The Continental Imbalance and Canadian Defence Options.

Cuthbertson, B. C. U

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THE CONTINENTAL IMBALANCE AND CANADIAN DEFENCE OPTIONS

by

Brian Craig Uniacke Cuthbertson

Department of War Studies, King's College, London

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ABSTRACT

The aim of this thesis is to analyse the influence that the North American continental imbalance has had on the formulation of Canadian defence policy, in order to derive the defence options open to Canada in the last quarter of the 20th century. By continental imbalance is meant the disproportionate imbalance in political, economic and military power between Canada and the United States.

The influence of the continental imbalance on Canadian defence policy has varied in the last one hundred years, but has been most influential during periods of United States overseas expansion. The Cold War period of United States overseas expansion and consequent increased United States strategic requirements made it extremely difficult for Canada to separate national, continental and NATO defence requirements. The principal argument of this thesis is that the apparent lessening of United States overseas activity and changes in United States strategic requirements provide Canada with a wider set of defence policy options than it has had since the beginning of the Cold War. This wider set of options allows for a clearer separation of national, continental and NATO defence requirements than has been previously possible. The era when continental defence requirements have been considered as permanent and strategically
indivisible appears to be ending. The principal
Canadian defence requirement in the future is likely to be
the necessity for an independent naval capability
sufficient to ensure unhindered use of contiguous
waters and of the resources of the world's second
largest continental margin.
ACKNOWLEDGEMENTS

I would like to thank my supervisor, Professor L. W. Martin, for his advice and encouragement.

I wish also to express my thanks to the following persons: My wife, Dr. Lindsay MacDonell, for her support and for proofreading this thesis, and Mrs. Sylvia Smither, the Departmental Secretary of War Studies, for her administrative assistance.

This thesis embodies the results of my own research.
## CONTENTS

<table>
<thead>
<tr>
<th>Abstract</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>2</td>
</tr>
<tr>
<td>Chapter 1 Review of Literature</td>
<td>5</td>
</tr>
<tr>
<td>Chapter 2 Canadian Defence Policy and Relations with the United States 1867-1945</td>
<td>25</td>
</tr>
<tr>
<td>Chapter 3 Continental Air Defence and NORAD</td>
<td>55</td>
</tr>
<tr>
<td>Chapter 4 The Options in Air Defence</td>
<td>111</td>
</tr>
<tr>
<td>Chapter 5 Canadian Maritime Interests and Naval Policy 1867-1974</td>
<td>145</td>
</tr>
<tr>
<td>Chapter 6 Collective Defence and Canadian Naval Policy</td>
<td>193</td>
</tr>
<tr>
<td>Chapter 7 National Maritime Interests and Canadian Naval Policy</td>
<td>227</td>
</tr>
<tr>
<td>Chapter 8 The Canadian Arctic, Territorial Defence and NATO's Northern Flank</td>
<td>271</td>
</tr>
<tr>
<td>Chapter 9 The Armed Forces and Internal Security</td>
<td>316</td>
</tr>
<tr>
<td>Chapter 10 Rendering Unto Caesar... and Canadian Defence Options</td>
<td>352</td>
</tr>
<tr>
<td>Guide to Abbreviations</td>
<td>371</td>
</tr>
<tr>
<td>Bibliography</td>
<td>375</td>
</tr>
</tbody>
</table>
CHAPTER 1

REVIEW OF THE LITERATURE

General Comments

The most striking feature of Canadian defence literature is the dearth of comprehensive, objective and scholarly surveys of Canadian defence policy. There are, in fact, only two such studies; one written in 1940 by C.P. Stacey and the other by C.S. Gray in 1972. In the intervening period, there has been a plethora of articles and pamphlets, most of which are highly polemical and written by authors whose backgrounds in defence studies have been somewhat limited. The non-polemical literature on continental defence has been written mainly by Americans attempting to rationalize its implications for Canada.

The high standard of Canadian historical literature, written with the assumption that "the military and diplomatic components of national security policy are, and ought to be, indissolubly combined, in study and analysis as well in formulation and execution",¹ is in striking contrast to the literature on contemporary Canadian defence policies. The principal writers have been C.P. Stacey

and James Dayrs. Professor Eayrs freely admits he writes about those aspects which interest him the most. This leaves one, certainly in his third volume, *In Defence of Canada: Peacemaking and Deterrence* (1972), with an impression that the full story has not been told.²

Colonel Stacey's *Arms, Men and Governments: The War Policies of Canada 1939-1945* (1970) is a comprehensive and exhaustive critical examination of Canadian Second World War political and military policies. Both Professor Eayrs and Colonel Stacey had access to sources not readily available to others and reprinted, often in full, the most pertinent documents. Many of the references, in this thesis, to their books are to these reprinted documents and relatively inaccessible sources, such as parts of the Mackenzie King diaries and the Claxton and Foulkes papers.

**Overviews of Canadian Defence Policy**

There are basically two approaches one can take in writing about Canadian defence policy. The first is to analyse it in the context of the interaction of political, historical and strategic factors. The second is to analyse it in a largely strategic context to determine strategic requirements. The advantage of the former approach is that defence policy is placed in a larger context, but with the concomitant disadvantage that the clarity of strategic argument may be submerged by extraneous

considerations. The advantage of the latter is that it clarifies strategic requirements by their intellectual separation from other factors in the overall national policy equation. Its disadvantage is that apparent strategic truisms, removed from their political and historical context, beg questions rather than answer them. Generally, Colonel Stacey in his The Military Problems of Canada: A Survey of Defence Policies and Strategic Conditions Past and Present (1940) follows the former approach and Dr. Gray in his Canadian Defence Priorities: A Question of Relevance (1972) follows the latter.

Although Colonel Stacey wrote in wartime 1940, he attempted an examination of "the permanent elements of Canada's strategic position" using both historical and contemporary analyses of events. For example, in analysing the history of an unmilitary people with more of a military history than most Canadians generally admit, he remarks:

Their [the people of Canada] history is full of warlike episodes, and they have proved on many occasions that they can be skilful and determined fighters; yet few nations have shown more profound antipathy to the idea of military preparations in time of peace or less interest in military affairs generally except in moments of emergency. Canada's history is marked by an alternation of long periods when the national defences are almost utterly neglected with short violent interludes, arising out of sudden foreign complications, when the

country awakes to the inadequacy of those defences and tries to make up for earlier inactivity by measures taken in the teeth of the crisis.

This unmilitary outlook is certainly in great part the result of Canada's political connection with Great Britain and the protection which she has consequently received from the mother country. Part of it is due to the special point of view of the French Canadians. But part of it is also due to geography and the North American environment; until a generation or so ago, in the days before the Battle of Manila Bay, much the same attitude and outlook were found in the United States. Finally, in the most recent period, American friendship, the United States fleet, and the Monroe Doctrine have been pressed into service to aid in explaining the continued existence of a mentality which was familiar even in the days when an Anglo-American war was far from "unthinkable".

Dr. Gray's aim in 1972 was "to investigate what ends, and with likely effectiveness (and at what cost), defence policy can serve for Canada." Canadian defence policy is investigated by an exploration of the contributions that defence activity may make towards the performance of certain essential services to the nation. He groups the services under security, sovereignty and independence, and national development. He argues that "This approach serves to broaden the range of activity that may properly be labelled as defence policy activity and suggests 'trade-offs' and new ways of looking at problems that tend to be ignored in traditional analyses that focus almost exclusively upon

4 Ibid., pp 53-4.

such prominent monuments as NORAD, NATO, and peacekeeping."

The principal weakness of Dr. Gray's analysis is that it is too contemporary, or as Hedley Bull in his review remarked, it may be read as a kind of extended commentary on the white paper [Defence in the 70s, 1971], and provides a critical and discriminating guide to the thinking of what may loosely be called the Canadian defence establishment ... Strategy is a science of means not ends, and the question with which Mr. Gray's book leaves this reviewer is whether books should be written that confine themselves to its terms.

By paying insufficient attention to political and historical factors, Dr. Gray places too much credence in contemporary government statements and public criticism by a small but vocal minority. The result was that even by the time the book was published, the government was reversing itself on defence policy and by 1975 had in practice reverted to the historical tenets of Canadian defence policy. This has taken place with hardly a murmur of public criticism; indeed it has invoked considerable support. This does not destroy Dr. Gray's analysis which was very comprehensive and objective. It does, however, point out the weakness of his approach in contrast to Colonel Stacey's earlier study, which had a perspective not present in Dr. Gray's.

Continental Defence

Continental defence began with the Ogdensburg Declaration of August 1940 and the setting up of the

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6 Ibid.

Permanent Joint Board on Defence (PJBD). The two principal sources for these developments are the United States official history *Military Relations Between the United States and Canada 1939-1945* (1960) by Stanley W. Dzuiban and C.P. Stacey's *Arms, Men and Governments: The War Policies of Canada 1939-1945*. Colonel Stacey had access to the Canadian records and to Mackenzie King's diaries and is therefore the more complete study.

Colonel Stacey's book has been very much at the centre of the debate about Mackenzie King's prime ministership, but this thesis does not enter into it. However, in a recent article, "The Turning-Point: Canadian-American Relations during the Roosevelt-King Era", he argues that by the end of the war King had become so disturbed over developing Canadian-United States ties that he told cabinet he "believed the long range policy of the Americans was to absorb Canada."\(^8\) Colonel Stacey joins the ranks of Canadian tory historians, such as Donald Creighton, when he suggests that "the future historian may ultimately conclude that the worst blow Canadian nationality ever suffered was the decline of the British Empire."\(^9\) I accept the tory interpretation of Canadian history and this is reflected in parts of this thesis; hopefully in a critical manner. In fact, the basic argument of this thesis is that

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contemporary political and strategic conditions allow for a lessening of Canadian-United States defence cooperation, but that a return to the "golden age" of Canadian nationality is probably out of the question.

Turning to more contemporary literature on continental defence, one finds only two major published studies and one unpublished study, all by Americans. Melvin Conant's *The Long Polar Watch; Canada and the Defense of North America* (1962) is an attempt to explain and rationalize the inescapable necessity for a permanent and intimate defence relationship. He contends that the "hostility of the Soviet leadership toward free institutions and free peoples and the growth of Soviet military power makes it imperative that the forces that oppose Soviet ambitions be strongly armed, increasingly vigilant, and politically united."¹⁰ He argues further that changes in the requirements for the defence of strategic forces has placed Canada in "the forefront of Western defense" and that "without either nation really intending it, Canadians find themselves inextricably involved in the purposes and power of the United States. If geography has made the relationship inescapable, the disparity of resources has made the partners all too manifestly unequal."¹¹ From this he concludes that

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¹¹ Ibid., p 142.
"In order for Canada to play its full role in the free-world alliance, Canadians must first realize that the defense alternatives open to them and to the other members of the alliance are actually very few in number and permit of no very radical change in course."  

Mr. Conant accepts the United States' assumption that intimate defence cooperation is a permanent aspect of Canadian-United States relations and that United States strategic requirements are the dominant factor. His "permanent" solution for the Canadian-United States defence relationship is provided in his A Perspective on Defence: The Canada-United States Compact (1974). In this he advocates the "creation of a single comprehensive defence organization embracing the land, sea, and air components of the Canada-United States defence relationship."  

He admits it is unlikely that any new arrangements would ensure more meaningful consultation. Mr. Conant is sufficiently knowledgeable about Canadian affairs to understand the Canadian historical antipathy and resistance to any formal, comprehensive and permanent alliance. He is also aware that "relations between Canadian and U.S. governments are probably more strained than at any other time in living;" 

12 Ibid., p 143.  

13 Melvin A. Conant, A Perspective on Defence: The Canada-United States Compact, Behind the Headlines, Vol XXXIII, No 4, (September 1964) Canadian Institute of International Affairs.
memory" but he ignores the implications of this upon the assumption that organizational changes will suffice.

A scholarly and comprehensive study of the most important and disruptive period of the Canadian-United States defence relationship is Jon McLin's *Canada's Changing Defense Policy, 1957-1963: The Problems of a Middle Power in Alliance* (1967). It seems unlikely when the documents of the period are opened that his analysis of the "curious contretemps which marked the relations between the United States and Canada during the period of development of the Arrow aircraft and the Bomarc missile" will be challenged. Where he is open to challenge is in his interpretation of the significance to overall Canadian-United States relations and in particular to defence relations of these "curious contretemps".

Much depends on one's interpretation of the Diefenbaker years when the Renegade, as Peter Newman in his critical study of Diefenbaker called him, was in power. Mr.

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14 Robert A. Dunn Jnr., "Canada and the Economic Discontents," *Foreign Affairs*, Vol 52, No 1, (October 1973) p 119. Mr. Dunn begins his article with this remark and ends it with the 'note that both countries are in the same boat - and that it will not help to hit each other with the oars.' p 140. His assumption is the same as Mr. Conant's - an intimate "permanent" relationship.


16 Peter C. Newman, *Renegade in Power: The Diefenbaker Years*, (Toronto: McClelland and Stewart, 1963). Mr. Newman since then has become a fervent nationalist; one is tempted to say in the Diefenbaker mould.
Diefenbaker was an inept administrator but from the view of instant history, I would suggest that Mr. Diefenbaker's attempt to reverse the liberal continentalist flow of Canadian post-war history did not fail completely. One can find no United States commentators on Canadian affairs, however sensitive to the Canadian condition, who recognize that Mr. Diefenbaker acted from a deep commitment to Canada as a viable northern transcontinental state whose history and interests were far from being coincidental with those of the United States. An articulate, but somewhat polemical, statement of this commitment is George Grant's _Lament for a Nation: The Defeat of Canadian Nationalism_ (1965).

I have accepted Mr. McLin's analysis of the events surrounding the cancellation of the Arrow, Canadian acceptance of nuclear weapons, the defence production sharing agreements, and the debate over NORAD. I have included only enough background on these events to maintain continuity. I have, however, concentrated on two aspects; the strategic requirements for air defence and NORAD, and the Cuban Missile Crisis. The purpose of concentrating on the strategic requirements for air defence is to argue that the requirement is not permanent but temporary. I also argue that the Cuban Missile Crisis was a turning point in the

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17 George Grant is the grandson of "the" George Monro Grant (1835-1902) who was one of the foremost Canadian imperialists of his era. The present George Grant's critique of North American society is in his _Technology and Empire: Perspectives on North America_, (Toronto: House of Anansi Press, 1969).
continental defence relationship because it demonstrated how political and historical factors outweighed strategic logic. It demonstrated that the coincidence of Canadian and United States interests was both less complete and less permanent than had been assumed.

The most comprehensive analysis of the Canadian-United States defence relationship is Dr. Roger Swanson's "An Analytical Study of the United States/Canadian Defense Relationship as a Structure, Response and Process: Problems and Potentialities" (1969). This is an unpublished PhD thesis but a summary of his analysis has been published in a Behind the Headlines pamphlet of the Canadian Institute of International Affairs. Dr. Swanson's main argument is that...

... the United States contemporaneously constitutes a national security threat to Canada in the form of an inadvertent United States hegemony, resulting from a continental involvement of tremendous disproportion coupled with an unusually low degree of natural-cultural barriers .... casting the United States in this light does not constitute a generalized indictment of the United States nor an imputation of specific United States actions, for indeed, the United States threat is undesired, unconscious, unrecognized, unarticulated and benevolent.

... the United States-Canadian continental involvement is structural; the emergence of the United States as a national security threat arises from this

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18 Roger F. Swanson, The United States as a National Security Threat to Canada, Behind the Headlines, Vol XXIX, Nos 5-8, (July 1970), Canadian Institute of International Affairs.

structural continentalism; the continuation of the United States threat will become ever more serious as the technological-industrial age advances demanding ever-increasing economic-defensive integration and centralization; the alleviation of the United States threat -- it can never be eliminated because it is structural -- necessitates a paramount United States-Canadian effort if Canada is to survive as a distinct national unit; this effort must be based upon a realistic appraisal of the nature of the United States threat, and above all, a recognition that it constitutes a threat of national security dimensions.20

Although the word structural is used many times, it is not entirely clear what Dr. Swanson means. He analyses the defence relationship as a series of structural components such as air defence and the defence production sharing arrangements. He argues that these structural components were both inevitable and necessary because of geography, economic-technological requirements and the assumption by the United States of a world role. When he says, for example, "the United States-Canadian involvement is structural" he seems to mean both the components themselves and the factors that brought them into existence. Because the most fundamental problems are structural, his solution is to tidy up the present "unstructured" defence relationship by eliminating "all unnecessary, duplicatory, and defunct organizational components and functions" and establish a bilateral Joint International Defense Commission which is formalized by treaty.21 He, as does Conant, sees as paramount the requirement for a formal defence treaty in which obligations are defined clearly and are assumed to be permanent for the

20 Ibid., pp 510-511.
21 Ibid., p 550.
foreseeable future.

Dr. Gray, in his *Canadian Defence Priorities*, devoted a chapter to the Swanson thesis of the United States as a security threat to Canada. He concludes that "the Swanson thesis would seem to err in its assumption of the fragility of Canadian nationality and in its implicit dismissal of many of the parameters of Canadian economic, military, political and psychological life." 22 It is difficult to gain a perspective on present Canadian-United States relations and the "threat" that the continental imbalance is posing, but Dr. Gray's assessment probably is sounder than Dr. Swanson's.

The Swanson thesis makes a strategic assumption that political and strategic factors that brought the present Canadian-United States defence relationship into existence are permanent. This derives from a lack of detailed strategic analysis, which would suggest the "structural components" have been and are continuing to change, and thereby allowing for reduced Canadian defence contributions to meet United States strategic requirements. The strategic requirements for a permanent formal defence treaty may well be becoming a matter of history.

The lack of careful strategic analysis in the Swanson thesis results in a number of serious errors of fact that adversely affect his conclusions. The most obvious is Dr. Swanson's confusion over the command arrangements for

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NORAD (North American Air Defence Command). Even after quoting verbatim the NORAD Agreement on command arrangements, he confuses the terms "unified command," "joint command" and "operational control" and ends up calling NORAD a United States Joint Chiefs of Staff unified command, which earlier he had correctly shown that it was not.

Anti-Americanism and Canadian Defence Policy

In the 1960s, Canadian historians began a detailed re-examination of Canadian history from the 1860s to the 1920s; the period of transformation from colony to nation. This has led to studies in Canadian military history of the period, of the development of the Anglo-Canadian alliance, and the rise to statehood. The foremost historian of the Canadian militia is Desmond Morton with his Ministers and Generals: Politics and the Canadian Militia 1868-1904 (1970) and The Canadian General: Sir William Otter (1974). Of greater interest to this thesis are Carl Berger's The Sense of Power: Studies in the Ideas of Canadian Imperialism 1867-1914 (1970) and Norman Penlington's Canada and Imperialism 1896-1899 (1965). Both these studies analyse the inter-relationships of the growth of Canadian imperialism, fear of American absorption, the strengthening of the Anglo-Canadian alliance, the creation of a national army and navy, and anti-Americanism. The period from 1895-1905 was one of deteriorating Canadian-United States...

relations, United States overseas expansion and general bellicosity, fear of United States absorption of Canada and intense anti-Americanism by particular groups in Canada. Although there are dangers in historical comparisons, the 1960s and early 1970s do suggest very similar forces at work.

In 1960, James M. Minifie published his *Peacemaker or Powder-Monkey: Canada's Role in a Revolutionary World*, the first of a number of polemics with highly emotive titles. Mr. Minifie was the C.B.C. correspondent in Washington in the 1950s and became a United States citizen. Hardly had he done so than he discovered that United States foreign and defence policies were morally reprehensible and came back to Canada. What seems to have upset Mr. Minifie the most was the conduct of United States imperialism in Latin America, which he saw as a betrayal of the virtues of early Republican America. That the United States had considered itself the imperial guardian of the Western Hemisphere since its independence and that republican virtues had never seemed very virtuous to Canadians, seems to have escaped Mr. Minifie. However, the arguments he made have been echoed in the succeeding literature; in fact it has been one long footnote to Mr. Minifie's book. The result has been a low standard of scholarship and analysis, for what is a credible argument if expressed in more realistic terms.

Mr. Minifie argued that Canadian leadership in the Western Hemisphere was imperative because Canada had no revolutionary tradition. In the third world, "Canada could
play a far more effective role than it has yet envisaged as interpreter of the ideas and experience of the West, and as a representative of the tradition of progress by evolution rather than by force and violence, a role from which the United States is precluded by its history. "24 He advocated Canadian neutralism because it "would have a healthy effect in purging Canada of a tendency to free-load on American defence efforts."25 Canada should withdraw from NORAD and NATO because "It is time to cease walking with the Devil; the bridge has been reached."26 and this withdrawal would turn "Canadian thoughts to the northern frontier rather than to the flesh-pots beyond the southern boundary."27

To be fair to Mr. Minifie he did advocate that neutrality would have to be armed neutrality, something no other Canadian has advocated, rather the reverse. Through all his emotive rhetoric he did see that an essential component of Canadian independence was an independent military capability based on strategic realities. His solution was for Canada to take over the complete air defence responsibility for the northern half of the continent and create its own nuclear deterrent with nuclear powered submarines.

24 James M. Minifie, Peacemaker or Powder-Monkey: Canada's Role in a Revolutionary World, (Toronto: McClelland and Stewart, 1960) p 166.
25 Ibid., p 16.
27 Ibid., p 86.
The titles of some of the succeeding anti-American literature are a sufficient portrayal of their content: 

More realistic and serious attempts to examine the Canadian-United States defence relationship, but only in article and pamphlet form, are "Canada's Long Term Strategic Situation" (1962) and "The Strategic Significance of the Canadian Arctic" (1965) by the late Robert J. Sutherland of the Defence Research Board; "Canadian Defence Policy in the Nuclear Age" (1961) and "The Complications of Continental Defence" (1966) by the late General Charles Foulkes; and Canada and the United States: Political and Security Issues (1970) by John W. Holmes. A recent addition, The Diplomacy of Constraint: Canada, the Korean War and the United States (1974) by Denis Stairs, is a diplomatic history of the Canadian participation in the Korean War. He argues that Canada certainly had far greater freedom of action in its relations with the United States than the polemical literature asserts.

