1977	$424,900	$276,495	65%	$98,601	23%	$49,852	12%
1978	$522,100	$303,444	58%	$140,753	27%	$77,897	15%
1979	$580,000	$341,238	59%	$118,938	21%	$119,824	21%
1980	$556,500	$354,260	64%	$136,490	25%	$65,763	12%
1981	$680,600	$384,716	57%	$201,717	30%	$94,216	14%
1982	$781,500	$435,827	56%	$241,283	31%	$104,420	13%
1983	$953,300	$501,602	53%	$282,015	30%	$169,677	18%
1984	$1,157,300	$533,245	46%	$291,892	25%	$332,142	29%

* Figures from FY 1961/62 to FY 1967/68 are the actual expenditures of the RCN/MARCOM

Source: G.R. Lindsey, “Conference on Maritime Forces,” (January 20-21, 1972), Series X, Vol 68, 1, George Lindsey Fonds, MG 0005, LCMSDS.

** All other figures are from Dan Middlemiss' "Economic Consideration in the Development of the Canadian Navy since 1945” in *The RCN in Transition: 1910-1985*.

Annex B – SJSDD vs SCAN Proposal Evaluation Summary

Evaluation Summary - SJSDD

	Compliance						Risk			Ability		
	E	G	M	A	P	U	L	M	H	S	P	I
Operational Capability				●				●			N/A	
Ship			●				●			●		
Integrated Logistics		●					●			●		
Management			●					●		●		
Industrial Benefits				●				●		●		
Contractual			●					●		●		
Financial			●					●		●		

Evaluation Summary - SCAN

	Compliance						Risk			Ability		
	E	G	M	A	P	U	L	M	H	S	P	I
Operational Capability				●				●			N/A	
Ship				●					●		●	
Integrated Logistics				●				●			●	
Management			●						●			●
Industrial Benefits				●					●	●		
Contractual					●				●		●	
Financial					●				●		●	

Source: "Briefing for the Honourable Romeo LeBlanc." (June 20, 1983). Vol 213 File 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.

Legend					
Compliance		Risk		Ability	
E	Exceptional				
G	Good	L	Low	S	Superb
M	Modest/ Marginal				
A	Acceptable	M	Medium	P	Probable
P	Poor				
U	Unacceptable	H	High	I	Insufficient

Annex C – Ship Characteristics

SHIP CHARACTERISTICS

		PATROL FRIGATE	SOVEREIGNTY SHIP
SHIP PARTICULARS*	DISPLACEMENT – DEEP (TONS)	3965	3200
	DIMENSIONS (FT) LENGTH OVERALL/WATERLINE	418/394	374/356
	BEAM (WATERLINE)	47.5	42.0
	DRAFT	15.5	14.4
	PROPULSION TYPE	COGOG	COGOG
	(SHP) CRUISING POWER	2 x 5000	2 x 5000
	BOOST POWER	1 x 35000	1 x 35000
	SPEED MAX – SEA STATE 2	28	29
	MAX – SEA STATE 5	24.5	23
	RADIATED NOISE LEVEL	EQUAL TO DDH 280	GREATER THAN DDH 280
	RANGE AT 15 KTS.	4500 N.M.	4500 N.M
	FRESH/FROZEN/GENERAL STORES (DAYS)	30/45/90	30/30/30
SENSORS	UNDERWATER	TOWED ARRAY HULL MOUNTED SONAR	——— HULL MOUNTED SONAR
	ABOVE WATER AIR	AIR SEARCH	AIR SEARCH (REDUCED)
	ABOVE WATER SURFACE	SURFACE SEARCH NAVIGATION RADAR	——— NAVIGATION RADAR
	ABOVE WATER FIRE CONTROL	SURFACE & AIR	SURFACE & AIR (REDUCED)
	ELECTRONICS SUPPORT MEASURES (ESM)	FULL ESM OUTFIT	ESM (REDUCED)
	OTHER	———	———
WEAPONS	UNDERWATER	——— TORPEDO TUBES	SHORT RANGE A/S ROCKET ———
	ANTI AIR	MISSILES	———
	ANTI SURFACE	MISSILES	———
	GUN	1 X 76 MM 2 X 20 MM	1 X 76 MM 2 X 20 MM
	ELECTRONICS COUNTER MEASURES (ECM)	CHAFF/INFRA-RED/JAMMER	———
COMMAND AND CONTROL SYSTEM (CCS)		INTEGRATED CCS	DATA DISPLAY SYSTEM
COMMUNICATIONS		MEETS NATO REQ'TS	COMM'N (REDUCED)
HELICOPTER		SEA KING	SEA KING
ICE CAPABILITY		BRASH ICE	BRASH ICE
ACCOMMODATION		205	185
SAILAWAY COST 1977/ 78 * *		$ 139 M	$ 93 M
PROJECT COST 6 SHIPS 1977/78 * *		$ 1585 M	$ 1072 M

COMBAT

ENFORCEMENT

* - ALL SHIP PARTICULARS ARE NOMINAL, SUBJECT TO REFINEMENT

** - SAILAWAY COST IS THE COST OF ADDING ONE FULLY OUTFITTED SHIP TO THE PROJECT

COST DOES NOT INCLUDE HELICOPTER OR AVIATION STORES/SPARES

Reproduction of "Figure C of Annex B – Ship Characteristics of Maritime Forces Surface Requirements (DND-8-77DP)," Vol 74, File 11, 111, Barney Danson Fonds, R13905-1415-0-E, LAC.

Annex D – Construction Options and IRB Distributions

Project Alternatives ($M 83/84)						
Contractor Options (ATL - QC - WEST)	**Premium (M)***	**Total Cost Difference (M)****	**Atlantic (M)**	**Quebec (M)**	**Ontario (M)**	**West (M)**
SJSDD 6-0-0	$0	$0	$877	$710	$695	$91
SJSDD 3-3-0	$57	$57	$678	$966	$695	$91
SJSDD 2-2-2	$93	$93	$611	$883	$695	$277
SCAN 0-6-0	$0	$472	$149	$1569	$669	$148
SCAN 3-3-0	$58	$530	$416	$1360	$669	$148
SCAN 2-2-2	$132	$604	$336	$1286	$669	$376

* Relative to the cheapest option for each contractor

** Relative to the lowest cost option (Building all six ships in Saint John)

Source: “Briefing for the Honourable Romeo LeBlanc.” (June 20, 1983), Vol 213 File 1, Romeo LeBlanc Fonds, R12069-3185-4-E, LAC.

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