Canadian Naval Policy

The Canadian navy has been the Cinderella of the military establishment since its inception in 1910, and this status is reflected in the paucity of available literature.
Gilbert Tucker's two volume *The Naval Service of Canada: Its Official History* (1952) is the primary source for Canadian naval developments from 1910 to 1945. There is no aspect of Canadian defence policy requiring more investigation than Canadian naval policy. Particularly lacking are any interpretative studies of Canadian naval policy and its relation to national interests. This thesis devotes a good third to Canadian naval policy in an attempt to remedy this situation.

**Internal Security**

The requirement for a military internal security capability has its own raison d'être. However, that internal disturbances would bring United States intervention is one of the unstated assumptions of the Canadian condition. Only in fiction, such as Ellis Portal's *Killing Ground: The Canadian Civil War* (1968) does it appear. This thesis accepts the validity of the assumption of United States intervention as simply a consequence of the continental imbalance.

The requirements for internal security are something that most Canadian commentators are ignorant of, avoid, or dismiss with the fallacious argument that internal security is a police matter. Professor Eayrs went so far as to advocate that 'it would be best to have no military establishment at the disposal of the central government lest it yield to the

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temptation⁴⁹ to use it to maintain the Canadian body politic. Professor Layrs does not examine the argument that a professional and bi-racial military establishment is one of the instruments available to government for preventing Canadians from allowing emotions to dictate action.

Aside from the pros and cons of using military forces for internal security, the only reliable source on the use of troops for internal security is B/Gen McLearn's testimony to the Standing Committee on External Affairs and National Defence in 1972 and his article "Canadian Arrangements for Aid of the Civil Power" in the Canadian Defence Quarterly (Summer 1971). B/Gen McLearn was Judge Advocate General of the Armed Forces at that time.

Summary

All the major studies of the Canadian-United States defence relationship in the post Second World War period have been by Americans. They have been primarily concerned with rationalizing the requirement for a permanent, formal and intimate defence relationship. Canadian defence requirements have been assumed to be simply a corollary of United States strategic requirements. National, as opposed to continental defence requirements, have been considered to be virtually non-existent.

Although no Canadian has undertaken a comprehensive study of the relationship as it has affected Canada, there

has been a plethora of articles and pamphlets that reminds one of past Canadian sectarian battles. The sectarian character of the debate between the pro NORAD/NATO adherents and those opposed, has retarded the development of a Canadian defence policy that is both politically acceptable and strategically realistic. It has also retarded the development of independent Canadian strategic thought. The continental imbalance in military power has been mirrored by the literary imbalance between major studies of Canadian defence policy written by Canadians and those by non-Canadians.

This thesis analyses the historical, contemporary and likely future influence of the continental imbalance between Canada and the United States on the formulation of Canadian defence policy. It examines the influence of the continental imbalance from the Canadian perspective. The aim is to derive possible Canadian defence options that allow for a clearer separation of national, continental and alliance defence requirements than has been possible in the past twenty-five years. The suggested options are considered to meet the requirements of political acceptability and strategic realism.

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31 For the need for independent Canadian strategic thought see Colin S. Gray, "The Need for Independent Canadian Strategic Thought," Canadian Defence Quarterly, Vol I, No 1, (Summer 1971) pp 6-12.
CHAPTER 2

CANADIAN DEFENCE POLICY AND RELATIONS WITH
THE UNITED STATES 1867-1945

The United States as The Enemy

During the wars of the French and British colonial periods, geography "imposed upon Canada a definite strategic pattern of warfare" with the strategic centre along the St. Lawrence River.\(^1\) There were two main approaches to the centre; one by the sea into the Gulf of St. Lawrence and the other by land north along the river systems to the upper St. Lawrence.

Via the land approach came the Iroquois, and during the 18th century, the British and the American colonists used both approaches. During the Revolution, the Americans, lacking seapower, relied on the land approach. They failed to conquer Canada and British seapower secured Nova Scotia. In the War of 1812-14, the land route predominated, but naval supremacy on the Great Lakes was critical for both sides.\(^2\)

With the signing of the Treaty of Ghent in 1814, the last invasion attempt in Canadian history came to

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\(^2\)For a recent history of the war see J. Mackay Hitzman, *The Incredible War of 1812: A Military History*, (Toronto: University of Toronto Press, 1965)
an end. The continental designs of the United States continued to threaten the existence of British North America. They were one of the primary factors in bringing about Confederation. The British government's efforts to bring about Confederation were related to reducing British defence commitments.³ The defence policy of the new Dominion government was directed mainly at retaining the British commitment to defend Canada.⁴

The militia system in the last half of the 19th century was based on the voluntary principle. The concept was for a number of selected units to undergo periodic training at public expense. The units were called the Active Militia and formed the basis of the Canadian defence organization until the post Second World War period. In 1869, the Active Militia had a voluntary enrollment of nearly 40,000 and the Reserve Militia a potential of a levée en masse of over 600,000 eligible males.

The threatened United States invasion after the Civil War did not materialize, but the Fenian raids from the United States were testing enough for the Militia. The Fenians were followed by the Red River expedition of 1870.

³ See C.P. Stacey, Canada and the British Army, 1846-1871: A Study in the Practice of Responsible Government, (London: Longmans Green, 1936), Chap VI, Canada and the American Civil War, pp 117-78 in particular.

In 1871 the British regulars, with the exception of a garrison at Halifax, were withdrawn. This withdrawal forced Canada to create a small permanent force to provide standards and training for the Militia. The threat of United States invasion declined after the signing of the Treaty of Washington in 1871 which settled most of the outstanding Anglo-Canadian-American disputes.  

The years between Confederation and the First World War saw the creation of a Canadian Army. Although defence against the United States remained the ostensible first priority, the development of a national army was moulded by imperial influence and sentiment. Militia efficiency, never high, seriously declined in the 1880s and 1890s, notwithstanding the performance in the Second Riel Rebellion in 1885. By the mid 1890's, the Militia was in a state of decay having suffered, from 1892 to 1896, five ministers and rampant political patronage. The change in the Militia's

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5 W.L. Morton, The Critical Years: The Union of British North America, 1857-1873, (Toronto: McClelland and Stewart, 1964) pp 257-58. The treaty "rested on the withdrawal of British military power from the St. Lawrence Valley and the interior of the continent. The military supremacy of the United States in America ... was tacitly recognized .... The way was ... open for American acceptance of Canadian nationality, however slow, reluctant and ungracious that acceptance might be." p 257.

fortunes coincided with the accession of the Laurier government in 1896 and the appointment of Frederick Borden as Minister of the Militia.

Because of the relative weakening of Britain's position in the world, the British government was anxious to raise the efficiency of colonial forces and for colonial commitments to imperial defence. The British first requested a commitment to imperial defence during the Russian war scares of 1877-78 and again in 1885 after Sudan. Canada consistently refused to make any commitment.

It was the Venezuela Incident of 1895-96 that revived fears of a United States invasion and the apparent necessity for the continued commitment of Britain and the Empire to defend Canada. The boundary dispute between Venezuela and British Guiana, fanned by the jingoism of the time, was settled without an Anglo-American war, but "laid bare Canada's strategic dependence on Britain." 8

The Canadian realization that an Anglo-American war would be fought primarily on Canadian soil, and the jingoistic anti-Canadianism of the United States government and press, resulted in a resurgence of anti-Americanism. The Venezuela Incident revived interest in national defence and gave impetus to that curious phenomenon of Canadian imperialism as "one variety of Canadian nationalism - a

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8 Ibid., p 38.
type of awareness of nationality which rested upon a certain understanding of history, the national character, and the national mission." The Canadian imperialists were in the forefront of efforts to increase military preparedness, in supporting Canadian participation in the Boer War, and to create a Canadian navy to support British naval power. The principal argument of the imperialists was that Canada's destiny lay in the necessity of an at least tacit, if not a formal Anglo-Canadian alliance, to prevent absorption by the United States.

The shock of the Venezuela Incident, the indifference to Canadian economic interests by the United States, and the predominance and behaviour of Americans during the Yukon Gold Rush "forced Canada to turn from the United States to Britain." This turning coincided with the burst of pro-imperial feeling in Great Britain personified by Joseph Chamberlain's accession to the colonial office. In 1898, Chamberlain chose Colonel Edward Hutton as his "imperial agent" to re-establish British influence over Canadian

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10 Norman Penlington, Canada and Imperialism 1896-1899, pp 261-62. Canada had attempted without success from the 1860s to the 1890s to gain favourable trade agreements with the United States. By the 1890s, trade reciprocity with the United States had become a loyalty to Empire issue. The Laurier government in 1911 was to suffer defeat over its proposals for unrestricted reciprocity with the United States.
defence policy. Hutton's policy was to create a balanced militia army with necessary staff and services to fight on its own until British help could arrive. His tenure was the shortest of all the British General Officers Commanding (GOCs) but he laid the "basis for a self-confident, unified, military institution."  

Canadian-United States relations in the late 1890s were further worsened by the failure of the Anglo-Canadian-United States Joint High Commission (1898-99) to settle outstanding disagreements and by the belligerent attitude of the United States over the Alaska Boundary dispute. Canada was preoccupied with United States relationships in a period of bellicose United States imperialism exemplified by the Spanish-American War. Canada's positions on the issues in dispute in this period "abstractly considered, were not unreasonable, but practically they were excessive and provocative in relation to the limitations of Canada's power." To offset Canadian weakness, there was Britain and the Empire.

11 Desmond Morton, Ministers and Generals: Politics and the Canadian Militia 1868-1914, p 133.
12 Ibid., p 161.
13 Norman Penlington, Canada and Imperialism 1896-1899, p 262.
The triumph of Canadian imperial sentiment was Canada's participation in the Boer War despite the resistance of both French and English Canadian nationalists. The nationalists viewed Canadian participation as a precedent for involving Canada in imperial wars in which Canada had no interests. The pressure of public opinion and general enthusiasm resulted in a contribution that numbered more than 8,000. For Canada, participation was an emotional self-offering and a quid pro quo for British support in Canadian-United States disputes. Britain used "Canada's fear of the United States to stimulate militia reform and inculcate the possibility of participation in [imperial] war[s]."

After the Boer War, there was continuous improvement in the Militia under the ministries of Frederick Borden (1896-1911) and Sam Hughes (1911-1916). Expenditures rose from $3 million at the turn of the century to $11 million in 1914. The Militia Act of 1904 ended the employment of British officers as GOCs, and a Militia Council with a Chief of the General Staff substituted. As the Canadianization of the Militia progressed, so did the strengthening of imperial ties by the standardization of war organization, administration, training, and armament. By the outbreak of the First World War, the authorized establishment of the

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Ibid. It has been argued that the Militia Act of 1904 (4 Edw. VIII c. 23) allowed active service for the Militia overseas. See Richard A. Preston, "Contraction of Imperial Power," The Canadian Defence Quarterly, Vol 2, No 4, (Spring 1973) p 45.
Canadian Militia was 77,323 all ranks.\textsuperscript{15}

Constitutionally, Canada was at war when Great Britain declared war on 4 August 1914, but Canada had the power to decide the level of contribution. On 2 August the Prime Minister, Robert Borden, had already offered an expeditionary force and on 3 October 1914 the thirty-three thousand men of the First Division sailed from Canada as the largest force that had ever crossed the Atlantic. By December 1915, the government had set the objective of an army of 500,000. Over 400,000 served overseas and the Canadian war dead total of 48,121 was barely short of the United States total. Canada came of age in the First World War. In the words of Donald Creighton:

The Canadian Expeditionary Force was the greatest collective enterprise that Canada had ever attempted. The War of 1914-1918 was the greatest experience that the Canadian people had ever known, or would ever know.\textsuperscript{16}

Imperial control over the Canadian Expeditionary Force was resisted, and the gaining of military autonomy found its counterpart in international recognition of Canada's status as an autonomous member of the new Empire-Commonwealth.\textsuperscript{17}


Despite some United States opposition, Borden fought for and gained recognition of independent Canadian statehood at the Paris Peace Conference of 1919.

The debate between the Canadian imperialists and nationalists from the 1890s to 1914 was not over Canada's membership in the British Empire, but whether closer imperial relationships were a necessity to offset the continental imbalance. For the imperialists, the magnitude of the threat of absorption was such to warrant closer imperial ties and contributions to imperial defence and unity. They saw the Empire as the focus of Canadian international endeavour. In their imperialist euphoria, they saw Canada as the ultimate leader of the Empire. Sentiment, interest and anti-Americanism were entwined. For the nationalists, there was little fear of American invasion and a certain admiration for the unfolding dynamic society to the south. They were most opposed to imperial defence contributions because they would draw Canada into the vortex of militarism and imperial wars. The Monroe Doctrine was sufficient defence against non-continental threats. The nationalists took for granted British support for Canadian interests but there was to be no quid pro quo in terms of overseas commitments.

Because of the changing European balance of power, British policy was to maintain good Anglo-American relations. British support for Canadian claims during the Alaska Boundary dispute was less than total when faced with a bellicose Theodore Roosevelt. The weakness of Canada was
clearly demonstrated. It was the unfavourable outcome of the Alaska Boundary dispute that forced Canada to accept greater responsibility for its international relationships and for its defence. The way chosen was basically that advocated by the imperialists. It was an alliance-oriented way that chose greater Canadian defence effort and overseas commitments to offset the continental imbalance. The confidence thus engendered, and the increased international stature, allowed Canadian-United States relations to develop on a more equitable basis. This became apparent after the United States entered the First World War and in the economic and defence cooperation that ensued.

The United States as Neither Enemy nor Friend

The repatriation of Canadian troops from Europe was completed as fast as possible. This rapid withdrawal reflected the deeply felt disenchantment for the outside world and heralded the isolationism which was to dominate Canadian policy in the inter-war years. The predominant politician of the period was Mackenzie King who opposed the concept of collective security whether or not it wore the clothes of the League of Nations or the Empire-Commonwealth.

18 Ibid., pp 44-8 for an analysis of the negotiations.

19 See ibid., Chap 14. "The change in the Canadian-American relationship was the result of 'war conditions.' Unexpectedly, the war had driven two distrustful neighbours into each other's arms." p 279.
Any form of collective security meant the possibility of commitments, and to this he was unalterably opposed. The only form of collective action that he supported was appeasement. If Canada had no commitments and no apparent enemies, then there was a requirement for only the minimum of defence forces. His policies reflected the mood of the country. R.B. Bennett, when Prime Minister (1930-35), was not opposed to collective security. However, he had no more interest in the defence forces than Mackenzie King, except for using them to undertake measures for unemployment relief during the depression.

It was in this political climate that defence planning was undertaken in the inter-war years. The Militia was to fare better than the navy, if only because aid of the civil power was a role that no politician could entirely dismiss. It was this role that absorbed the attention of the Militia in the immediate post-war years.

Canadian defence planning revolved round the production of four defence schemes. Planning was the responsibility of the Director of Military Operations and Intelligence, who from 1920 to 1927 was Colonel J. (Buster) Sutherland Brown. He operated largely in a strategic void because no one really believed another war involving Canada was likely to occur.

20 James Dayrs, In Defence of Canada: From the Great War to the Great Depression, Vol 1, (Toronto: University of Toronto Press, 1964) p 70. The details of the four defence schemes are taken from this volume and its companion Vol 2, Appeasement and Rearmament, (Toronto: University of Toronto Press, 1965).
for at least ten years. Geographical isolation and Anglo-American naval supremacy made Canada secure from direct attack across the seas. There was no inclination to plan for expeditionary forces, although some outline planning was done during the Chanak Incident of 1922. Only the threat from the south remained and it was related to the state of Anglo-American relations. The two issues that could have led plausibly to serious friction were firstly the Anglo-Japanese Treaty, dating from 1902, and secondly the naval balance of power. The first was removed when, under Canadian pressure registered at the Imperial Conference of 1921, the British government decided not to renew the treaty to which the United States was most opposed. The second was resolved at the Washington Conference on Naval Disarmament of the following year. This gave Japan naval supremacy in the Western Pacific and ended Anglo-American naval rivalry with the United States Navy left dominant in the Western Atlantic. The capability of Britain to use naval power for the defence of Canada against an American invasion was formally ended long after it had ceased to be a likely contingency.

The political deduction from the resolution of these issues was that war between Canada and the United States


22 George F. Stanley, Canada's Soldiers, p 351.
could no longer be considered a possibility. However, Defence Scheme No 1, issued on a highly restricted basis in 1921, but cancelled in 1931, was based on an American invasion of Canada against which the full weight of the Empire would be deployed. The Imperial General Staff's planning priorities were for war with a European combination, the United States, Japan, or a combination of any of these. Colonel Brown decided that Canada's priorities should be defence against the United States, against Japan, and for expeditionary forces for Europe or for a minor crisis elsewhere.23

Colonel Brown was not alone in planning for a North American war. The United States had plans for attacking a combination of Britain and Japan. United States' plans for war against Britain and Canada were not destroyed until six months before Munich. In R.A. Preston's opinion:

The chief value of American and Canadian planning for war in North America, though it was not directed towards the correct objective, lay in that it provided a rationale for military training in general. Institutionalized political-military co-operation would not necessarily have meant more reliable planning. In times when appropriations for defence were much too small, if there had been closer politico-military links and planning had, as a result, been closer to political reality as seen by the politicians, the armed forces of both countries might have been deprived of a valuable format for training. In that case the military potential of both countries,

and their readiness for war, might have been reduced - in Canada's case perhaps to zero. 24

Defence Scheme No 2 was to be directed against Japan, but until the fear that Japanese-American friction could lead to a threat to Canadian neutrality in the 1930s, no plans were made.

Beginning in 1926, attention was concentrated on Defence Scheme No 3 for an overseas expeditionary force; the impetus being the staff planning for the Imperial Conference of the same year. It was just such planning to which Mackenzie King and his principal advisor, O.D. Skelton, were so opposed because it amounted to "a blank cheque from the Dominion to be filled in at a moment's notice without any reference to any particular situation that might arise...." 25 Defence Scheme No 3 was submitted finally to the Bennett government in 1932 and approved the same year. 26 Defence Scheme No 4 was for the dispatch of a Canadian contingent as part of an Empire force to deal with a minor crisis. It never got beyond the draft stage.

24 Ibid., p 57.

25 Observations made by Mackenzie King at the 1923 Imperial Conference quoted in James Layrs, In Defence of Canada: Vol 1, p 79. From the King Papers.

26 For a description, see C.P. Stacey, Six Years of War: Official History of the Canadian Army in the Second World War, Vol 1, (Ottawa: Queen's Printer, 1955) pp 29-33.
Defence Scheme No 2 was finally issued in 1938 and was called the Combined Services Plan for the Maintenance of Canadian Neutrality in the Event of War Between the United States and Japan. The fear was that Japan would use Canadian waters in operations against the United States, and thereby cause the United States to take over defence of Canada's Pacific coast. It was United States fear of a Japanese attack that gave the initial impetus to Canadian-United States defence collaboration as world events moved towards war.

Inter-war defence planning was largely illusory because no government was prepared to do anything more than maintain a semblance of defence forces. The financial cuts during the depression had, by 1935, left Canada virtually disarmed; in that year the defence budget was $13 million.

In 1935, Mackenzie King led the Liberals to victory over the Bennett government and by the summer of 1936 the new government accepted that something had to be done about defence. The basic premise was that all defence planning and rearmament was to be directed towards the direct defence of Canada and not to the equipping of an overseas expeditionary force. Although Mackenzie King accepted that Canada would participate in a major European war involving Britain, he was never prepared to state this publicly. The government continued the policy of avoiding any Empire-Commonwealth defence commitments that could be construed as a commitment to engage in a war or as an infringement of Canadian autonomy. This policy was carried to absurd lengths when
Skelton instructed the members of the Joint Staff Committee attending the 1937 Imperial Conference that they must not discuss with their British opposites the question of the defence of Newfoundland. 27

The decision that action should be taken in defence emphasized the divergence of views between the Departments of External Affairs and of Defence. Skelton, who dominated External Affairs, saw Canadian foreign policy in the context of the "struggle" for autonomy from Whitehall. He was strongly isolationist and prepared to advocate neutrality in a major war in 1937, but by 1938 had accepted the impracticality of neutralism. 28 In contrast, the Joint Staff Committee assumed, particularly after General McNaughton became Chief of the General Staff in 1929, that Canada would participate in a major war and that this participation would consist primarily of an expeditionary force. 29

Although coastal defence had been made the focal point of Canadian rearmament, little was accomplished because of


28 Ibid., pp 7, 37 and 138-9.

29 The Joint Staff Committee's view of the world situation and its consequences for Canada are in a memorandum written by Colonel H.D.G. Crerar submitted in September 1936. An extract from the memorandum is reprinted in James Cayrs, Appeasement and Rearmament, Document 1, Extract from Memorandum by Joint Staff Committee, Department of National Defence, 5 September 1936 (Army Records), pp 213-22.
budgetary restrictions. More was achieved on the Pacific than on the Atlantic coast. The Canadian forces at the onset of war were capable of dealing with very minor raids and a skeleton for mobilization for overseas operations was available. In Colonel Stacey's words:

The justification of Mr. King's policies - and it is a powerful justification - must be sought in the fact that, after all the uncertainty and debate of the pre-war years, Canada entered the conflict in September 1939 a united nation. Yet it should be said that military policies such as she pursued in those years were luxuries which could not have been afforded by any other country which did not, like her, enjoy the double advantage of having both great physical obstacles and powerful friends between her and the potential enemy.

In the inter-war years, the continental imbalance had a limited influence on Canadian defence policy. Any form of overseas commitment was eschewed and Canadian foreign policy was formulated in an isolationist framework. This framework would only have been realistic for defence planning if Canada had had a declaratory policy of neutralism and was prepared to have sufficient defence capability to preserve that neutrality. Both were politically unacceptable and Canada went to war unprepared to defend its coasts and contiguous waters. The policy combination of no commitments and no defence served the cause of national unity, but it was carried to such extremes that Canada was too weak to defend the homeland in the early years of the war. This weakness brought the continental imbalance into play once again, but this time in the context of the United States as a friend.

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30 C.P. Stacey, Arms, Men and Governments, p 6.
or "big brother" which was soon to become the most powerful state in the world.

The United States as A Friend - Initial Contacts

In the inter-war years there was no military contact with the United States. The United States reacted to the rise of Nazi Germany by emphasizing its policy of isolation from any European conflict and its concern for hemispheric defence. In 1936, President Roosevelt stated that the United States would defend itself and its neighbours. In 1937, Mackenzie King and Roosevelt did discuss, in a very general and informal manner, aspects of common defence. This was followed by a courtesy call by Colonel Crerar, Director of Military Operations and Intelligence, on General Craig, the United States Chief of Staff. A more serious contact was the highly secret visit by the three heads of the services to Washington in January 1938. This was followed by the public speeches of Mackenzie King and Roosevelt in which the President affirmed that the "people of the United States will not stand idly by if the domination of Canadian soil is threatened...." In reply to this unsolicited American

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31 Mayor La Guardia, after he became Joint Chairman of the Permanent Joint Board on Defence (discussed later), wrote to President Roosevelt in reference to Canada "We may encounter the usual difficulties because of pride and the little brother attitude with which you are familiar." See C.P. Stacey, "The Turning-Point: Canadian-American Relations during the Roosevelt-King Era," p 6.

concern, Mackenzie King gave the now classic basis for Canadian-United States military relations:

We, too, have our obligations as a good friendly neighbour, and one of these is to see that, at our own instance, our country is made as immune from attack or possible invasion as we can reasonably be expected to make it, and that, should the occasion ever arise, enemy forces should not be able to pursue their way, either by land, sea, or air to the United States across Canadian territory. 33

The tentative nature of these contacts derived not only from the historical lack of any contact but also from differing perceptions of the threat to North America held by the military leaders of each country. The Canadian Joint Staff Committee saw the defence of Canada as beginning in Europe and in terms of Anglo-Canadian cooperation. Canadian military organization and training was designed for easy cooperation with British forces. The Joint Staff Committee expected United States neutrality and no invasion threat to North America. Canadian military efforts would be directed overseas and Canadian-United States military cooperation would be a secondary preoccupation. 34

In drafting the pre-war RAINBOW series of plans, the United States military planners were concerned solely with the direct defence of the Western Hemisphere and with United States Pacific interests. They were concerned principally with the defence of eastern Central and South America against

33 In a speech at Woodbridge, Ontario 20 August 1938 and restated in House of Commons, Debates, 1941, Vol 1, p 57.
34 C.P. Stacey, Arms, Men and Governments, pp 99-100.
political infiltration and with the setting up of German and Italian air bases from which the Panama Canal and the United States could be attacked. The collapse of France in June 1940 gave a new direction to United States planning, and RAINBOW became the main preoccupation. It had, as its main assumption, the collapse of British and French resistance in Europe and the loss of their fleets. The primary concern became the defence of northeastern Brazil against an attack launched from West Africa. Brazil became "the pot of gold at the rainbow's end."36

The initiative for greater military cooperation between Canada and the United States came from the United States President. He requested the meeting between himself and Mackenzie King on 18 and 19 August 1940 which produced the Ogdenburg Declaration sanctioning the setting up of the Permanent Joint Board on Defence (PJBD).37 Mackenzie


36 Ibid., p 367.

37 This meeting and the setting up of the PJBD are described in C.P. Stacey, Arms, Men and Governments, pp 339-43; Dzuiban, Military Relations, pp 22-30; James Layrs, Appeasement and Rearmament, pp 199-200; and J.W. Pickersgill, The Mackenzie King Record, Vol 1, 1939-1944, (Toronto: University of Toronto Press, 1960) pp 139-40. Mackenzie King tabled the complete Privy Council Minute for the establishment of the PJBD in House of Commons, Debates, 1941, Vol 1, pp 56-7. In referring to the permanency of the PJBD he said it "was not being formed for a single occasion to meet a particular situation, but was intended to deal with a continuing problem." Ibid., p 56.
King agreed to the establishment of the PJBD without consulting either his cabinet colleagues or his military advisers. The PJBD consisted of Canadian and United States sections each headed by a civilian, representatives of the services, and a civilian secretary. The practice was to submit joint recommendations, (the PJBD had no executive authority) to each government and during the war 33 recommendations were made, the majority in the first two years of its operation.³⁸ It was involved primarily in the drafting of the plans for the joint defence of North America.

**Joint Planning**

Planning began early in September 1940 and a final joint draft was called the Joint Canadian-United States Basic Defence Plan - 1940. It provided for the defence of Newfoundland, Canada, adjacent portions of the United States, and Alaska.³⁹ It was drafted to meet the feared emergency arising from the defeat of the United Kingdom or if the Royal Navy ceased to control the North Atlantic. The possibility of attack by Japan was also considered. The plan, although listing joint tasks, did not state how and with what resources these were to be carried out, nor did it describe the command arrangements.

³⁸ A history of the PJBD is in Dzuiban, Military Relations in which the recommendations are published in Appendix A, pp 347-65. He did not have access to Canadian records which have been used by Colonel Stacey.

³⁹ Ibid., pp 88 and 100 contain the details of the plan.
The plan apparently was not formally approved or disapproved by either government. The United States Army War Plans Division was critical of the absence of detailed command arrangements. It wanted the Maritime Provinces, Newfoundland, and British Columbia to be included as sectors of the United States North Atlantic and Pacific Frontiers. The sectors were to remain under Canadian tactical command (operational control), except that the United States would assume command in the Maritimes or Newfoundland sectors when its forces in either had reached preponderant levels.

Planning was resumed in March 1941, as part of the overall planning between the United States and Great Britain, on the assumption that the United States would enter the war. Canada was not a party to these discussions which resulted in a plan known as ABC-1 (America-British Commonwealth), designed for the defeat of the Axis powers once the United States entered the war. This resulted in the PJBD simultaneously attempting to work out the command arrangements for Basic Defence Plan - 1940 and drafting a new plan to supplement ABC-1. This new plan was known as the Joint Canadian-United States Basic Defence Plan No 2 or more commonly as ABC-22.

In the discussions for Basic Defence Plan - 1940, Canada resisted direct United States control over Canadian forces in Canada. Subject to prior consultation with the

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40 Ibid., p 111.

41 C.P. Stacey, Arms, Men and Governments, p 349.
Canadian chief of staff concerned, Canada proposed that "strategic direction" of the two countries' land and air forces be vested in the Chief of Staff of the United States Army. This was accepted by the PJBD on 15 April 1940 in what is known as the "Montreal Revise" of the Canadian proposal. Strategic direction was defined as the "assignment of missions and the allocation of the means required to accomplish them."42

The issue of command arrangements was by no means settled as discussions now concentrated on the command arrangements for ABC-22. The United States proposed that it should have strategic direction of all forces in Newfoundland, the Maritime Provinces, the Gaspé Peninsula and British Columbia. The intention of the United States (not apparently revealed to the Canadians) was to incorporate these areas into the United States Northeast and Western Defence Commands. Canadian officers would still hold the Area Commands, except in Newfoundland when United States forces outnumbered Canadian forces, but these officers would be under the direct command of senior United States commanders. It became clear during the discussions that, for the United States, the operational meaning of strategic direction was complete operational command of Canadian forces. In essence, the United States wanted to impose its concept of unified commands which would have included control over the administration and

42 Ibid.
discipline of the assigned Canadian forces. The initial opposition to United States strategic direction came from the Chief of Naval Staff, who pointed out that Canadian strategic control of naval forces would be limited to "coastal and inshore patrol vessels and aircraft in inshore waters of Canada and Newfoundland." Canada would lose strategic control in her contiguous sea areas.

The Chiefs of Staff took their reservations to the Cabinet War Committee, arguing against giving the United States unqualified strategic control over Canadian forces. They proposed, instead, that specific operational tasks be assigned to Canada and the United States, and that mutual cooperation be the basis of command arrangements. The Chiefs drew the distinction between the two draft plans. They accepted that for the direct defence of North America, for which the 1940 plan had been designed, the preponderant power of the United States made it reasonable that it should initiate strategic direction of the combined forces. However, ABC-22 was offensively oriented and the primary objective would not be the defence of North America, but to assist in destruction of the enemy in any part of the world where allied forces would be sent. The concession of strategic direction would give the United States supreme command

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43 See Ibid., p 354 for the disputes in the PJBD over the meaning of strategic direction.

44 Quoted in Ibid., p 349.

over Canadian forces in Canada. The 1940 Plan only became operational in the likelihood of an invasion; a contingency the Canadian Chiefs of Staff had largely discounted even in the darkest days of 1940. ABC-22 would become operational once the United States entered the war, a most likely event. Canada refused to concede strategic direction to the United States and the Canadian concept of mutual cooperation became the basis of the command arrangements.

**Newfoundland**

In the 1930s, the service chiefs had stressed the strategic importance of Newfoundland to Canada but had been precluded from discussing arrangements for its defence with the British. When war came, no information had been exchanged and the British had made no arrangements for its defence. It was not until June 1940 that Canada sent troops for the defence of the island. Two days after the Ogdensburg Declaration, Canada reached an informal agreement with Newfoundland which gave Canada wide responsibilities for its defence and it was included as part of the Canadian Army's new Atlantic Command. As a result of the Destroyer-Bases Agreement with the United Kingdom, the United States became involved in the defence of Newfoundland.

Canada was not a direct participant in the discussions which began in January 1941 but did have observers attend. Canadian concern was both political and military. There

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46 C.P. Stacey, *Six Years of War*, p 179.
was the problem of harmonizing any arrangements reached with the United States with the possible future accession of Newfoundland to Canada. The Chiefs of Staff made it clear that Canada retained the right to establish any defences in Newfoundland which it considered necessary. They became alarmed at United States demands for complete military control in an emergency and to regulate all communications within, to and from any areas leased. Under the final agreement signed in London on 27 March 1941, the United States acquired six leased areas for 99 years. Although Canada was not a signatory, it was one for a protocol signed the same day in which special Canadian concern for the defence of Newfoundland was recognized. Neither Canadian political nor strategic interests were well served by the leasing of base areas in Newfoundland, and the consequences flowed over into the post-war years and are still with us.

Northwest Canada - Routes to Alaska

The idea in the 1930s of a great circle air route to the Orient, and the need for air communications in the Canadian Northwest, had resulted in some airfield construction before 1942. The PJBD recommended completion of the airfields because of the need to move aircraft to Alaska. After Pearl Harbor, the facilities of the Northwest Staging Route (as the line of airfields became known) were made available to the United States. The United States became involved in further construction and it was not until near the end of
the war that Canada regained control over the route.\textsuperscript{47} Canada had little wartime use for the route and it was mainly used by the United States for the movement of aircraft to the Soviet Union. Its significance for continental defence was far less than had been anticipated.

Before the war, there had been some political pressure from Canadian and United States Pacific coast areas for a highway through Canada to Alaska. The proposed route was to run along the coast and west of the Rockies. Canadian and United States military authorities did not consider a highway a military requirement and certainly not for one that ran along the coast rather than followed a well protected inland route. However, United States military interest developed after Pearl Harbor, spurred by the desire for a secure alternative to the sea route to Alaska and as a means of supplying the developing Northwest Staging Route. It was this latter requirement that determined the final choice of the route as the United States moved with considerable speed to obtain Canadian acceptance to build the highway. Canada agreed to its construction but on the condition that the United States pay the full cost and at the end of the war the highway would become part of the Canadian highway system. The highway was not used for carrying military supplies to Alaska and "apart from its utility in connection with the airway, there was no real military requirement whatever for

\textsuperscript{47} For a description of the United States role in its construction see Dzuiban, \textit{Military Relations}, pp 200-16.
the Alaska highway."

The Eastern Arctic and Routes to Europe

United States involvement in the Eastern Arctic was far less massive than in the Northwest, but its implications were far more significant for the future. The requirement for staging airfields to ferry aircraft to the United Kingdom arose early in the war. There was a requirement for an alternative to Gander for use by short range aircraft. The alternative, jointly selected by Canada and the United States, was Goose Bay, which Canada agreed to construct and maintain. Post-war control over the Goose Bay complex was secured by Canada, with certain limitations, in an agreement with Newfoundland. The agreement, signed in 1944, provided for a 99 year lease but made provisions for United States and British military use "for the duration of the war and for such time thereafter as the Governments agree to be necessary or advisable in the interests of common defence." This proviso was to prove of some significance in the post-war period.

Plans for the massive movement of aircraft overseas resulted in a project called CRIMSON which was a series of airfields in Canada along the polar route to Europe. The

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48 C. P. Stacey, Arms, Men and Governments, p 383.

49 Memorandum of the Agreement Between Canada and Newfoundland Relating to the Establishment of an Air Base at Goose Bay, Labrador, Canada Treaty Series, 1944, No 30, 10 October 1944.

50 For a history of the project see Conn and Fairchild, The Framework of Hemispheric Defense, pp 399-403.
United States was most enthusiastic about the project but the Canadian Chiefs of Staff had reservations. Project CRIMSON failed to meet expectations and few aircraft were moved via its airfields. Canada, under a June 1944 exchange of notes, reimbursed the United States for all expenditures of "permanent value." The airfields were handed over to Canada, starting with Churchill and ending with Frobisher Bay in September 1950.

United States Benevolence and the Continental Imbalance

The United States attitude to Canada in the 19th century was one primarily of indifference intermixed with occasional bellicosity. The Canadian attitude was generally one of respect but underlaid by an aversion to American extremism and fear of absorption. During the Second World War, American indifference was replaced by a benevolent or a big brother attitude.

Canada accepted continental defence in the early years of the war from presumed necessity. After the direct threat to North America had ended, United States military activity in Canada was directed to support the war effort overseas. The requirements for continental defence only existed for a short period, but the die had been cast.

Whether or not Ogdensburg had taken place, some form of continental defence arrangements probably would have been necessary. However, if Canadian defences had existed that were strong enough to defend contiguous waters and coastal areas, the cooperation would have been much less. Certainly United States presence in Newfoundland could have been
resisted more successfully. Canadian public opinion would have been less receptive to continental defence and the military reservations about its requirements would have surfaced more strongly at the political level.\textsuperscript{51} An armed Canada would probably have given Canada the confidence to resist the temptations of continental defence and to have relied on its own resources; in fact to have continued the policy of no commitments until the United States had entered the war.

Once continental defence was accepted as policy, its implementation was dominated by the informal arrangements of the PJBD. This unquestionably worked well and in Canada's favour. The United States was not prepared to force through measures about which Canada had strong reservations. The United States did not attempt to expand its activity in Canada and Newfoundland beyond that for military requirements. The United States displayed at least a benevolent attitude, if not understanding of the Canadian sensitivities towards the extensive United States presence that developed. Once the war was over United States presence rapidly declined, but interest in continental defence did not. The continental imbalance began to affect Canadian defence planning for peacetime well before the war ended.

\textsuperscript{51} For an analysis of Parliamentary reaction to Ogdensburg and Canadian-United States defence cooperation see Chun-Chang Chu, "Canadian Attitudes to Continental Defence Co-operation with the United States, 1936-1960, As Expressed in Parliament," unpublished thesis, Dalhousie University, 1967. The Quebec Liberals had considerable reservations about the United States as an ally. The Ogdensburg Declaration made no special appeal to the Conservatives and they suspected the United States had extracted political concessions from Canada. The CCF (socialists) fully supported the Ogdensburg Declaration but had reservations later in the war.
CHAPTER 3

CONTINENTAL AIR DEFENCE AND NORAD

Post-War Political Objectives

Canada entered the Second World War as the oldest and most prestigious of the Dominions, with a foreign policy almost entirely concerned with "autonomy" within the Empire-Commonwealth. Canada ended the war as a minor great power with her economic strength greatly expanded, probably the fourth most powerful military state in the world, and with the potential capability to produce nuclear weapons. This status had its ephemeral aspects and there was little desire to exploit it.

During the war years, the Canadian government gave considerable thought to the organization of the post-war world and Canada's place in it. The primacy of the Great Powers was accepted, but in the context of a world collective security system. Canadian planners considered any reversion to regional systems to be undesirable. The aim of Canadian policy was to keep the Great Powers united in their responsibility for the maintenance of security. Divisions among them were to be avoided, particularly between the United States and the Soviet Union. Nothing was to preoccupy the government and

its planners more than the consequences to Canada of its geographical position between these two powers.

Countering American Strategic Requirements

It was understood from the very beginning that post-war defence arrangements with the United States would be one of the most difficult areas of policy. In May 1944, government planners began the preparation of a paper called "Post-War Defence Relationship with the United States: General Considerations." The paper was based on the following assumptions:

a. It may be assumed that international problems arising from purely Canadian-United States relations are unlikely to bring about a conflict of policies serious enough to prejudice general friendly relations and that, therefore, any threatening difference of view would only be occasioned through differing attitudes towards events in other parts of the world. The possibility, however, of the United States being moved to exert undue pressure on Canada, particularly as respects matters of defence, should not be overlooked.

b. That for several years at least a direct military threat to North America is unlikely, although the means to meet such a threat should be available during this period.

c. That victor nations, including the United States, will maintain larger armed forces than before the war to enforce the peace.

The paper analyzed the changes in the strategic environment. In the past, the Atlantic and Pacific Oceans, controlled as they were by the British and United States.

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navies, had provided immunity from attack. This control remained but "the development of air power [had] diminished the physical isolation of the North American continent by opening up the northern approaches." Canada had now become of "more strategic importance to the United States because it lay across the shortest air routes from either Europe or Asia."

The experience of the war had shown that the United States was prepared or even anxious to proceed alone with defence measures on Canadian territory that it considered necessary. It was apparent that the existence of major military installations in Canada built, paid for, and operated by the United States might impair Canada's freedom of action. The fears were that this interest would be expressed "with an absence of the tact and restraint customarily employed by the United Kingdom" and that a "militant form of continental defence-mindedness" could develop in the United States. Therefore, "the pressure on Canada to maintain defences at a higher level than would seem necessary ... might be very strong."

There seemed to be no option but to accept the necessity for coordinated continental defence planning with Canada carrying out a greater peacetime defence commitment than ever before. It seemed clear that in future it should be part of Canadian policy "to accept full responsibility for such measures of local defence as the moderate nature of the risk to which we are exposed may indicate to be necessary."

Canadian policy planners did not believe that the Soviet
Union posed an immediate and direct threat to North America. It was not considered to be in a position to wage another war and its policy was defensive.

Hardly a month passed after victory in Europe before the United States, through the PJBD, requested conversations to provide, in the light of changed world conditions, a continuing basis for joint action of the military forces of Canada and the United States in order to ensure the security of Alaska, Canada, Labrador, Newfoundland, and the northern portion of the United States." The desirability of the standardization of Canadian and United States forces, and of Canada becoming a member of the "military family of American nations" was suggested.

The Canadian government gave approval for continued collaboration in joint planning. A joint planning staff was organized which shortly after became the Military Cooperation Committee. It was composed of Canadian and

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3 Ibid., p 336. Quoted from Department of External Affairs Files.

4 Stanley W. Dzuiban, Military Relations, p 334. The issue of standardization arose in 1944 for operations in the Pacific theatre. The final decision was a compromise. C.P. Stacey, Arms, Men and Governments, pp 54-62. General McNaughton, then Minister of National Defence, considered that: "One of the primary reasons for the decision to associate the Canadian [Pacific] Division with a United States Corps was to obtain experience with the United States system of Army organization and U.S. equipment in view of the obvious necessity for the future to co-ordinate the defence of North America as a firm base against possible contingencies." John Swettenham, McNaughton, Vol 3, 1944-1966, (Toronto: Ryerson, 1969), p 171.
United States military officers in equal numbers and corresponding ranks, and who were also members of the PJBD. Agreement was reached on an appreciation of the military situation relating to continental defence. This appreciation formed the basis for a revision of the now dated ABC-22 and was ready for governmental approval by 5 June 1946. The United States was very much in a hurry.

The appreciation focused on how military technology in the form of long range bombers, guided missiles, atomic weapons and submarines had removed the immunity from attack that geography had previously provided to North America. It was appreciated that by about 1950 the enemy (the Soviet Union) would be capable of an all out attack on North America, including the seizure of Arctic bases. The attack would come across the polar cap and northeast Canada into the heartland of industrial North America. The first priority was for an effective air defence system, including early warning, meteorological and communications facilities, a network of airbases deployed as far north as feasible, fighter-interceptor aircraft, and anti-aircraft defences.

The draft Basic Security Plan of 5 June 1946 followed the format of its predecessors. The joint tasks differed little from the wartime ones, but Joint Task No 1 was to

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5 James Eayrs, Peacemaking and Deterrence, pp 337-8.
protect the vital areas of Canada and the United States from air attack. Complete Canadian responsibility for the defence of Newfoundland was not conceded. The command arrangements were to be "effected by mutual co-operation except where unified command [was] determined to be appropriate." The Chiefs of Staff of each nation retained the strategic direction and command of their forces.

The Canadian government's reaction was to accept what amounted to a United States appreciation of the threat, but to question the urgency of countering it. Mackenzie King's initial reaction was to question the bilateral formulation of the plan and to exchange views with the British, something to which the United States would have been opposed. The United States' policy of insisting on the bilateral character of Canadian-United States defence arrangements was not to be deviated from, regardless of Canadian desires.

Mackenzie King was invited to the White House in October 1946 where President Truman tried unsuccessfully to "obtain sanction .... to go ahead and work towards an agreement as a result of which plans for defence would be coordinated and developed." The following month Cabinet considered the matter, and heard the Chief of Air Staff, Air Marshal R. Leckie, argue against the United States proposals for air defence. He thought that attack on North America would be just a feint for an attack on Europe. To

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counter this, much less elaborate defence arrangements were necessary than the United States had proposed. Again, it was the Canadian military authorities, who in disagreeing with United States threat perceptions, gave the government cause to pause. Cabinet decided not to accept the joint appreciation nor proceed with joint planning until there had been additional discussions at the diplomatic level.

These took place in the utmost secrecy in Ottawa, and George Kennan for the Americans gave a much less alarmist appreciation of the threat. The United States no longer attempted to present demands for requirements such as Arctic fighter bases. The Basic Defence Plan was, however, approved.

The government had successfully resisted the initial rather heavy pressure for elaborate continental defence measures. It had accepted the principle of coordinated defence measures and in particular continental air defence. General Foulkes, then Chief of the General Staff, later stated in defence of the 1958 NORAD agreement that "the decision for joint air defence was taken in 1946 not 1958."  

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9 General Charles Foulkes, Canadian Defence Policy in a Nuclear Age, Behind the Headlines, Vol XXI, No 1, (May 1961) Canadian Institute of International Affairs, p 2.
The government was not unaware of the implications of acceptance of this principle, and in late 1946 authorized studies by technical teams of the requirements for continental air defence.

One of the principal component studies was for an Arctic radar chain located somewhere between the national transcontinental railway and the Arctic Ocean. The concept was discarded at the time because of cost and impracticality. As the Minister of National Defence, Brooke Claxton, later told the House of Commons:

... such a radar chain [across the Far North] might give us early warning of an approaching attack, [but] between this Arctic radar chain and the main radar control system far to the south lay a vast and isolated area in which it was simply not practicable to build the complete gridwork of overlapping radar coverage which is necessary to keep attacking planes under continuous observation. Thus by the time any attackers had travelled the hundreds of miles between the first alarm and the nearest desirable target they would be completely lost to our defending control system.

Therefore such an isolated Arctic radar chain might provide an alarm which might not lead to effective action, while it might nevertheless be likely to immobilize all activities in all target areas. Moreover, it would be very easy to create this result by "spoofing" raids.

Although initial United States pressure had been resisted, there had been no real agreement on the form that post-war military relations should take. Earlier, the PJBD at its November 1945 meeting had drafted some principles for future cooperation. These appeared to the Canadian government to

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take the form of a basic security pact and were unacceptable.\textsuperscript{11} The PJBD undertook a revision and simply recommended close cooperation for the provision of security for the northern part of the Western Hemisphere. This formed the basis of the Board's 35th Recommendation of 16 September 1946 and subsequent joint public announcement.

The Recommendation was approved by Cabinet and on Mackenzie King's insistence the British were informed, but the policy was to make no public announcement. This was changed when the Soviet Union levelled charges against Canada of aiding United States imperialist designs in the Far North and the Canadian press took up the cry. The government convinced the United States of the necessity of making a joint public announcement and this was done on 12 February 1947.\textsuperscript{12} It said that it had been decided to continue collaboration in peacetime on a limited basis but that no treaty, executive agreement or contractual obligation had been entered into. Either country could discontinue the collaboration at any time. The new arrangement was rationalized on the basis that each country could fulfil its obligations under the UN Charter more effectively because such collaboration was a contribution to stability.

However, Canada was now involved in a bilateral defence arrangement. The disparity of resources, the strategic

\textsuperscript{11} James Layrs, \textit{Peacemaking and Deterrence}, p 345.

significance of Canadian geography, the intensifying Cold War, and advances in military technology were to create even greater United States pressures for closer bilateral defence cooperation. The continental imbalance had become the dominant factor in the formulation of Canadian defence policy in the post-war period.

Immediate Post-War Military Activity in the North

The United States withdrawal from the Northwest had been complete, but there was a United States desire to ensure that the air and road facilities should be maintained.\(^{13}\) The Canadian Army was made responsible for the Northwest Highway System (Alaska Highway) and the RCAF took over the administration of the Northwest Staging Route from Edmonton north.

Of far greater moment were United States desires concerning the eastern Arctic and Goose Bay. Although the air bases of the CRIMSON Route were being handed over gradually, the United States wanted them maintained. In the early months of 1946, Canada gave permission to the United States to fly B-29 aircraft over Arctic Canada to conduct experiments using LORAN (long range aids to navigation). Permission was then granted for the United States Coast Guard to set up static LORAN stations in the Arctic.\(^{14}\) In the same year, but with considerable

\(^{13}\) Journal of the PJBD, 29 April 1946, Department of External Affairs' Files in James Layrs, Peacemaking and Deterrence, p 351.

\(^{14}\) Robert A. Spencer, Canada In World Affairs From UN to NATO 1946-1949, (Toronto: Oxford University Press, 1959), p 315.
reluctance, permission was granted for suitable sites for meteorological stations.

From 1947 to 1950 five weather stations were set up. Alert, the one farthest north, was to become an important electronic listening post. These were joint ventures in that the costs were shared and the officer in charge of each station was a Canadian as were fifty per cent of the staff. The situation was far from satisfactory because initially no one could reach or leave these stations except in United States planes or ships. Within a short time the RCAF was supplying half the maintenance lift. By 1954, Canada had assumed responsibility for resupplying all the stations except Alert. Only in 1972 was full operational responsibility for all the stations assumed.

Goose Bay was the largest northern base covering the shortest approach to the industrial heartland of North America from European Russia. It was the continental terminus for the strategic air route from Europe to Iceland and across Greenland. The United States wanted to build up Goose Bay into a giant base with an establishment of 10,000 men with subsidiary bases in the eastern Arctic. Goose Bay was considered to be the "only suitable base for very


17 James Eayrs, Peacemaking and Deterrence, p 354.
heavy bombardment groups and in fact could be said to be the most important all-round strategic air base in the western hemisphere." There was some Canadian resistance, but by the end of 1947, B-47 bombers were operating from it. Canada, with much reluctance, had become involved in providing facilities for United States offensive systems, though not until 1963 would it grant permission for the United States to store nuclear warheads at Canadian bases. The strategic importance of Goose Bay rapidly declined with the opening of Thule Airbase in 1952.

Continental Air Defence and the Pinetree Line

By 1948 air defence had become a matter of public debate. A member of Parliament, L.W. Skey, in stressing the importance of air defence, favoured the RCAF being given priority for the defence of Canada. Colonel Wallace Goforth, recently retired Deputy Director of Defence Research, argued for greater emphasis on air defence.

18 "Memorandum of Canadian-United States Defense Conversations Held in Ottawa in Suite 'E' Chateau Laurier Hotel, December 16 and 17, 1946," p 73. In 1952, Canada granted 7,000 acres at Goose Bay for a 20 year lease to the United States for a fighter base. R.J. Sutherland, "Canada's Long Term Strategic Situation," International Journal, Vol XVII, No 3, (Summer, 1962) p 211. It was announced on 12 January 1973 that the United States might continue to use the facilities until 1976 and that discussions were underway whereby the Canadian Ministry of Transport would acquire the present United States facilities and operate and manage the airfield for both civilian and military purposes. International Canada, (January 1973) Canadian Institute of International Affairs.

Basing his argument on the new technologies available and that the oceans and Arctic wastes were no longer effective barriers, he concluded that: "Geography underlines the logic of a Canadian interceptor role, as a first requirement of defence." The government was most reticent about discussing air defence, but the 1948 estimates called for greater RCAF expenditures than for either the Army or the RCN. The increase was related to the development of the Canadian designed CF-100 fighter begun in 1946. Brooke Claxton conceded that "the only kind of attack which is envisaged as possible should war break out in the immediate future is an attack of a diversionary nature which would be cleared up quite speedily." It was admitted that such an attack could only come by air.

General Foulkes, in an informal secret talk to officers on 28 January 1948, provided an appreciation of the Soviet threat. Having reviewed the deterioration in Great Power relations during 1947, he had no doubt that the Russians were capable of overrunning Europe, but doubted the probability of them doing so. His reason was that "no nation will attempt a planned war until it possesses sufficient atomic weapons


21 Canada, House of Commons, Debates, 1948, Vol II, pp 1117-21 and reiterated same, Debates, 1949, Vol II, p 1663 when he said "Since an attack on Canada could only be made by air and by sea, emphasis must be on defence forces; by air - radar stations and communications, backed by interceptors and a relatively small mobile brigade group; by sea - antishubmarine and antismine vessels for the protection of shipping and coastal waters."
This could happen in the time period 1952-57, but there was a possibility of a conventional or accidental war between 1950-52. The day of complete air invasion (sic) of Canada had not yet arrived, but Canada could expect to be bombed with the aim of tying down troops and upsetting morale. Europe would be the primary theatre of operations and the aim would be to prevent the war from spreading to North America.

Other than stating the requirement for and initiating some research into the problem of air defence, the government took no steps in the immediate post-war years to develop an air defence system. In the United States, air defence from 1945-48 was practically non-existent. The impetus to develop an air defence system was provided by the 1948 Soviet May Day Parade display of long range bombers. This impetus was reinforced by the August 1949 detonation of a Soviet nuclear device. The United States informed Canadian planners that they considered that the Soviets might have 150 bombs by 1954, sufficient, if delivered without warning, to cause enough damage that the war would be lost.

It had been understood from the very beginning that early warning was the key requirement for any type of air defence system on a continental scale, and it was upon this

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22 "Extracts from an Address by the Chief of the General Staff, Lt.-General Charles Foulkes, To Officers of Army Headquarters," 28 January 1948 (Foulkes Papers) reprinted as Document 3 in James Eayrs, Peacemaking and Deterrence, p 390.

23 James Eayrs, Peacemaking and Deterrence, p 359.
aspect that research and development was concentrated. But this research received a relatively low priority as attention became focused on the buildup of the Strategic Air Command (SAC), on the Korean War and on the dispatch of Canadian and American troops to Europe.

Canadian defence expenditures for 1949 were the modest amount of $360 million. The White Paper on Defence that year stated the three basic objectives of Canadian defence policy as:

a. to provide the force estimated to be necessary to defend Canada against any sudden direct attack that could be or is likely to be directed against it in the near future.

b. to provide the operational and administrative staffs, equipment, training personnel and reserve organization which would be capable of expansion as rapidly as necessary to meet our needs; and

c. to work out with other free nations plans for joint defence based on self-help and mutual aid as part of a combined effort to preserve peace and to restrain aggression.

In expanding on the 1949 White Paper on Defence in the House, Brooke Claxton said that the Soviet Union was the only possible aggressor and that any attack would come by air. To meet such an attack by air there would be required:

jet interceptors and anti-aircraft guns with the necessary radar equipment and communications system, backed by a relatively small but highly trained, efficient and mobile force of ground troops. The territory of Canada is so vast that it is obviously impracticable to construct a chain or grid of radar warning stations ...

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nevertheless an early warning system to cover vital approaches and areas is being developed. 25

The early warning stations were envisaged to form the basis of the Pinetree line. During 1950-51, the United States and Canada reached agreement to proceed immediately to build up a single system working upward and outward from the principal target areas to provide protection to the most vital areas. 26 About one-quarter of the stations were to be in Canada. The United States had already begun the construction of 75 stations in continental United States and Alaska. The agreement was formalized with an exchange of notes on 1 August 1951. 27

The detailed planning had begun in 1949 under the auspices of the PJBD. An air defence planning group was established in Ottawa and this group formed the basis for the RCAF air defence headquarters established near Montreal soon afterwards. 28 Air defence

25 Canada, House of Commons, Debates, 1949, Vol II, p 1701. In September 1950 he spoke about the requirements for radar coverage over all vital approaches and remarked that the Americans "have as great interest in their defence being effective in Canada as they have in its being effective in the United States." Canada, House of Commons, Debates, 1953, 2nd sess., p 325.

26 Canada, House of Commons, Debates, 1953-54, Vol I, p 362. The Pinetree line was only an outer layer of a system of search radars that could be used to direct interceptors and to control air traffic. The total number of search radars, including the Pinetree line ones, eventually built was 193.


identification zones were set up on both sides of the international border and along both coasts. Canadian and United States interceptors were given authority to cross the border to make interceptions.

Construction of the Pinetree Line began immediately. Canada paid one-third of the cost of the thirty-three stations built in Canada. The Pinetree line ran from Vancouver Island into the Peace River country down into the northern states of the United States Prairies, up again into Ontario and Quebec and ended up at the Atlantic coast of Newfoundland. The Pinetree line was operational by 1954. A number of the stations located in Canada were manned and commanded by Americans, but Canada retained title to all sites and the right to take over the manning of such sites if so desired. Government sensitivity over having the United States operating some of the stations was reflected in having it operate the ones farthest away from Canadian population centres. 29

Perhaps the most revealing, as well as the most terse, statement came from the RCAF in June 1952. It stated that United States Airforce personnel would arrive soon to man "a number of radar installations being constructed in Canada as part of the North American radar system." These would be stations "primarily intended for the defence of localities

in the United States" and the whole project was "in line with long-term plans for joint Canada-US aerial defence." 30

With the adherence of both Canada and the United States to NATO, strong pressures developed from Canada to associate continental defence with NATO. The idea of transferring the measures for continental defence from the PJBD to NATO was discussed in 1950 at a joint meeting of the Canadian and United States Chiefs of Staff. This was part of the discussion for the setting up of the Canada-United States Regional Planning Group (CUSRPG). The CUSRPG was one of the five regional planning groups being set up under the auspices of NATO, the four others being European. According to General Foulkes, the Canadian Chiefs of Staff were "under some political pressure to bring North American defence measures into the NATO fold; but as the practical and strategic reasons far outweighed the theoretical arguments, it was decided to go along with the U.S. view." 31 The United States simply refused to contemplate any arrangement that interfered with what they considered to be the "permanent" character of joint planning (NATO was a 20 year treaty) or any form of multilateral arrangement or veto over the use of SAC to which continental air defence was becoming linked. It was decided to retain the PJBD and to report to NATO on

30 Quoted in ibid.

continental defence measures.

In 1952, NATO decided to introduce integrated commands to supercede the regional planning groups. It was then realized that if this was applied to continental defence, a United States over-all commander would be appointed.\(^{32}\) Canadian policy, ever since the PJBD had been formed, had been to avoid any form of unified command except in the direct of emergencies. This cooled much of the Canadian ardour for the previous proposals. The United States was not at this time interested in a unified command. There was, therefore, no desire in the early 1950s for a unified command in either country.

The Pinetree line was expanded in both Canada and the United States when it was agreed in 1959 to build seven more heavy radar sites. As a result of an agreement in June 1961, Canada agreed to fund and operate ten of the stations in Canada and in addition to man five more, but these were to be funded by the United States. But, in 1963 under a new agreement, the RCAF assumed financial and manning responsibility for all stations in Canada except six in Newfoundland and Labrador, although it manned the one at Gander. By 1969, as a result of reductions, there were 27 stations manned and operated by the Canadian Forces Air Defence Command out of the 30 still operating in Canada.\(^{33}\) The three remaining ones were in

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Newfoundland and Labrador and were operated by the United States. Since then, Canada has taken over responsibility for the station at Goose Bay and closed down the Moosonee, Ontario station leaving 25 stations still in operation.

The remaining United States bases are an inheritance of the Anglo-American destroyer bases agreement. When Newfoundland joined Confederation in 1949, the United States retained the use of the bases but agreed to a suspension of jurisdictional rights for a five year trial period. This arrangement was worked out by the PJBD and implemented by an exchange of notes. The United States has not requested any change.

The Mid-Canada and Distant Early Warning Lines

From 1949 the United States undertook a number of measures for air defence, but these were discrete and were not designed to fit into any continental air defence concept of a massive scale. A crucial factor was the lack of the necessary technology to provide a high enough kill ratio to make an air defence system effective against nuclear armed bombers. In 1951, the United States employed scientists at the Massachusetts Institute of Technology to study the technical problem of air defence. This study (Project Charles) resulted in the formation of the Lincoln Laboratory and the study was carried out throughout the winter and


spring of 1951-52. During the summer, a report called Summer Study Group Report was produced. From the very beginning of Project Charles, there was unofficial Canadian military and scientific participation.

The Summer Study Group Report: (1) estimated that in two or three years the Soviet Union would have sufficient aircraft and atomic weapons to cripple the United States in a surprise attack; (2) declared that existing and planned American defences were inadequate and improperly integrated, and that under optimal conditions would achieve only a 20 per cent kill-ratio; and (3) argued that new and probable technological breakthroughs made it feasible to develop an air defence system that could hope to achieve a kill-ratio of 60 to 70 per cent. 36 The report urged that a distant early warning system across northern North America to give three to six hours warning be given top priority. The early warning system was to consist of two lines of radar stations separated by about 400 miles. This was to be supplemented by a set of sea wings - airborne and shipborne radars extending from Alaska to Midway in the Pacific and from Labrador to the United Kingdom in the Atlantic.

To determine the feasibility of a distant early warning system, the United States decided to carry out an engineering and systems study in 1952. Canada was prepared to agree to cooperate, but only if a joint military study group was formed to study the whole concept of continental

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36 Ibid., pp 329-30.
air defence. To this, the United States readily agreed. The Canadian aim was to ensure that the government would have available the necessary and technological information upon which to make its decisions.

The Summer Study Group Report created a major debate within the incoming Eisenhower Administration which was bent on decreasing defence expenditures. The explosion of a Soviet hydrogen bomb device in August 1953 gave a new urgency to the debate. The proponents of air defence, largely scientists, argued that the advent of Soviet fusion weapons challenged the low priority being given to air defence. This was because the fear of a crippling surprise attack was now a real threat to both SAC, concentrated as it then was on a few bases, and to the civilian population. They saw the requirements of air defence as (1) early warning, (2) air defence forces to destroy enemy aircraft at long ranges, (3) area defence of populated regions, and (4) short range defence. A fundamental premise was that the problem of early warning was inseparable from the cost of an effective over-all air defence system. A piece-meal or discrete approach to air defence was no longer possible.

The proponents of air defence sought a strategic counterbalance, in continental air defence, to the United States Airforce doctrine of "offence is the best defence"
with its emphasis on SAC. The strategic and doctrinal confusion was not to be sorted out until the concept of first and second strike forces was developed in the middle fifties. \(^{38}\) Also, in the early fifties, relations between European defence, SAC and continental air defence were not perceived with any clarity. The Eisenhower Administration introduced tactical nuclear weapons into the European theatre in 1954 as a means of saving on manpower costs. It was then realized that this could mean the near automatic use of nuclear weapons in Europe in a war. Therefore, the Soviet Union would be tempted or forced into attempting to destroy as much of SAC as possible on the assumption that nuclear escalation would not be limited to central Europe.

European defence became dependent on the ability of SAC to massively retaliate. The credibility of SAC was dependent in turn on its invulnerability to surprise attack, and, therefore, on the air defence measures designed to provide the necessary early warning to get it off the ground and protect its bases.

The consequences for Canada of European dependence on the massive United States retaliatory capability and the requirement to provide for its invulnerability far exceeded those entailed in purely continental defence. The strategic significance of the Canadian Arctic and its airspace now assumed an importance directly related to the defence of the

Western World. As R.J. Sutherland remarked in 1965:

Domestic North American concerns were sufficient to bring about the Canada-United States alliance, but they did not call forth the great expansion in United States nuclear striking power, the build-up in continental air defences or the construction of the Arctic warning systems. These were an investment in security. The beneficiaries of the investment included Canada and the United States owing to their fundamental interest in the security of western Europe. This is something which few North Americans and even fewer Europeans have understood with any clarity.

The urgency of reaching a decision on air defence bore fruit with the approval, on 6 October 1953, of the National Security Council (NSC) Paper 162. This paper identified the Soviet threat as "total", and recommended the adoption of nearly all the proposals of the Summer Study Group Report, and contemplated spending $20 billion over a five year period for air defence. The studies for the Joint Military Study Group were by no means complete when, in November, the Eisenhower Administration accepted the approved plans of the Canadian and United States Chiefs of Staff for an early warning system. In the same month, Canada permitted the initiation of siting surveys. After a series of complex negotiations, the agreement to construct the Distant Early Warning (DEW) line was announced in Parliament in November 1954.

It had been recognized that if the United States decided to go ahead with a comprehensive air defence system, it would be very difficult for Canada to refuse to cooperate and to provide

39 Ibid., pp 266-7.
facilities on Canadian territory. On 3 October 1953, Brooke Claxton suggested in a memorandum that whether or not Canada thought such projects necessary:

... it will, of course, create many serious problems for Canada. The Canadian Government may or may not be convinced, when United States projects are proposed, that they are reasonably necessary when weighed against global strategic factors and political obligations overseas; as well as against the possibility of air attack taking new forms in the next decade. However, it may be very difficult indeed for the Canadian Government to reject any major defence proposal which the United States Government presents with conviction as essential for the security of North America.

If new United States defence projects in Canada, and in particular new radar defences, should become inevitable, the Canadian Government will be faced by the question whether Canada should share in the cost and operations of the new projects or whether the United States should be allowed to develop and operate them exclusively with United States money and men. If Canada is to share in these projects, how will that affect the level of future defence expenditures and, in particular, Canada's continuing share of NATO defences in Europe?

In 1947, Canada had discarded the concept of an Arctic radar chain. Research had continued on radar equipment that would be relatively inexpensive and require a minimum of attention. The concept was for a tactical warning line that would provide some degree of early warning but avoid the cost of an Arctic warning system. In mid-October 1953, the Joint Military Study Group recommended the construction of the McGill Fence, or as it became known, the Mid-Canada line. Feasibility studies were completed by June 1954 and the government approved its construction that month.

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41 James Eayrs, Peacemaking and Deterrence, p 369.
The Mid-Canada line provided a thin vertical electronic fence capable of detecting aircraft passing through its coverage from ground level up to a great height. It was sited along the 55th parallel, 400 to 800 miles north of the main Canadian population centres, but within relatively accessible areas, thereby easing construction.

To what extent there was United States pressure to construct a mid-Canada line is not known. There seems to be no evidence to suggest that if Canada had not built it, the United States would have wanted to do so. For Canada, its construction had a paramount political purpose. It was believed to be a relatively inexpensive way of providing for a major and independent contribution to a larger joint project. The Mid-Canada line was solely Canadian in design, construction and equipment. Coverage of the sea approaches would be required, and by building a mid-Canada line Canada could argue, justifiably, that it had done its share and could leave the seaward extensions to the United States. This is in fact what happened, and the United States paid the full cost of the seaward extensions. In a memorandum to Prime Minister St. Laurent on 21 October 1953, Brooke Claxton provided the political rationale for constructing a mid-Canada line.

42 See John Swettenham, McNaughton, Vol 3, p 199-201. McNaughton, as Canadian Chairman of the PJBD from 1946 to 1959, had insisted that Canadian electronic firms be given the contracts for the Pinetree line. This laid the basis for a high technology electronic industry of over 400 firms and made possible the complete Canadian input for the construction of the Mid-Canada line.
[The construction of a mid-Canada line] would ... give us the initiative and enable us to tell our own people and the Americans that we were quite prepared to do anything we thought necessary in continental defence.

Our taking the initiative with regard to the McGill Fence would put us in a better position to say, "Well, we think we have done what we thought was necessary for continental defence. If you want to go on and do more, we are not going to stand in the way", and keep our self-respect without having to put out too great an expenditure of materials, manpower and money.

The Korean War was the trigger which, in 1951, launched Canada on a massive rearmament programme with expenditures of $5 billion over a three year period. 44 Initially, all three services benefited but it soon became clear that air defence expenditures were going to take increasing amounts of a declining defence budget after 1954. The first sign that air defence was going to cost a great deal of money was the cost of the Mid-Canada line, which, when completed in 1957, had cost $210 million. 45 Such expenditures were attacked by Generals Guy Simonds and W.S. Macklin. 46 They considered the whole idea of continental air defence as a "Maginot Line" strategy destined to be a costly failure. They argued for balanced conventional forces useful

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43 James Layrs, Peacemaking and Deterrence, p 370.
44 See below pp 291-2
for operations in defence of the north, NATO and later peacekeeping. These public criticisms were not made until after their retirement (1956) but it seems reasonable to assume that they were made privately in the early fifties, but without apparent effect.

The decision to construct an early warning system in the Arctic was an integral part of a comprehensive continental air defence system involving the extensive use of Canadian geography. Canadian geography offered the possibilities of early warning, defence in depth and increased range and response time for interceptor forces. The further north the early warning system, the greater the warning time for SAC and civil defence measures.

The DEW line stations were sited as far north as was possible without incurring prohibitively heavy costs. To have gone further north would have magnified the costs and gained only two hours of additional warning. With the advent of intercontinental ballistic missiles (ICBMs), early warning time became a matter of minutes. In 1956, Lieutenant General Gavin of the United States Airforce was quoted as saying: "As we look ahead we can see considerable payoff in being able to put stations on the polar ice cap to detect missiles early in their flight, perhaps at the instant of take-off." Much to

47 See R.J. Sutherland, "The Strategic Significance of the Arctic," pp 267-8 for an analysis of the strategic importance of Canadian geography.

48 Quoted in Canada, House of Commons, Debates, 1956, Vol VII, pp 6955. Mr. Alvin Hamilton in using this quote remarked "For one of the essentials would be another DEW line, 500 or 600 miles further north, running from Ellesmere Island..."
the relief of Canadians, who were concerned about a challenge to Canadian Arctic sovereignty, the United States chose another system; the Ballistic Missile Early Warning System (BMEWS) with stations in Alaska, Greenland and the United Kingdom.

The second benefit offered by Canadian geography was defence in depth. There were two advantages to be obtained; first, enemy bombers could be engaged before reaching their targets; and second, by extending the area of radar coverage the risk of saturation of defences could be reduced. To achieve defence in depth there were two main options. The first was to extend northwards the system of radars for controlling interception and the airfields for the interceptors. The second was to construct a long range aircraft possessing integral radar that could operate beyond the range of ground radar cover. The final decision was to use the Mid-Canada line as the most northward radar system capable of assisting interceptions. The nine Canadian CF-100 squadrons were located on bases in southern Canada just south of the Mid-Canada line. This solution achieved some defence in depth for the United States but none for Canada. The interception battle would be fought over the populated southern part of Canada, a fact that was to influence the later debates over NORAD and nuclear westward over the Arctic ice. This area is regarded by Canada as Canadian territory on the sector principle by which eastern and western boundaries are carried northwards to the pole. The United States however does not recognize this principle, and might not concede Canada's claim if it were formally presented which has not yet been done.
weapons. One determining factor in not extending the systems of radars and airfields further north was cost. Another factor was that if there was a northern extension, Canada probably would have to accept United States interceptor bases on Canadian soil in addition to the Newfoundland ones.

An exchange of notes on 15 May 1955 provided the legal basis for the construction, which by then was well under way. Canada provided the sites and reserved the "right, on reasonable notice, to take over the operations and manning of any or all the installations."49 All entry had to be in accordance with Canadian customs regulations and there were no restrictions in the jurisdiction of Canadian law. When, in the House, the issue of Canadian sovereignty was raised, the Minister of Northern Affairs and Natural Resources, Mr. Jean Lesage, said: "Our sovereignty has never been endangered by the existence of the D.E.W. line. We have agreements with the United States and the facts are there to prove we have sovereignty over our northern territory."50 The United States bore the complete cost of $2 billion for the DEW line.

In R.J. Sutherland's view, Canada derived two principal benefits from the construction of the DEW line. Firstly, Canada secured what the United States had up to that time assiduously endeavoured to avoid, namely, an explicit recognition of Canadian claims to the exercise of sovereignty

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in the Far North. Secondly, it diminished the threat of hostile encroachments into the Canadian Arctic by making it clear that the region constituted a part of a security zone of North America and NATO.\textsuperscript{51}

The Canadian government of the day, if not later governments and the general public, was clear on the strategic reasons for continental air defence. Canadians had participated from the very beginning in United States studies. It has been stated that it was a Canadian "who first drew attention to the vital distinction between first-strike and second-strike capabilities, and to the corollary, that the key targets of a Soviet first strike would be the bases of the United States Strategic Air Command rather than North American cities."\textsuperscript{52} Mr. Claxton in 1954 made it clear that the Soviet H-bomb detonation reinforced the rationale for air defence to protect the SAC bases.\textsuperscript{53} The following year, his successor, Mr. Campney, argued that the improved Soviet nuclear delivery capability required greater efforts to strengthen the defence of the continent "because North America is the only great base from which operations for the defence of Europe can be supported, and also because of

\textsuperscript{51} R.J. Sutherland, "The Strategic Significance of the Arctic," p 271.

\textsuperscript{52} Ibid. In all probability it was R.J. Sutherland himself.

\textsuperscript{53} Canada, House of Commons, Debates, 1953-54, Vol V pp 4903-05.
the necessity of protecting the thermonuclear retaliatory capability of the United States.\textsuperscript{54}

Canada then, by 1955, was committed to continental defence on a large scale in peacetime. It had accepted that continental air defence was designed primarily to protect SAC from surprise attack. Such an acceptance was never seen in purely continental terms but as essential to the defence of the whole North Atlantic area. It was a contribution to Western security far exceeding any national air defence requirements or even continental ones. Canada's perception of the need to defend Europe was exemplified by the stationing of 12 squadrons of day fighters in Europe, compared to the nine squadrons for continental air defence.

Until the building of the DEW line, there had not been a disproportionate sharing of the costs of continental defence and the costs had not been prohibitively high. The DEW line was a project of great magnitude, complete in itself, stretching across the Canadian north, completely United States financed and controlled, and in a largely inaccessible area where Canadian sovereignty had never been fully accepted by the United States. The construction of the DEW line involved Canada in a United States alliance more intimate and embracing than any previous agreement.

The NORAD Agreement

The arrangements for command of the developing continental air defence system had followed the traditional pattern of mutual cooperation. The cooperation that developed between

the RCAF Air Defence Command and the United States Air Defence Command was far more intimate than had been previous arrangements in war or peace. This intimacy was natural once the decision had been made to consider air defence in a continental context and to give it a high priority. It resulted in military planning being directed to the natural military solution of an integrated command.

The developing military requirement for an integrated command conflicted with Canadian political reticence about too close an association with the United States. To find a solution, a joint United States-Canadian operational and scientific group was set up in May 1956 to study the problems of continental air defence. One of its recommendations to the national chiefs of staff in December 1956 was for the operational control of air defence forces by an integrated command structure. The United States was desirous of giving rapid implementation to the recommendation, but the Canadian government, faced with an election, declined to act. The election was held on 10 June 1957 and the Progressive Conservatives came to power under Mr. Diefenbaker with a minority of seats. This was to be turned into the largest majority in Canadian history after another election a year later.

When the Diefenbaker government, specifically the Prime Minister and his Minister of National Defence, George Pearkes, came to consider the proposed agreement, they were under

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intense pressure to conclude it. The government did not do so until an exchange of notes on 16 May 1958. However, in August 1957 the government had agreed to make a joint statement accepting a "system of integrated operational control of air defence forces ... under an integrated command responsible to the Chiefs of Staff of both countries." The phrase "joint command" did not appear, rather it was to be an "integrated command," a more intimate command relationship.

The text of the actual agreement can be broken into two parts. The first part was concerned with justifying the agreement, and the second with the actual organization of NORAD. It began by noting that it had been recognized for some years that the air defence of Canada and the United States had to be considered as a single problem. Coordination of separate air defence plans did not provide for the necessary "authoritative control." This was required because:

The advent of nuclear weapons, the great improvement in the means of effecting their delivery, and the requirements of the air defence control systems demand rapid decisions to keep pace with the speed and tempo of technological developments. To counter the threat and to achieve maximum effectiveness of the air defence system, defensive operations must commence as early as possible and enemy forces must be kept constantly engaged. Arrangements for the coordination of national plans requiring consultation between national commanders before

56 The United States wanted the joint command to become effective by mid-1957 when the last of the radar networks would be operational. Delays were considered to be dangerous at a time when the Soviet Long Range Airforce had become substantial, Jon McLin, Canada's Changing Defense Policy, 1957-1963, pp 39-40.

57 Joint announcement is reprinted in ibid., p 46.
implementation had become inadequate in the face of the possible sudden attack, with little or no warning. It was essential, therefore, to have in existence in peacetime an organization, including the weapons, facilities and command structure, which could operate at the outset of hostilities in accordance with a single air defence plan approved in advance by national authorities.

On Canadian insistence, the relationship of continental defence to NATO was defined in more precise terms. The Canadian-United States region was described as an "integral" part of NATO. And "In support of the strategic objectives established in NATO for the Canadian-United States region and in accordance with the provisions of the North Atlantic Treaty," the two governments recognized the desirability of integrating headquarters exercising operational control over assigned air defence forces. The "strategic objectives" of the Canadian-United States region were not defined. However, NORAD was not a command of NATO, and regardless of Canadian political desires, its association with NATO was so tenuous that no organizational relationship could be used as a justification. The failure to provide a strategic rationale for continental air defence left a void that could not be filled by the previous description of the changing technological environment and of the resulting military requirements. Even in the litter, no mention was made of ballistic missiles and their implications for air defence.

The military arguments for an integrated command structure

were very strong. The political problem lay in how to ensure that NORAD's actions would not involve Canada in situations over which it could exercise little influence. The issues of consultation, of responsibility of CINCNORAD (Commander-in-Chief North American Air Defence) and of advanced planning were of paramount importance. CINCNORAD was to be responsible to the Chiefs of Staff of both countries, who in turn were responsible to their governments. The plans and procedures to be followed in wartime were to be formulated and approved in peacetime, and were to be capable of rapid implementation in an emergency. The arrangements of consultation, responsibility and planning did not and never have made clear what control Canada would exercise over NORAD's actions in a crisis.

The difficulty lay in the intimate strategic relationship of NORAD to United States deterrent forces and the direct presidential control exercised over them. Because the "strategic objectives" were not defined, this relationship was not explicitly defined. Because the survivability of the United States deterrent was of paramount interest, what measures NORAD took in a crisis also had to be controlled by the president. In practice, therefore, consultation with Canada in a crisis was a matter of presidential discretion. The emphasis thus had to shift to working out procedures that could be implemented in a crisis.

The problem was further complicated by having a Canadian as deputy commander with full powers to act in the absence of CINCNORAD. This could result in a president giving orders to a Canadian officer whose government disagreed with, or had
not been informed of, those orders. The United States has always been particularly careful never to place any restrictions on the authority of the Canadian deputy on the assumption, presumably, that there could never be a conflict of authority. 59

NORAD was to consist of separate Canadian and United States contributions of air defence forces, as determined by each government. It was to be commanded by an integrated headquarters exercising not unified command or operating on the basis of mutual cooperation, but by having operational control over the nationally assigned forces. Operational control was defined in the agreement as "the power to direct, coordinate, and control the operational activities of forces assigned." All other aspects of command were to remain the responsibility of national commanders, such as the Commander of the RCAF Air Defence Command. The main difference between NORAD and previous Canadian-United States mutual cooperation command arrangements was that there was to be one headquarters instead of two. Instead of two headquarters each with a national commander reporting directly to his respective government, there was to be one headquarters of Canadians and Americans serving one commander (CINCHORAD) who was responsible to both governments for the operational control of the assigned forces. Normally, forces under operational control are assigned for only short periods, but in the case of NORAD, it was for ten years. The channels of command from the two governments

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to CINCNORAD and the arrangements for consultation between the two governments were of particular importance to Canada. 60

Re-equipping NORAD

Complementing the decision to integrate the North American air defence command system, were the decisions to automate the air defence system, re-equip the air defence forces, and embark upon civil defence measures designed to ensure the survival of North American society. It had been understood, since the exploratory work of the Lincoln Summer Group, that the manual type of command and control system would be unable to contend with the increased speed, and after 1954 the presumed larger numbers, of Soviet bombers. Joint command arrangements greatly improved the efficiency of a manual system, but the introduction of SAGE (semi-automatic ground environment) made a fully integrated system a necessity.

Before the introduction of SAGE, the Canadian air defence commander operating from his headquarters at St. Hubert, controlled all Canadian air defence forces. Once NORAD was agreed to, the Canadian commander came under CINCNORAD and had the authority to order Canadian forces into action in accordance with the previously agreed rules of engagement. He could do this without first gaining governmental authority. However, until SAGE was introduced, he was still a national commander controlling all Canadian air defence forces, but with a United States superior.

60 As part of the NORAD Agreement, a Canada-United States Ministerial Committee on Joint Defence was created. It has met only four times: in 1958, 1959, 1960 and 1964. There is no evidence that it was a useful instrument for defence coordination.
CINCNORAD. It was, in fact, the command relationship the United States had wanted in 1940-41.

NORAD was divided into eight regions embracing the complete area of North America. The regions were sub-divided into divisions and SAGE was built into all the regions except those in Alaska, and Newfoundland and Labrador. Because the NORAD regions ran geographically south to north, practically all the populated area of Canada was placed under the operational control of United States officers. The areas under Canadian operational control were northern Canada and the Maritimes.

Canada had been developing a successor to the CF-100. By 1957-58, the development of the CF-105, or Arrow, had reached the stage where a decision had to be made on whether or not to put it into production. For reasons that were eventually made public, the projected cost per aircraft had risen from $1.2 million to $8 million, compared to a United States equivalent interceptor for $2 million. The government decided to cancel the Arrow.

Estimating the significance of Soviet military technological advances has never been easy, and in the later 1950s and early 1960s it was particularly difficult. That the threat was shifting from manned bombers to ICBMs was clear, but the time scale of this shift and the proportion of bombers to missiles were not. The

continuous revision of estimates during this period resulted in rapid changes in United States procurement programmes.

General Foulkes remarked:

In the assessment of the threat, Canada is dependent upon the United States for virtually all principal intelligence estimates. The Canadian contribution is limited to the analysis and assessment of the information and to collaboration in a joint estimate of the threat. This joint judgement is often a compromise and has not always been accurate. As a result, it has been necessary for Canada to make considerable change and expensive adjustment to its contributions to continental defence.

When cancelling the Arrow, the government suggested that it "felt justified in deciding that we should spend a much smaller amount of money on joining in the chain of ground to air missile bases which the United States was developing for the protection of their SAC bomber bases and for the protection of the main centres of industry in the northeast portion of the United States and Canada." This was reference to the BOMARC ground to air missile, which was an area weapon designed to supplement interceptors, both being integrated with SAGE. One of the justifications for the cancellation of the Arrow was that "by the 1960s manned aircraft ... will be less effective in meeting the threat than previously expected." BOMARC and SAGE

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became linked in the public mind as a substitute for the cancelled Arrow.

The United States was initially opposed to the deployment of BOMARC in Canada because of previous political problems over the Newfoundland bases and the stationing of United States personnel at the Pinetree radar sites. However, General Pearkes took the political initiative because of his concern that any new air defence system should operate sufficiently far north to provide protection to the Montreal-Toronto region. The result was that two bases planned for northeastern United States were moved to North Bay, Ontario and La Macaza, Quebec. Only cursory consideration was given to more bases.

Three difficulties arose over the BOMARC decision. Firstly, its had had such an unsatisfactory development history that there was strong pressure to cancel the programme. Secondly, it had been developed in two versions, "A" and "B" versions. The "A" version could use either a conventional or nuclear warhead, but performance limitations caused the United States to discard it. The "B" version could use only nuclear warheads and this fact triggered off the now famous or infamous debate over the adoption of nuclear weapons. The third difficulty concerned its strategic usefulness. Because of programme delays it would not come into service until 1962, after the period of considered maximum danger from the Soviet bomber threat. It was also vulnerable to a Soviet "first wave".

65 For an analysis of the BOMARC decision see Jon McLin, Canada's Changing Defense Policy 1957-1963, pp 84-100.
missile strike. Partly because of the Canadian commitment to BOMARC and possible consequences to Canadian-United States relations of its cancellation, and partly as a result of the collapse of the Paris Summit Conference in 1960, the United States decided to construct ten BOMARC bases, two of which would be in Canada.

The Canadian Chiefs of Staff had always been clear in their advice that BOMARC or no BOMARC, Canada would have to have interceptors. The RCAF had not been in favour of the BOMARC or of any ground based missile system. The government was in the predicament, partly of its own making, of having Canadian air defence forces consisting of only two BOMARC sites once the CF-100s were retired from service.

Having cancelled the Arrow, ostensibly for strategic reasons but actually because of its cost, the government found it politically difficult to buy a United States interceptor outright. The alternative was to divert United States aircraft already in service. The final arrangement was that the United States Airforce diverted 66 McDonnell F101-B "Voodoo" fighters. These were in exchange for Canada taking over the United States operated Pinetree line stations and paying $50 million towards the cost of F104s (Starfighters) for European members of NATO under mutual assistance arrangements.66 In addition, Canada would manufacture, under licence, the F-104s to re-equip its own air

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66 Ibid., p 190.
division in Europe and the airforces of certain European countries. The F-104 order was worth $200 million to the Canadian aircraft industry.

These highly advantageous purchase arrangements were an extension of the benefits Canada derived from the Canada-United States Defence Production Sharing Programme which had begun in 1959. The United States accepted that Canadian cooperation in continental defence was very much dependent upon Canadian industry obtaining a fair share of contracts. This was notwithstanding the fact that the United States paid two-thirds of the cost of continental air defence installations in Canada and the complete cost of the DEW line.

The Defence Production Sharing Programme was different from previous post-war arrangements because it was related to United States procurement in Canada of defence material for the total United States defence programme, and not just for continental defence. The programme allowed the Canadian defence industry to gain access to the United States defence market by waiving the Buy America Act, and ignoring customs duties and fiscal regulatory restrictions. The aim was to increase United States defence orders in Canada and over the period 1959-1969 Canada had a net favourable balance of $505 million in defence purchases.

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68 Ibid., p 133.
Even a cursory perusal of the figures of the period 1959 to 1964 demonstrates the advantages of the agreement to Canada, if it was determined to maintain a relatively large military establishment with sophisticated weapons. In 1956-57 the Canadian defence budget was $1.8 billion, but by 1960 it was down to $1.5 billion and was not to reach the former figure until the 1970s. In 1958-59 the cost of the Canadian contribution to NORAD was $163.8 million and the following year it was down to $101.4 million. It gradually rose to $154.6 million in 1963-64. Since then it has steadily declined. Canada was, therefore, from 1959 onwards reducing its overall budget and the amount of its NORAD contribution in absolute terms. At the same time it was assuming greater responsibility for United States manned installations in Canada and re-equipment its airforce with BOMARC, F-101s and F-104s.

This was partly because under the United States/Canada cost sharing agreement for air defence, the United States paid two-thirds of the capital costs of CAUN (Continental Air Defence Integration North) facilities. These included the SAGE system for the Northern NORAD region, the long range radar sites built in Canada as an extension of the Pinetree line, the telecommunications requirements, and the

two BOMARC squadrons. Canada's share of CADIN was $150 million. The Voodoos were in essence a gift.

The growing confusion over defence was further intensified by the debate over nuclear arms for the Canadian forces. The Diefenbaker government had agreed to deploy the BOMARC B in 1958, to buy surface to surface missiles for the brigade group in Europe in 1957, to re-equip the air division with Starfighters in 1959 and to use the Voodoos with air to air missiles. All these weapon systems required the use of nuclear warheads if they were to be effective. Yet this was not initially made clear and was deliberately obscured by the government until a cabinet revolt over the issue brought the government down in 1963. The succeeding Liberal government under Mr. Pearson accepted nuclear arms, but made it clear that its policy would be to withdraw from these nuclear commitments in the future.

The Cuban Missile Crisis

Canadian-United States relations, already under considerable strain over the nuclear arms issue, were further aggravated by the Cuban Missile Crisis of October 1962. Canada was the only NATO ally that publicly questioned the American blockade, when Mr. Diefenbaker suggested an impartial inquiry into the state of affairs in Cuba. Although Mr. Diefenbaker accepted United States leadership of the Western World, he was not a continentalist and viewed close Canadian-

United States relations with suspicion. In the view of Donald Creighton, the doyen of Canadian nationalist historians, Mr. Diefenbaker

resented the American claim to a special and exclusive protectorate over the affairs of the Americas; and, in common with many Canadians, he disliked the fanatical excess of American antipathy to Communism, and disapproved of the extreme methods - commercial embargo and military intervention - by which the United States had tried to bully Cuba into conformity with the American way of life. 71

Such lone opposition to United States policy would not have had serious repercussions except for NORAD. Canada was no more consulted about the United States action over Cuba than was any other state. However the United States required Canadian cooperation: (1) to bring NORAD to a high state of readiness, (2) to arm its interceptors with nuclear weapons deployed in Newfoundland and Goose Bay, (3) to disperse its interceptors further north to Canadian airfields, and (4) to have authority to overfly Canadian air space and use Canadian airfields for the nuclear armed SAC bombers.

To what degree Canada acquiesced to the United States requests remains uncertain. CINCNORAD put NORAD on Defence Condition 3 (DEFCON 3) alert from the normal DEFCON 5, the highest being DEFCON 1. 72 Canadian air defence forces were not put on equal alert with United States forces, although the Minister of National Defence, Mr. Douglas Harkness, without.

71 Donald Creighton, Canada's First Century, p 324.

the approval of the Prime Minister, did put Canadian forces on an increased alert status within 24 hours of the United States alert.\textsuperscript{73} The other requests may not have been met. Apparently, for example, permission was granted for only eight of the 640 SAC overflights requested.

The Canadian argument was that under the NORAD agreement consultation should take place before the plans and procedures to be followed by NORAD in a crisis were implemented. The NORAD Agreement, however, made clear that "the plans and procedures to be followed by NORAD in wartime shall be formulated and approved in peacetime by the appropriate national authorities and shall be capable of rapid implementation in an emergency." Such an arrangement was acceptable when there was a common perception of the threat and for Canada this meant a clear \textit{casus belli} such as a Soviet invasion of Europe. Over Cuba there was no common threat perception.

The issue of prior consultation arose again during the 25 October 1973 Nixon alert during the fourth Arab-Israeli War. Again, apparently, NORAD forces were alerted with orders going directly to Canadian officers from the United States government, without prior consultation with the Canadian government. The alert for Canadian forces seems to have been cancelled. The alert then pertained only to forces of the United States Continental Air Defense Command (CONAD) of which CINCNORAD was also the commander. This did not solve the problem because the Canadians at the integrated NORAD

\textsuperscript{73} Ibid.
headquarters were involved in the operational control of
the alert. They seemed to have been removed from duty for the
remainder of the alert.\footnote{The government initially said that Canadians were not
involved in the alert as only the United States Continental Air
Defense Command was alerted. It was later admitted that
Canadians at NORAD HQ were involved for a time. There were
calls for the dismissal of the Chief of Defence Staff for
misleading the government. \textit{Halifax Chronicle-Herald}, 27 October
1974. This incident is a good example of the sensitivity
that some Canadians have over NORAD.} Government statements during the alert
would suggest that the nature and implications of the NORAD
integrated command structure are either not understood or not
accepted after 14 years of operation.

Canadian refusal to accept the full military implications
of continental defence arrangements resulted from a lack of a
common political perception of the threat. The underlying
political assumption of the NORAD Agreement was that a military
threat to the United States was by definition a continental
threat requiring a joint automatic military response. In
the case of the Cuban Missile Crisis, the United States
interpreted it as a military threat to its national security
but also as a threat to United States national interests in
Latin America. The Nixon Alert was an exercise in superpower
diplomacy and there was no direct military threat to North
America involved.

The Canadian-United States disputes, during the Cuban
Missile Crisis and the Nixon Alert, were re-enactments of
similar disputes during the Second World War and immediate
post-war years about the military threat to North America.

\footnote{The government initially said that Canadians were not
involved in the alert as only the United States Continental Air
Defense Command was alerted. It was later admitted that
Canadians at NORAD HQ were involved for a time. There were
calls for the dismissal of the Chief of Defence Staff for
misleading the government. \textit{Halifax Chronicle-Herald}, 27 October
1974. This incident is a good example of the sensitivity
that some Canadians have over NORAD.}
In these periods, Canadian defence cooperation with the United States was conditional to the extent that Canada would never allow its territory to be used in a manner inimical to the security of the United States. Canada assumed that the operations of NORAD would be conditional upon a common political perception of the military threat to North America. However, a conditional relationship was impossible because NORAD was an essential component of the United States deterrent over which Canada could not have any political control. The United States did not require Canadian political acquiescence but it did require military acquiescence when it put its deterrent forces on alert, whatever the reason.

The Canadian view of the relationship of continental defence and the defence of Canada was given by the new minister of National Defence, Mr. Paul Hellyer, in his 1964 White Paper.

It is, for the foreseeable future, impossible to conceive of any significant external threat to Canada which is not also a threat to North America as a whole. It is equally inconceivable that, in resisting clear and unequivocal aggression against Canadian territory, Canada could not rely on the active support of the United States. Recognition [of this] ... must not be permitted to obscure certain national responsibilities of which account must be taken in Canadian policy.

Canadian defence is part of the defence of North America but it is, in certain key respects, a clearly distinguishable part of the larger strategic task. One can define the defence of Canada as those aspects of North American defence which must, for reasons based upon Canadian national interest, be subject to Canadian control. The minimum requirements for the defence of Canada are: the ability to maintain surveillance of Canadian territory, airspace and territorial waters; the ability to deal with military incidents on Canadian territory; the ability to deal with incidents in the ocean areas off the Canadian
coasts; and the ability to contribute, within the limit of our resources, to the defence of Canadian airspace.  

Quantitative Reductions and Qualitative Improvements

The 1964 White Paper on Defence forecast that "failing the wide-scale deployment of an AICEM (anti-ICBM), the proportion of Canada's resources directed to air defence will gradually decline through the balance of the decade." The Soviets did not decrease their bomber strength as much as had been anticipated, keeping in service about 150 long range bombers. In the middle sixties, quantitative reductions were made in NORAD's structure but these were complemented by qualitative improvements. NORAD moved into ballistic missile detection and tracking of space objects in space. Canada was, to varying degrees, involved in all these changes.

The weapon and radar systems were reduced gradually, beginning in 1961 with the reduction of the nine Canadian interceptor squadrons to five, and later only to three squadrons (44 aircraft in 1979). The Voodoos were exchanged with the United States Airforce for 66 improved versions (F-101B/C) of the same aircraft. This only involved an expenditure of $7 million for modifications. The Mid-Canada line was closed down during 1964 and 1965. The United States


76 Ibid., p 14.
in 1965 closed down the sea and air extensions of the DEW line. This was followed in 1969 by the thinning out of the radar stations in 37 NORAD Division (Newfoundland and Labrador). Canada closed down its two BOMARC sites in 1970 and the United States sites were reduced to nil by 1972. The continental air defence system of the first part of the 1960s had by the end of the decade become primarily a perimeter air defence system.\textsuperscript{77}

The qualitative improvements involved the installation of BUIC (Back-up Interceptor Control) and SAGE command and control centres underground. In 1973, all BUIC centres were placed on semi-active status except one at North Bay, which is the headquarters of the Northern NORAD region. It was developed into an underground Regional Control Centre-SAGE (RCC-S) and is considered to be virtually invulnerable to nuclear attack.\textsuperscript{78} It is the only one in Canada, out of a total of six in 1974. All limited status BUIC centres are to be phased out by 1978. The United States bore about 95 per cent of the cost of the BUIC installations and two-thirds of the $51.8 million for the construction of the underground facility at North Bay.\textsuperscript{79}

NORAD was given the responsibility for the detection of ICBMs and submarine-launched ballistic missiles (SLBMs).


\textsuperscript{78} Ibid., No 47, May 27, 1969, Appendix EEE, p 1695.

\textsuperscript{79} Ibid., No 41, May 6, 1969, Appendix XX, North American Air Defence, p. 1417.
The BMEWS (Ballistic Missile Early Warning System) sites were established between 1960 and 1963 and the United States bore the total cost of $920 million. The information from the sites is relayed over cables and radio circuits, many of which run through Canada. The information is processed by NORAD headquarters and passed to such users as the National Defence Headquarters in Ottawa.

NORAD was also made responsible for the United States SPADATS (Space Detection and Tracking System). The information is relayed to NORAD headquarters and it tells a sensor where and when to look for a specific satellite; the sensor then sends the data back. There are four Baker-Nunn space tracking optical sensor sites, one of which is in Canada at Cold Lake, Alberta. 80

By 1970, NORAD had developed the capacity and structure that it has today. Its operational forces of 85,000 personnel are deployed at about 300 locations. 81 Canada provides 11,000 of the personnel and there are about 200 Canadians stationed in the United States. There are about 250 United States NORAD personnel in Canada, involved in co-manning and custodial activity for the nuclear weapons stored at six sites under the two-key arrangement. Thirty-seven NORAD Division had been almost entirely United States manned until 1971 when Canada took

80 Ibid., p 1418.

over responsibility for the manual Division Direction Centre and heavy radar site at Goose Bay. The aim was to assume greater responsibility for the surveillance of the air space approaches to Eastern Canada. There are also about 500 United States civilians and six officers involved in manning the four main stations of the DEW line located in Canada. All stations are commanded by a Canadian officer and Canadian civilians are also employed by the Federal Electric Company, which holds the United States Airforce contract for the operation of the DEW line. The United States pays the full cost of operating the DEW line which is estimated at $100 million per year.

Canada has been contributing about one-fifteenth of the total cost of NORAD; by 1969 this share was roughly estimated at 8 to 10 per cent. Canadian expenditures were related directly to early warning, bomber defence, and surveillance of North American air space and in the early 1970s have been about $150 million per year.

The command structure of NORAD was also revised during the 1960s. The number of regions was reduced from eight to the four existing today; Western, Eastern, Northern and Alaskan. The Northern Region is commanded by a Canadian and he exercises operational control over the DEW line, over all the airspace of northern and western Ontario, Quebec and the Atlantic Provinces,

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82 Defence 71, Department of National Defence, (Ottawa: Information Canada, 1972) p 44.

83 SCEAND, Evidence, 28th Parl., 1st sess., No 41, May 6, 1969, Appendix XX, North American Air Defence, p 1418 and see also Colin S. Gray, "Canada and NORAD," Appendix A.
and over the interceptors located at Bagotville, Quebec and Chatham, New Brunswick.

The remaining airspace, including heavily industrialized southern Ontario, is under the operational control of the three adjacent NORAD regions with control centres in the United States. A Canadian is deputy commander of each region and he may act on behalf of the Canadian government where Canadian national sovereignty is concerned. In 1970, the CF-104s of the Operational Training Squadron at Cold Lake, Alberta were given the task of carrying out interceptions over Western Canada. As part of the continuing negotiations for changes in the boundaries of the NORAD regions, it was announced in May 1975 that a regional headquarters would be established near Edmonton. This will allow interceptions over Western Canada to be controlled from a Canadian headquarters. The Canadian interceptor squadron at Comox, British Columbia is responsible for interceptions on the Pacific Coast but apparently will remain under the operational control of the Western Region NORAD Headquarters in the United States.

84 SCEAND in its ninth report recommended "that the principle be accepted that there should be Canadian commanders in those areas where essentially all the territory is Canadian. The possibility of extending, at reasonable cost, the Northern Region (which is under Canadian command) to include the heavily populated and industrialized area of southern Ontario should also be considered carefully," SCEAND, Ninth Report, 28th Parl., 1st sess., No 49, June 26, 1969, p 20.

85 Canada, Department of National Defence, (Minister of National Defence, Donald Macdonald), White Paper on Defence: Defence in the 70s, (Ottawa: Information Canada, August 1971) p 20. Hereafter referred to as Defence in the 70s.

86 Globe and Mail, May 2, 1975. The Globe and Mail reported the announcement as stating that this change "will bring Canadian
From 1944 onwards it was accepted, certainly by government, that continental defence arrangements in some form would continue in peace, and that Canada would have to have larger defence forces than before. The policy of no commitments and no defence was no longer possible. Until the construction of the DEW line, the imbalance between Canada and the United States in terms of resources to meet changing defence requirements was not great. It was the escalation in defence requirements of the United States, deriving from its dominant position in the Western Alliance, that resulted in the expansion of continental defence arrangements. Canada was caught up in a vortex of technological change by reason of its geographical position and United States superpower status.

The technological requirements and the cost precluded Canada undertaking the requirements in Canada for continental defence with its direct relationship to the expansion of United States nuclear capability. This left basically three options for Canada. Firstly, accepting that absolute refusal to allow use of Canadian geography would not have been in the national interest, as well as politically unacceptable to Canadian public opinion, Canada could have allowed the United States to do what it wished and pay the full cost. Continental defence air space under Canadian control for the first time since the NORAD Agreement was signed in 1958. To the best of this writer's knowledge, there have been no arrangements reached for Canadian headquarter's control over interceptions for southern Ontario or for the Pacific coast. The statement probably means all interceptions in Canadian airspace will be carried out by Canadian aircraft. The statement was probably deliberately misleading in order to lessen any public criticism of a renewal of the NORAD Agreement which Mr. Richardson has publicly supported.
in the nuclear age would have been a complete United States responsibility. The second option would have been to devote all the Canadian defence effort to continental defence, including a major contribution to the DEW line. The third option, and the one chosen, was more complex. It required a substantial, but clearly defined, Canadian contribution to continental defence and an overseas peacetime commitment to European defence.

The first option could have been acceptable only if Canada lacked the resources for any other option. This, it patently did not. The second option had the advantage of increasing Canadian control over United States military activity in Canada and perhaps of greater influence over United States decisions for continental defence. Its principal disadvantage was that Canadian defence policy would have become even more dependent than it did on the vagaries of technological change and United States threat perceptions. Canadian defence forces would have become appendages of those of the United States. The structural imbalances that did develop would have been accentuated, not lessened. Canadian foreign policy would have been severely constrained in its European policies. The second option would have been a continental and isolationist option. The third option provided a greater degree of foreign and defence policy flexibility, and served to offset the continental imbalance. Its choice was consistent with previous choices in Canadian history when the old world was used to offset the continental imbalance of the new.
CHAPTER 4

THE OPTIONS IN AIR DEFENCE

The New Debate

There has developed a strong aversion in Canada to buying into new and costly weapon systems. For Canada, the primary factor in air defence procurement decisions is not strategic, but political. The United States may make continental air defence decisions on strategic and financial grounds, but the effects on Canadian-United States relations are secondary. For Canada, they are the primary factor.

During the spring and summer of 1969, the Commons' Committee on External Affairs and National Defence held hearings on the renewal of the NORAD Agreement. The hearings concentrated on three aspects of continental air defence. The first was concerned with the strategic need and structure of NORAD including its responsibilities, command arrangements, resources, and the Canadian contribution. The second aspect was the possible consequences to Canada if the United States proceeded to develop an anti-ballistic missile (ABM) system. The third aspect was an analysis of proposed improvements of NORAD including the Airborne Warning and Control System (AWACS), Over the Horizon-Backscatter (OTH-B) radar and the Improved Manned Interceptor (IMI).
The committee had as a basis of discussion the new defence priorities given in the 3 April 1969 announcement by Mr. Trudeau. The first two were of direct relevance: the surveillance of our own territory and coastlines, i.e., the protection of our sovereignty; and the defence of North America in cooperation with United States forces.

Canadian Priorities and Continental Air Defence

The 1964 White Paper had made a clear demarcation in theory between the Canadian role in the strategic task of air defence and those aspects which had to be related to more specific national interests. Canada had never, publicly at least, differed with the United States over the strategic rationale for air defence. The differences that arose during the Cuban Missile Crisis and the Nixon Alert had been over differing political perceptions. In 1968, the NORAD Agreement had been renewed for five years without debate, with the caveat that "this agreement will not involve in any way a Canadian commitment to participate in an active ballistic missile defence."^2

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^1 The priorities given were:
(a) the surveillance of our own territory and coastlines, i.e. the protection of our sovereignty;
(b) the defence of North America in co-operation with U.S. forces;
(c) the fulfillment of such NATO commitments as may be agreed upon; and
(d) the performance of such international peacekeeping roles as we may from time to time assume.

^2 Agreement to Extend for a Period of Five Years the Agreement Between the Government of Canada and the Government of the United States Concerning the Organization and Operation
One reason why the NORAD Agreement had been renewed with no debate was that attention was focused on the Canadian contribution to NATO to a much greater extent than on NORAD. This attention was reinforced by Mr. Trudeau's decision, in May 1968, to undertake a comprehensive review of Canadian foreign policy. For various reasons the government announced its NATO policy before the review was completed. Canadian adherence to NATO was reconfirmed but with a reduced military presence on the central front.

The announcement outlined the government's new "philosophy of defence." Crucial to this philosophy was a new ordering of priorities for which resources would be allocated on the concentric-circle principle; that is money would be provided for low priority activities only after those of high priority had been adequately financed.

The priorities reflected the government's desire to establish a new balance between national interests and international commitments; between domestic and foreign

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policies. Central to this balance was the government's view that the threat to peace and security had greatly receded and therefore more resources could be allocated to other national aims such as economic growth and sovereignty and independence. The underlying theme was that Canadian "external activities should be directly related to national policies pursued within Canada, and serve the same objectives."5 The most important national interest was the preservation of the political integrity and independence of Canada as a bilingual and multi-cultural state. Foreign and defence policies were instruments to achieve this paramount interest. An international role for Canada in terms of Pearsonian internationalism with its faith in collective defence and peacekeeping was deprecated and replaced by Trudeauvian nationalism that was more introverted and continental in its basic tenets.

On taking office in 1968, the government of Mr. Trudeau was faced with possible defence capital expenditures of between $300 and $400 million to re-equip Canadian forces committed to NATO.6 It put a three year budgetary ceiling on Canadian defence expenditures of $1.8 million, or 2.4 percent of the GNP, in the spring of 1968. By 1971, only 1.8 per cent of the GNP was being spent on defence.


6 Bruce Thordarson, Trudeau and Foreign Policy, p 146.
But more important was the amount available for capital expenditures as a percentage of a total fixed defence budget. From 1962/63 to 1968/69 the percentage had dropped from 22.3 per cent to 18.2 per cent; but in the next three years it was to drop to less than 16 per cent or $245 million. The government, therefore, had a strong aversion to the continuance of defence policies that could entail heavy capital expenditures.

It is perhaps somewhat of an oversimplification to suggest that the new philosophy of defence and its priorities derived solely from financial expediency. But as one commentator had remarked: "It is one of the characteristics of the present Canadian Government that it seems to feel a curious compulsion to prove after-the-event rationalizations for perfectly justifiable decisions that have already been taken on grounds of expediency."8

The government's 3 April 1969 announcement listed the priorities of Canadian defence, with money to be allocated to the lower priorities only when higher priorities had been adequately financed. This, however, did not explain the extent to which, for example, the first priority


of protection of sovereignty had to be satisfied before the requirements of continental defence, the second priority, were to be met. 9 An attempt to answer this conundrum was made in the White Paper published in August 1971 entitled Defence in the 70s.

Defence in the 70s noted the increasing stability in the world and argued that "Canada's overriding defence objective must... be the prevention of nuclear war by promoting political reconciliation to ease the underlying causes of tension, by working for arms control and disarmament agreements, and by contributing to the system of stable mutual deterrence." 10 The only direct external military threat to Canada's national security was seen as a large scale nuclear attack on North America considered as one set of targets. Cooperation with the United States in North American defence would remain essential as long as joint security depended on stability of the strategic military balance. The Canadian objective would be to make an effective contribution (within the limits of resources) to continued stability by assisting in the surveillance and warning systems and in the protection of the United States "retaliatory capability as necessary." 11

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9 Ibid., p 381.
10 Defence in the 70s, p 6.
11 Ibid., p 25.
Defence in the 70s confirmed that no projected United States ballistic warning and defence systems would require either extensive use of Canadian territory or Canadian participation. On continued bomber warning and defence systems, Defence in the 70s provided a number of strategic arguments which can be summarized as follows:

1. If nuclear war occurred, Soviet nuclear forces would probably attack in a concerted programme with minimal warning to achieve maximum surprise.

2. Soviet bombers would be launched simultaneously with missiles and have a follow-on role, striking targets which did not require immediate attack, or which the missiles had not attacked successfully.

3. Because Soviet bombers used in this role would considerably augment follow-on strikes, bomber defence would contribute to stability.

4. The importance of up-to-date surveillance systems.

5. The time had passed when a full, active anti-bomber defence was essential for the protection of the United States deterrent capability.

6. The Soviets might be tempted to re-build their long range bomber force if they believed there would be absolutely no defences against them.

The government's policy was that "normal peacetime identification should be performed by Canadian aircraft." To implement this policy, CF-104s were given this role for

12 Ibid., p 20.
the Prairies, the Goose Bay radar site was taken over, and the eastern based Voodoo squadrons took over the identification role for eastern Canada. These were simple arrangements, readily implemented, and followed previous governments' policies for the Canadianization of continental air defence installations in Canada.

Control for northern airspace, for which there was no interceptor capability, was forecast as a future requirement:

The Government will keep under review the options available for using mobile surveillance radars, either airborne or air portable, so that airspace control can be instituted where and when needed. For example, protection of Canadian interests may, in the future, require air-traffic-controlled airspace in certain parts of the North. 13

Defence in the 70s stated that some integration of military and civilian air control systems had taken place and that further studies were underway. Since then, the Ministry of Transport (MOT) has been made responsible for implementing a new Joint-En-Route Terminal system to control all air traffic over the southern part of Canada from coast to coast. There is much commonality between the technological requirements of MOT and DND to control air traffic in Canadian airspace. This has led to a proposal for a Canadian Air Surveillance System (CASS) which would integrate and expand the present MOT and air defence systems in order to bring about an overall

13 Ibid.
reduction in costs and to avoid duplication. Such an "integrated system would provide national control in areas where control is now exercised by NORAD Regional Control Centres located in the United States."\(^\text{14}\)

The United States has a similar integrative policy and by 1978 all military search radars in continental United States will be integrated with civilian ones. It is intended that some Canadian border radars will feed into the United States joint civilian-military centres.\(^\text{15}\)

\textit{Defence in the 70s} did not give any clear indication about whether the government would renew NORAD again in May 1973. The policy of renewal "will depend on the strategic situation extant, including progress in SALT."\(^\text{16}\) The government did lay down the principle that "unless the strategic situation changes, the Government intends to update its contribution to the active anti-bomber defences of North America only to the extent that this is required for the general control of Canadian airspace."\(^\text{17}\)

Just prior to the renewal of NORAD for a further


\(^{16}\) Defence in the 70s, p 30.

\(^{17}\) Ibid.
two years on 12 May 1973, Mr. James Richardson, the new Minister of National Defence, before SCEAND gave further elaboration for continued adherence to NORAD.

... we now believe that if the Soviet Union were to decide to launch a nuclear attack on North America and to employ bombers in such an attack, the bombers would be launched at the same time as the ICBMs, or subsequently against targets which might have survived the initial missile attack.

... We have to recognize that the bomber, if it could reach its target undetected and unopposed, would be a very effective weapon against the United States land-based missile forces and strategic bomber forces and could seriously reduce United States retaliatory capabilities. We have concluded that effective early warning systems, able to detect the approach of bombers well away from their targets, are the main requirement to deter the Soviet Union from using them effectively in a first strike attack on the United States retaliatory forces.

We have also concluded that to rely at this time on warning alone to deter bomber attack would introduce an undesirable element of instability into the present strategic system .... Effective early warning requires not only a capability to detect such aircraft through radar, but to carry out positive identification as well.

The stability of deterrence is ... reduced if intruding bombers cannot be compelled by interceptor aircraft to reveal clearly what their intentions are.

It is important to recognize that this concept of stabilizing the deterrent does not require a capability to defeat an attacking bomber force, but merely to determine without ambiguity through the threat of significant losses, whether an attack on the continent is actually intended.

We can make ... [our] contribution more effectively within the kind of integrated system for operational control of the
air defence forces of both nations which the NORAD Agreement has established.\footnote{Statement on NORAD by the Minister of National Defence, the Honourable James Richardson, SCEAHD, Evidence, 29th Parl., 1st sess., No 9, April 13, 1973, pp 78-9.}

These statements provide more coherent arguments than had been made in Defence in the 70s. They clearly differentiate between the requirements for early warning, determination of intentions, and bomber defence. The arguments for continued Canadian participation in continental air defence are based on the first two requirements. The question is whether there is any difference between the requirements to control airspace and to determine intentions. The general tone of Defence in the 70s would lead one to suspect that there is, whereas Mr. Richardson's statement would not. It is unlikely that a clarification will be forthcoming until the government is faced with making a decision on a new interceptor. The present life of the Voodoos has been given as 1980. How many more interceptors will be required to determine intentions than to control airspace is a question of cost and performance, both at present not known.

The government's lack of enthusiasm for large capital expenditures for air defence is in part diplomatically counterbalanced by its preparedness to make special arrangements to enhance the protection of North America and contribute to the maintenance of stable mutual deterrence. SAC refueling tankers are to be allowed to continue using Goose Bay and SAC bombers to overfly...
Canada on airborne alert in times of crisis, as determined by the Canadian government. Training flights without nuclear weapons can continue in peacetime. The government is to begin negotiations to allow United States interceptors and SAC refueling tankers to disperse to selected bases in Canada in times of crisis. These arrangements and negotiations reflect the United States desire to use Canadian airspace and facilities and avoid the difficulties that arose during the Cuban Missile Crisis.

Mr. Richardson, when asked by a SCEAND member, "If we did not have NORAD would we not have to have another program of co-operation between the two nations?" answered "Absolutely, in my opinion, yes." The political factor was overriding when SCEAND concluded "that one of the basic justifications for continued membership in NORAD is that it helps Canada avoid being faced with a request from the United States for facilities in Canada, the granting of which impinge (or at least be considered by some Canadians to impinge) on Canadian sovereignty."

The New Air Defence Package

During the period 1958 to 1963, NORAD reached its peak of strategic usefulness because its capabilities matched the threat. The Soviet Long Range Airforce did not have good electronic counter measures or aerial refueling

19 SCEAND, Evidence, ibid., p 17.
capabilities. Penetration of NORAD defences, although possible by a high-low-high profile, was not the threat it was to become in the late sixties.

In the sixties, the Soviets did not increase the size of their long range airforce (it declined from 200 to about 145 long range bombers). However, they did improve its effectiveness by introducing 50 aerial refueling tankers, a sophisticated ECM capability, and air to surface missiles (ASM) with a 200 mile range. They have developed a new bomber, codename Backfire. It is in series production and operational deployment is expected shortly. Backfire is considered to be best suited for a peripheral role but "when deployed with a compatible tanker force, BACKFIRE constitutes a potential threat to the Continental United States." 23

NORAD's capability was, and is, against the subsonic high flying bomber which it was designed to combat in the early 1950s. It has three principal weaknesses; vulnerability of its installations to destruction, poor capability for the detection of low level flights, and no capability to defend against bombers launching ASMs.

outside interception range.

Its vulnerability derives from the capability of ICBMs to destroy most of NORAD's installations, such as radars and interceptor bases, before the Soviet bombers arrive. Bombers with radar homing missiles could destroy the control radars. All present NORAD radars are line of sight radars and therefore detection and tracking of aircraft flying at low altitudes is severely limited. ASMs, for example the present Kangaroo, can be launched from outside the area covered by interceptor control radars. In 1967, the United States Airforce proposed a four component package to overcome these weaknesses by extending the air defence system outwards and downwards, and by making its components less vulnerable. The four new components were the OTH-B radar, the AWAC system, IMI, and SAM-D.25

Research had begun in the late 1940s into a radar system that would overcome the limitation imposed by the curvature of the earth. By the early 1960s, an over-the-horizon radar had been developed. The signals are reflected downwards off the ionosphere at an angle many

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24 SCEAND, Evidence, 28th Parl., 1st sess., No 43, May 13, 1969, Appendix ZZ, Dr. George Lindsey, Strategic Weapons, Stability and the Possible Contributions by Canada, p 1512.

25 Descriptions of these systems are in the testimony of Dr. Lindsey, ibid., pp 1466-72 and Jane's Weapon Systems 1972-73, pp 195-96 and 362-63. The Surface to Air-Development (SAM-D) is designed for tactical and point defence of Washington. There is no intention of deploying it in Canada and it is not discussed here.
hundreds of miles beyond the horizon and the echoes of aircraft can be detected, regardless of altitude, up to the ionosphere. Because the energy detected in the receiver has been scattered back from the target, this type of radar is called over the horizon-backscatter.

The original concept called for three OTH-B radars looking north, east, and west with a coverage outwards of 2000 miles compared to a DEW line radar with 200 miles. The northern OTH-B radar would replace the DEW line stations. Experiments are being carried out by Canada and the United States to determine if the OTH-B radar can be made to operate in the auroral belt zone. The United States is continuing with the development of the OTH-B radar with deployment planned for 1980. A southern site has been added and is presumably related to early warning against FOBS (fractional orbital bombardment system).

The AWAC system was conceived as a means of controlling interceptor aircraft further north than the Pinetree line allows, to offset the use of ASMts, and provide a platform invulnerable to missile attack. Its deployment was designed to allow for major reductions in the Pinetree line.

There have been a number of contenders for the IMI but the choice now appears to be between the United

[26 Jane's Weapon Systems 1972-73, p 196. There has been no information on how successful the experiments have been, other than that they are continuing.]
States Navy's F-14 and the United States Airforce's F-15 with the latter the more likely choice. Both would require modifications for continental air defence and there are no plans for an IMI until 1980.27

The new air defence package was conceived as a means of updating air defences against a full scale Soviet bomber attack in a general war. In 1972, the four objectives of the United States air defence system were stated to be: (1) to deter air attacks by defending strategic offensive forces and important urban/industrial targets, (2) to defend the National Command Authority, (3) to limit damage from small air attacks, and (4) to prevent unauthorized overflights in United States airspace.28 The acquisition costs of the new air defence package were estimated to be $5 billion.

In 1974, the United States Secretary of Defense James Schlesinger, stated that air defence would be "structured primarily for peacetime surveillance."29 The United States had continued "to keep open the


option to deploy a complementary air defense" system as long as there was some chance it "might deploy at least a thin nationwide ABM defense." SALT 1 had foreclosed even a thin nationwide ABM defence. Tight budgetary restraints necessitated adjustments in the United States air defence programme.

The AWAC system was designed to provide a means to control air defence aircraft in a nuclear war. The emphasis on peacetime surveillance has resulted in the AWAC system being transferred to a tactical role and redesignated the E-3A. Thirty-three rather than 42 aircraft are to be purchased at a total estimated cost of $2.5 billion. It is due to be operational by 1978. There has been some resistance to the removal of the AWAC system from a strategic role, on the grounds that "we are going too far, too fast with this, and the fact that we cannot, by treaty, defend against a missile attack is, in my judgement, not adequate justification to not defend against manned aircraft attacks." This view, by the then Chief of Staff of the United States Airforce, was given support by the Secretary of the United States Airforce when he stated that the AWAC system "does have that CONUS air defense role

30 Ibid., p 66.

31 United States, Senate Committee on Armed Services, Revision of Air Defense Posture, testimony of General George S. Brown, Chief of Staff, U.S. Airforce, 93 rd Congress, 2nd sess., S.3000, Part 2, Authorizations, February 7, 1974, p 351. General Brown has since been appointed Chairman of the Joint Chiefs of Staff.
it originally had."\textsuperscript{32} Those AWAC systems deployed in the United States are likely to be given both tactical and strategic roles with the former being the primary role.

For both strategic and budgetary reasons, the AWAC system is no longer considered to be an essential component for the updating of continental air defence. Unless there is a change in the strategic environment, there is likely to be little pressure to deploy any AWAC systems in Canada, even if some are given a strategic role. During alerts, they could be deployed as required, but they are unlikely to be used for routine peacetime surveillance. Canada, then, is concerned primarily with the OTH-B radar and the replacement of its present interceptors in the early 1980s.

\textbf{The Requirements for Airspace Control}

In peacetime, there is a requirement for most countries to be able to detect, identify and if necessary shoot down intruding aircraft; that is, to maintain control over national airspace. This requires an active air defence capability.

To maintain control over national airspace, a perimeter detection capability and interceptor aircraft are required. Quantitatively, the ideal is for radars to be sited to give at least complete perimeter coverage and also over as much of the internal airspace as possible. This is an immense task for continental size countries such

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as Canada, the United States, the Soviet Union and China
and relatively easier for countries in Europe. Probably
no continental size country has complete radar coverage,
although the Soviet Union has the most complete coverage.
It has been estimated that two-thirds of Canadian airspace
is not under radar coverage. 33

Continental size countries are unable, generally,
to deploy enough interceptors to undertake rapid interception
at all points of the national frontier (perimeter).
Instead, interceptors are grouped for deployment on the main
approaches, and a prime technical requirement becomes range.

The Soviet Union maintains the largest air defence
system designed both for control and for bomber defence.
The Soviets have 2,650 interceptors and 10,000 SAM launchers
at 1,600 sites. The United States has only 484 interceptors
and its SAMs are to be withdrawn from service by mid-1975. 34
Canada has 44 interceptors. SAMs cannot be used as a
means of maintaining surveillance that entails identification
and therefore the number and deployment of interceptors
determines the extent of identification/control coverage.
The United Kingdom maintains 9 squadrons of interceptors,
France 7, and Sweden 6. These countries maintain
interceptors primarily to maintain control over national
airspace.

33 John Gellner, "The Neglect of Canada's Set-up,"

It is difficult to determine how much less is required to maintain control over national airspace than for bomber defence. For small European countries, complete radar coverage is possible. Interceptors can be grouped to cover all approaches and depending on the technical capability of the air defence system, reaction can be fast enough to satisfy the requirements for interception before intruders have penetrated into national airspace. A rough estimate is that about 100 interceptors at the most, are required for complete control of national airspace of geographically small countries. If one was to extrapolate to determine the interceptor requirements for continental size countries, the figure would run into many hundreds. The number of radars required, if line of sight radars are employed, considerably magnifies the problem. There could, therefore, be only a marginal difference between the quantitative requirements for control of a national airspace of a continental size country and for bomber defence against, for example, the present 145 Soviet long range bombers.

The quantitative problems of maintaining control over national airspace are, however, secondary to the qualitative ones. Continental size countries have the advantage of depth to offset a large perimeter. The United States has used Canadian airspace to provide it with early warning. European countries have been forced to integrate, at least partially, their air defence systems to obtain sufficient early warning. To exploit fully
early warning, SAGE systems have now become nearly universal.\(^{35}\)
The NATO Air Defence Ground Environment System (NADGE) is now operational. The Swiss, Swedes, Iranians and Japanese all have similar systems in operation.

For North American control of airspace, the prime requirements are for perimeter radar coverage with an interceptor control capability, and enough interceptors to cover the main approaches. The United States air defence system meets these requirements in part because of the use made of Canadian geography. The DEW line provides both Canada and the United States with early warning, but control radars and interceptor capabilities cover only the southern part of Canada or one third of Canadian airspace.

The deployment of a northern OTH-B radar will increase early warning times, but any northward extension of interceptor capability will require the northern deployment of control radars and interceptor bases. Manual control of interceptions might be sufficient and there would be no requirement to extend the SAGE system northward. There is no evidence that the United States would contribute to such a northern extension, nor presumably would it be desirable for it to do so, if protection of Canadian sovereignty is the objective.

The present interceptors are capable of intercepting the present generation of Soviet bombers.

Unless Backfire with its Mach 2 capability is deployed in large numbers with an intercontinental mission, the present air defence system should meet air control requirements for the remainder of the 1970s. For the 1980s, the deployment of OTH-B radar and a new interceptor should prove sufficient unless bomber defence once again becomes a strategic objective.

Bomber Defence and the Strategic Balance

Anti-bomber defences between 1958 and 1963 were crucial to any overall United States damage limitation capability. Damage limitation became a doctrinal casualty to ICBMs and submarine launched ballistic missiles (SLBMs) deployed in large numbers and largely invulnerable to a counterforce strike. In the 1960s, the United States settled upon an assured destruction capability that would destroy two thirds of the Soviet population. This would require United States second strike forces to be able to deliver about 400 megatons equivalent (MTE). Because of demographic differences, the Soviet second strike would require only 200 MTE to achieve the same level of destruction. 36 Today, Soviet bombers could deliver about 1700 MTE and Soviet ICBMs and SLBMs about 5600 MTE (5100 MTE for ICBMs and 500 MTE for SLBMs). Comparable United States figures are 7900 MTE for bombers and 2300 MTE for ICBMs and SLBMs. 37


It has been estimated that only 5 per cent of the United States ICBMs would survive a Soviet counterforce strike, although this figure may be too pessimistic. If for purposes of analysis, we accept that say 7 per cent of the Soviet ICBM force would survive a United States counterforce strike, then the Soviet Union would have about 360 MTE (0.07 X 5100) left excluding SLBMs and bombers. Accepting that SLBM reliability would be around 70 per cent, submarine availability about 40 per cent, and 90 per cent of the available submarines would survive ASW operations, then the Soviets would have another 126 MTE (.7 X .4 X .9 X 500) available. The total is about 486 MTE or over double the presumed required amount, excluding the figure for the Soviet bomber force. The comparable United States figures after the present MIRV programme is completed will be 91 MTE for ICBMs and 376 for SLBMs for a total of about 467 MTE.

Assuming only 20 percent of the bombers of either side got through, the bomber figures would be only 340 MTE for the Soviet compared to 1580 MTE for the United States bombers. If bombers have a free ride, the figures are 1700 MTE and 7900 MTE. These figures, combined with the great accuracy that bombers can deliver their payloads, demonstrate the advantages of bombers over ICBMs and SLBMs. The overriding disadvantage is, of course, their vulnerability to first-strike attack and anti-bomber defences.

Today, bombers provide an overkill capability and serve as a form of insurance if either ICBMs or
nuclear powered ballistic missile submarines become highly vulnerable systems. Even if the Soviet Union used all of its ballistic missiles against United States strategic offensive forces and reserved its bombers for use against United States cities, the United States, according to Defense Secretary Schlesinger, "would have sufficient surviving forces to retaliate decisively against Soviet cities ... [and] that offers the best hope of deterring attack and thus protecting our cities, not our ability to defend them against bomber attack." 38

It is probable that both the United States and the Soviet Union will maintain bombers for strategic use for the foreseeable future. The Soviet Union will continue probably to maintain a sizable and technologically updated air defence system. The United States is not likely to undertake a major updating of its air defence system unless ballistic missile defence (BMD) becomes a strategic objective. This could develop if the SALT 1 Agreement on ABM site limitations is not renewed in 1977, BMD becomes technologically feasible within reasonable economic cost, and defence supercedes assured destruction as the basis of United States strategy.

There is developing concern in the United States over the increasing Soviet counterforce capability.

However, there is nothing in Secretary of Defense Schlesinger's doctrine of equivalence that suggests BMD is the answer. He argues for "essential equivalence between the strategic forces of the United States and the USSR" and is primarily concerned with offensive capability. If deterrence should fail, the policy is flexibility of response entailing the limited and discriminating use of nuclear weapons. The United States is continuing work on the SITE programme which is specifically designed for the defence of Minuteman. The programme for advanced BMD technology is being continued "to provide the Soviet leaders with strong incentives to negotiate additional strategic arms limitations agreements .... [and] to motivate them to keep the treaties and agreements already made." The option for BMD is being kept open as an instrument of negotiation and not as a likely strategic objective.

Canadian air defence policy since the 1964 White Paper has been predicated on the approaching end of bomber defence as a strategic objective. The rationalizations in both Canada and the United States for a continued requirement for bomber defence have been related to whether BMD would become a strategic objective. The apparent end of bomber defence as a strategic objective provides Canada with a wider set of options for air defence than it has had since the early 1950s.

40 Ibid., p 5.
41 Ibid., p 71.
Canadian "Independence" and NORAD

There are United States requirements for the use of Canadian facilities and airspace, particularly for early warning and SAC operations. These requirements may not be absolutely essential, but as long as the Soviet Union and the United States employ bombers for nuclear deterrence, Canada needs to have very good reasons to refuse these requirements. The issue then of continental air defence arrangements is how to reconcile United States strategic requirements with Canadian independence and sovereignty.

As John Holmes has written:

Problems between the United States and Canada should be regarded as permanent. They will not go away when we have "solved" them or found a formula. It is a question of "process" rather than "solution".\textsuperscript{42}

Canada in the third quarter of this century has found itself caught in a dilemma caused by the requirements for Canadian-United States military cooperation and the broader requirement to protect itself against "inadvertent United States hegemony."\textsuperscript{43} There has been a loss of Canadian independence in the formulation of national security policies. This has not been caused by the designs of the United States but by geographical position, modern military technology and the superpower status of the United States. If this loss of independence had been


\textsuperscript{43}Roger F. Swanson, The United States as a National
limited to defence policy, the effects would have been of temporary significance; but in Canada's case they have been only one aspect of a total loss embracing social, political, economic and cultural aspects.

The NORAD Agreement was a natural strategic development, but it also symbolized a new defence relationship in which Canada accepted some loss of control over the measures for the defence of Canada in exchange for greater security against a common perceived threat to North America and as a contribution to the security of the western world. The Agreement did make arrangements for consultation and although not entirely satisfactory, they have been as good as could be expected considering the disparity of contributions and the relationship of NORAD to United States deterrent forces. The United States has not been overbearing and in fact has been willing to go a considerable distance to meet Canadian sensibilities. The arrangements for command are particularly favourable to Canada when one considers the responsibilities given to Canadian officers in the border regions and the deputy commander of NORAD. This may be the price to pay for Canadian cooperation and for the use of Canadian territory, but the United States has not been reluctant to pay it and has done so honourably. If United States interceptors have undertaken interceptions on behalf of

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Canada, this has resulted from a failure of Canada to purchase more interceptors. NORAD has provided Canada with the cheapest way to maintain control over the second largest airspace in the world.

Canada has lost some military independence but Canadian air defence forces are far from being a passive appendage or in a satellite status to the United States military. The present NORAD organization and command arrangements give Canada as much control of its airspace as technology and military efficiency will allow with the present level of Canadian contribution. If the need arises for greater Canadian control of northern airspace, then Canada has the option of undertaking this task independently, while using NORAD installations. NORAD has not foreclosed the taking up of such an option, and it could make it easier and cheaper. It is not NORAD that inhibits Canada from assuming full responsibilities for controlling Canadian airspace, but the lack of complete control radar coverage and insufficient interceptors.

It is quite possible to set up a command relationship based on mutual cooperation to control North American airspace as long as peacetime surveillance and control remains the primary objective. The United States has a strategic interest in retaining the DEW line and Canada has a mutual interest in using it for peacetime control.

44 Colin S. Gray, Canada and NORAD, p 4.
The NORAD Agreement can be dissolved and Canadian-United States cooperation restricted to some form of mutual cooperation arrangement for the control of continental airspace. However, Canada must then expect to bear a heavier burden if it wants to exercise anywhere near the degree of control now exercised or expand it northwards.

**Canadian Options**

There is no strategic or political imperative for Canada to remain in NORAD today, but it could be in the national interest to do so. There would undoubtedly be some United States opposition to Canadian withdrawal. Refusal of Canada to grant the United States use of Canadian territory and airspace for any military purpose would most certainly precipitate a Canadian-United States confrontation. There are basically four options open to Canada.

**Option 1.** Canada can remain in NORAD but limit its participation to its present level regardless of the measures the United States takes to update the present air defence system. Canada could provide, under arrangements designed to protect its sovereignty to the greatest possible extent, the facilities the United States required in Canada. These could include one site for an OTH-B radar and use of Canadian airspace for the AWAC and IMI systems. The advantages to Canada would be minimum financial outlay for air defence, no upsetting of Canadian-United States relations, and continued direct access to the information obtained by NORAD facilities. The disadvantages could be extensive.
The disparity of resources deployed could result in changed organizational and command arrangements that would give the United States greater responsibility for controlling Canadian airspace than it now has. Unless Canada replaced the present interceptors, it would have no air defence capability. There would be only a pretence to sovereign control of Canadian airspace.

Canada could establish some form of air traffic control organization in northern Canada, probably centred at Frobisher Bay. Such an organization would have only internal regulatory functions unless interceptors were used and there was access to the information provided by an OTH-B radar.

Option 2. Canada could remain in NORAD and purchase only those systems that are most relevant to the control of Canadian airspace. Arrangements could be made for Canadian participation and control of those systems that Canada did not wish to purchase. The first priority would be to buy a successor for present interceptors. The aim would be to have enough interceptors to undertake all peacetime interceptions on the main approaches to Canada. There is no reason why Canada should contribute financially to the capital cost of an OTH-B site but joint manning could be advisable.

Northern airspace could be controlled by establishing a joint civilian-military air control system with the military portion being part of a northern NORAD interception capability. Other than an OTH-B radar site,
there should be no reason for any United States participation. Whether or not an OTH-B radar site is built, it would probably be in Canada's interest to take over the DEW line and improve some of the facilities so that the early warning function would be combined with that of control.

The principal advantage of this option is that there would be maximum Canadian control over Canadian airspace at reasonable cost. A northern extension would increase Canadian control to that of near complete perimeter coverage.

Option 3. Canada could withdraw from NORAD but continue continental air defence on a mutual cooperation basis with no Canadian participation in updated systems. If the United States wished to deploy updated systems requiring use of Canadian geography and airspace, then arrangements could be made for this. The main advantage would be the appearance, at least, of increased Canadian political and military independence. How great would depend on the arrangements reached with the United States. The arrangements, however, could be extensive enough to prove counterproductive. Having withdrawn from NORAD, Canada could find it had less means of controlling United States military activity in Canada than it had under NORAD. If Canada did not purchase any new interceptors, then the resulting vacuum over the second largest airspace in the world would be filled only to the extent that suited United States interests.
Option 4. Canada could withdraw from NORAD but continue continental air defence on a mutual cooperation basis with participation in updated systems. The level of participation would be governed by the requirements for maximizing Canadian control of airspace and for providing for essential United States strategic requirements. It could be low or high depending on United States strategic objectives. If bomber defence does not again become a United States strategic objective, early warning and bomber overflights will be the only significant strategic requirements. An integrated continental air defence system is not essential to meet the requirements of either. The operation of one OTH-B radar site in northern Canada is not likely to inhibit the independent conduct of Canadian foreign and defence policies. As long as the United States maintains bombers as part of its deterrent triad, Canada will have to accept overflights.

If bomber defence again becomes a strategic objective, then Canada could participate to a limited extent. It seems unlikely, however, that bomber defence could be conducted on a mutual cooperation/joint command arrangement. NORAD came into being because it was clear that mutual cooperation was too unsatisfactory as a command system for the conduct of bomber defence operations. Hence, Option 4 is only applicable if bomber defence does not again become a strategic objective.

The maximizing of Canadian control of airspace will
require some equipment updating. Accepting that early warning by either the DEW line or its possible replacement, the OTH-B radar site, will remain a United States responsibility, the main requirements will be a new interceptor by about 1980 and an extension of control radars to more northern areas. These requirements will exist whether or not Canada remains in NORAD.

The principal advantage of a mutual cooperation command arrangement with an updated air control/defence system is political. It would remove any chance of a recurrence of the difficulties that arose during the Cuban Missile Crisis and the Nixon Alert. It would probably result in the withdrawal of United States controlled nuclear weapons, although this may happen anyway once it is clear that bomber defence is a completely redundant strategic objective. It would mean that Canada had assumed complete responsibility for the active defence of its own airspace. The principal disadvantage is that for the same level of control, Option 4 could be more expensive and more difficult to implement than Option 2 which entails staying in NORAD.

Political Choice and the Options
If, as appears likely, bomber defence remains strategically redundant, there will not be any strategic imperative to maintain large active anti-bomber air defences. The extent to which Canadian air defence/control priorities will be met is a function of domestic choice. The
choice is primarily one of accepting or rejecting greater responsibility for the active control of Canadian airspace. The systems for air defence will have to be updated by the early 1980s as a normal replacement requirement. The greater the responsibility Canada decides to accept for the control of its own airspace, the greater the costs are likely to be. The decision over NORAD is a marginal one compared to that concerning the degree of responsibility Canada is prepared to assume for controlling its own airspace. Greater Canadian independence in the context of the continental imbalance is directly related to the assumption by Canada of greater responsibility for controlling its own airspace.
CHAPTER 5

CANADIAN MARITIME INTERESTS AND NAVAL POLICY
1867-1974

Geography has provided Canada with the nearest landfall on the great circle route from Europe to North America and a major waterway into the continental interior. Maritime Canada (The Atlantic Provinces) has the only natural deep water harbours for supertankers on the eastern seaboard of North America. The Atlantic coast continental shelf, which stretches out to 650 miles in one place, provides the banks for one of the world's most lucrative cod fisheries and may contain considerable reserves of oil and gas. The St. Lawrence-Great Lakes waterway is the gateway to continental Canada. In the past, maritime Canada dominated the seaward approaches to continental Canada and the two were linked strategically. However, they were never linked commercially. The result was the development of two separate commercial empires.

The commercial empire of the St. Lawrence was based on the exportation of staples from the interior. Its transportation system was extended by canals and railways until it stretched across a continent. It served the needs of continental ex-
pansion but never developed a maritime extension. Not only were the demands on the resources for continental development demanding enough in themselves, but there was never any economic need to develop a maritime extension. There was always sufficient cheap foreign shipping. For continental Canada, commercial maritime interests stopped at tidewater.

In contrast, the commercial interests of maritime Canada began at tidewater. The commercial empire that developed was based on the fisheries, shipbuilding and international seaborne trading. The period of greatest expansion of the Canadian fishing industry was from the 1830s to 1880s after the European distant water fleets had largely withdrawn from the cod fishery. By 1878, the Canadian merchant marine numbered 7,196 vessels and was the fourth largest in the world. The ships were built and sailed for international trading and not as an economic extension of Canadian continental expansion.

The changeover from sail to steam destroyed the basis of this era of maritime expansion. The post-Confederation national policy laid the basis for a manufacturing economy, but its centre was the Great Lakes region and its orientation was towards western expansion. The national development strategy was continental, not maritime, in direction. The fishing industry went into a decline that was only reversed in the 1960s. The merchant marine declined to almost nothing by the turn of the century. The Canadian response was to
adopt a completely *laissez-faire* policy towards maritime interests.

Canadian maritime expansion in the 19th century, took place under the aegis of Pax Britannica. The British North American colonies made no contribution to the maintenance of British seapower. The development of a sedentary fishery in Newfoundland resulted in the withdrawal of the West country ports' distant water fishing fleets, and Newfoundland ceased to be regarded as a nursery of seamen. Ships of war were built almost entirely in British yards with Baltic timber. ¹ Canadian timber, shipbuilding and shipping did augment British merchant shipping but the protected British market for Canadian exports was of commercial advantage primarily to the colonies. The benefits of Pax Britannica were accepted by the British North American colonies as being in the natural order of things befitting colonies of the British Empire. The maintenance of Pax Britannica was considered solely as an imperial responsibility and this view persisted after Confederation.

Throughout most of the 19th century, there was no challenge to British naval supremacy and naval expenditures were relatively light.² The Colonial Naval Defence Act of 1865 empowered colonial legislatures to establish naval forces for local defence, but there was little pressure for Canada to do so.

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² Ibid., p 110.
The American Civil War and the crisis surrounding the Russo-Turkish War of 1877-78 did produce a desire for the stationing of lightly armed auxiliary cruisers in the Bay of Fundy and the Gulf of St. Lawrence to protect trade. The upshot was the purchase of HMS Charybdis as a training ship for a naval reserve. The ship was found to be so unsuitable that the Admiralty bought her back.

Pax Britannica provided for the protection of trade, for coastal defence, and a deterrent to United States attack, but it proved less suitable as a means of protecting the fisheries. Throughout the 19th century, Nova Scotia and Newfoundland attempted to exclude foreign fishermen, mainly New Englanders, from the inshore fisheries and the Gulf of St. Lawrence and Bay of Fundy. The struggle for the "priceless fisheries" was entwined with tariff negotiations with the United States, Anglo-American relations and Canadian-United States relations. In the 1880s there developed sufficient dissatisfaction with the Royal Naval enforcement of Canadian fishery regulations against United States fishermen that Canada created its own fishery protection service.

The British Government was determined to maintain good Anglo-American relations and was not prepared to have the Royal Navy rigorously enforce fishery regulations. Canada therefore chose to do so and in 1886 some 700 vessels were boarded and 1,362 in 1887.4 This rigorous enforcement was primarily designed to harass the United States into revising its tariffs in favour of Canada. A compromise solution was reached in 1888 and enforcement of fishery regulations against foreigners ceased to be an issue until the late 1960s.

Canada had been forced to accept responsibility for the protection of its own fisheries because of the British government's refusal to do so. Because Canada had no navy, it created a civilian fishery protection service. This did not deter Americans from accusing Canadian officials of brutality and inhumanity against defenceless United States fishermen. There was nothing moral about the creation of a civilian fishery protection service and the tradition that this is the Canadian way of doing things has little substance.

When, in 1886, it was suggested to Canada that it should form a small Canadian navy to defend its coasts, the government replied that the fishery protection service formed the nucleus of a naval force.5 In 1913 Sir Robert Borden, as

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4 Ibid., pp 419-20

5 The then Minister of Militia, Sir A. Caron, was stalling on the question of Canadian contributions to imperial defence. See Richard A. Preston, Canadian Defence Policy and the Development of the Canadian Nation 1867-1917, Canadian Historical Association Booklet, No. 25, (Ottawa 1970) p. 12.
part of his naval policy, intended to expand the fishery protection service by the addition of light cruisers. The cruisers were to be manned by men under naval discipline and serve in war and peace to protect the fisheries.\textsuperscript{6}

The creation of a civilian protection service was a practical necessity, and after a short period of rigorous enforcement in the 1880s, its task became primarily the enforcement of conservation regulations involving only Canadian fishermen. This is its primary task today with any "difficult" situations with foreign fishermen being dealt with by Maritime Command. The fishery protection service of the 1880s always had the Royal Navy behind it, if foreign warships appeared, as the same service has Maritime Command behind it today.

In 1887, there began a series of colonial conferences which each in turn was to consider the problem of imperial naval policy. European states were rapidly industrializing and embarking upon overseas expansion to ensure supplies of essential raw materials. Pax Britannica had been dependent on naval supremacy in two hemispheres. By the end of the century, "the principle of universal command [of the seas] had to be surrendered in favour of a strategy of local concentration"\textsuperscript{7} as foreign naval expansion continued apace.


\textsuperscript{7} Gerald Graham, \textit{The Politics of Naval Supremacy}, p 123.
Although prepared to continue to guarantee naval defence for the Empire, there was an increasing desire by Britain for Empire contributions to offset foreign naval expansion. This desire came at a time when the new Dominions were developing in national autonomy and nation building was their principal concern.

The most satisfactory form of contribution to imperial naval defence, from the Royal Navy's perspective, was cash contributions. The least satisfactory was local navies under local control. Until the naval scare of 1909, Canada steadfastly refused to consider any form of contribution to naval defence, local or imperial, although, at the 1902 Imperial Conference, Canada stated it was prepared to consider setting up a naval reserve. The Canadian position was justified on the basis of colonial nationalism and the role the Canadian Pacific Railway could play in imperial defence. It was with some reluctance that Canada was prepared to take over responsibility for the defence of Halifax and Esquimalt in 1906.

The legislative initiative for a Canadian navy came from the Tory opposition to Sir Wilfred Laurier's Liberal government. Sir George Foster introduced a resolution

That in the opinion of this House, in view of her great and varied resources, of her geographical position and national environments, and of that

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Foster did not go beyond the idea of coastal defence, but he emphasized that Canadians should be prepared to do more than to rely on the Monroe Doctrine. After some debate, Laurier introduced a resolution requesting approval of "a Canadian naval service in co-operation with and in close relation to the Imperial navy, along the lines suggested by the Admiralty at the last Imperial Conference [1907]."  
At that conference the Admiralty had adopted the policy of supporting colonial efforts to provide local squadrons of torpedo boats and submarines to operate against local raiders. The growing apprehension over German naval power resulted in another Imperial Conference in July/August 1909. The Admiralty, now more sensitive to Dominion nationalism, proposed the concept of Dominion fleet units. These fleet units would operate in the Dominion's own sphere of influence in lieu of Royal Navy squadrons. The Admiralty's hope was

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10 Ibid., p 3511

that Canada would provide such a unit for the Pacific while the Royal Navy accepted responsibility for the Western Atlantic. This was unacceptable to the Canadian delegation because it would be politically impossible to concentrate on one coast and neglect the other. In the end, the Admiralty prepared two plans for fleet units based on the Bristol class cruiser and destroyers. It also outlined various training arrangements. The Canadian delegation returned home fully satisfied that the basis had been laid for a national navy that could be for direct defence of Canadian interests as well as for the defence of the Empire.

A small inshore or local navy would provide some coastal defence against scattered raiders. However, if the Royal Navy lost naval supremacy as a result of defeat in the North Sea, then a small inshore navy would be helpless against a concentrated naval attack. A small inshore navy, as was the fishery protection service, would be dependent on British naval supremacy for any operational role in the defence of Canada and its maritime interests. British naval supremacy was a sine qua non for any Canadian navy. However, in the Western Atlantic, the area of vital interest to Canada, Britain no longer was prepared to challenge the United States. During the Venezuelan Incident of 1895-96, the narrow margin of superiority over the Dual Alliance in European waters made it impossible to send reinforcements to the North Atlantic and West Indian Squadron. 12

12 Gerald Graham, The Politics of Naval Supremacy, p 123.
Any Canadian naval policy was contingent on British naval supremacy in European waters, United States benevolence and no threat arising from the Pacific. Strategically, Canada had the options of no navy at all, a small inshore navy distributed on two coasts, or the development of a navy capable of contributing to British naval power as well as providing for the direct defence of Canada. The first option implied a continuation of colonial dependency in a period of developing Canadian autonomy. It was also the period when British naval power no longer could provide for complete Canadian naval defence as a consequence of the end of Pax Britannica. This option was only applicable if there was no foreseeable threat to Canada that would not be countered by other states in their own interests.

The second option of a small inshore navy had the advantages of demonstrating Canadian desire to contribute to imperial naval power at least in a symbolic manner, and of being the basis for a "national" navy that could be expanded in war. Its disadvantage was that it might be too impotent to make any meaningful contribution to the defence of Canada or to British naval power. If never challenged, a small inshore navy had all the advantages; if challenged, it had none. The third option entailed Canada becoming a naval power in her own right and contributing to British naval power as an alliance partner rather than as a dependent colony.
In the ensuing debate, which lasted until 1914, and in many aspects continues to this day, the crucial question was not strategic, but what the relationship of a Canadian navy to the imperial navy was to be and what this relationship meant in political terms. In contemporary language, it was a question of alliance relationships. Canada had decided to have a navy at a time when its maritime interests in fishing, shipping and shipbuilding were in drastic decline. Furthermore, there was no intention of revitalizing them. In contrast to other developing naval powers, Canada had adopted completely laissez-faire maritime policies. Canada was interested in continental, not maritime, expansion. It was railways, not ships, that Canada was building. It was the settlement of the west, not expansion overseas, that preoccupied Canadians. However, Canada was as dependent as it had ever been on overseas trade. The right to trade freely overseas was the principal Canadian maritime interest and the maintenance of freedom of the seas in peace and war was a vital national interest.

The strategic logic of imperial defence could not be separated from imperial political relationships any more than politics can be separated from war. For some Canadians, Canada had reached the stage when it had external interests and should have the means of protecting and furthering those interests. Those interests were to be pursued through the British Empire, in which Canada, in return for defence contributions, would have a share in imperial foreign policy
decision making. Any Canadian naval policy, therefore, should be based on the protection of both Canadian and imperial maritime interests.

The solution preferred to meet this criterion was financial contributions to the Royal Navy to construct and operate fleet units that would eventually be returned as the basis of a permanent navy. The reasoning by Sir Robert Borden, whose proposal this was, was that the German naval threat was too immediate and menacing to await the development of a Canadian navy which would take years. Borden's policy was the separation of emergency contributions from his permanent naval policy. The latter would be directly related to the future form of the Canadian role in determining the foreign policy of the Empire. It was an alliance oriented policy that saw Canadian interests being furthered through an alliance structure.

There were other Canadians "who felt secure in the peaceful isolation of North America, hoped to escape entanglement in the incorrigible rivalries of Europe, and looked with suspicion and distrust on all schemes for armed co-operation inside the British Empire." They saw no need for any navy at all, or at best would tolerate one for purely local defence.

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15 Donald Creighton, Canada's First Century 1867-1967, p 118.
The Monroe Doctrine provided all the defence required. It was a form of nationalism, but an inward looking nationalism, isolationist and continentalist. In practice it was prepared to discard increasing Canadian independence in the context of the British Empire for an independence entirely dependent on United States goodwill. Opposition to a navy centred on the fear that its creation would drag Canada into unwanted wars. As Henri Bourassa expressed it:

Au lieu d'une marine canadienne sous l'autorité du gouvernement canadien, pour la défense du Canada, il [Laurier] nous gratifiait de deux escadres, organisées, et payées par le peuple du Canada; mises en cas de guerre sous l'autorité exclusive de l'amirauté anglaise, pur prendre part à toutes les guerres de l'Angleterre. 16

The Naval Service Act was passed, but the debate continued into the 1911 election, which saw Borden and his Conservatives elected. Borden's attempt to make a financial contribution was defeated in the Senate and he was unable to find an acceptable naval policy by 1914. At the beginning of the war, Canada had a Naval Service Act, two old cruisers, a skeleton naval service and a naval college; in reality, no navy. Early in the war Canada wished to expand the naval service, but Churchill at the Admiralty recommended concentration on the army build-up.

16 Henri Bourassa, Le Project de Loi Navale, PAC Pamphlet Cat., II, no 3706.
Until 1917, Canadian maritime activity was minimal. British shipping losses resulted in contracts being let to Canadian shipyards for 40 steel cargo vessels ranging up to 8,000 DWT. This spurred the Canadian Government into reviving the Canadian merchant marine to replace wartime shipping losses, to have the recently formed Canadian National Railways compete with Canadian Pacific Steamships, and to lay the basis for a peacetime merchant marine. Its construction was primarily carried out in the post-war period from 1919 to 1924 when 63 ships were built. The war created the opportunity, but the motivation was nationalistic and commercial.

By 1917, the submarine menace was at its peak and the Royal Navy was unable to provide sufficient forces for anti-submarine operations in Canadian coastal waters. The result was the formation of an Anglo-Canadian anti-submarine flotilla for coastal operations. It numbered about 100 vessels of which 29 belonged to the Canadian Naval Service. As Tucker remarked:

The flotilla was prolific of precedents; it was the first fleet to be commanded by an officer of the Royal Canadian Navy; it contained the first ships built expressly for the Naval Service; and it faced the first direct naval attack in the history of the Dominion. The east coast patrols and their organization now seem like the first run of a play which was

17 A.W. Currie, Canadian Transportation Economics, (Toronto University of Toronto Press, 1959) p 616.
to be revived many years later in the same theatre during the Second World War. 18

As Canada had been forced to create a fishery protection service, it was forced also to assume responsibility for its naval defence in coastal waters because the Royal Navy could no longer undertake the task. The failure, in the pre-war years, to create more than a "tin pot" navy meant that Canada was entirely dependent on other states for even a modicum of naval protection in coastal waters.

The navy began the peace with great expectations for expansion. The naval staff argued for strong local defence forces and additional forces to protect Canadian overseas trade interests. The ships of the new merchant marine were opening up routes to Britain, the Mediterranean, the West Indies, Australia and New Zealand. However, Canada was in no mood for expensive naval expansion plans, and in 1921 the new government under Mackenzie King cut naval expenditures. The result was the decommissioning of all warships, except two destroyers for purely training purposes, the retention of a small number of trawlers, and the creation of a naval reserve which was to become the mainstay of the Second World War naval expansion. The Naval Service Minister in presenting this policy felt this "would be more in keeping with the protection of our coasts than it would be in harmony with

highsea fighting, because the fleet as now constituted is for action on the sea, and not for the protection of our harbours and coasts as we understand that protection."19 The expectations that Canada would create even a credible naval force for local defence, let alone an ocean going fleet unit, were now completely dispelled.

The ships of the new merchant marine were profitable until 1921, but after that, losses increased. The ships were gradually sold off until 1936, when only six remained of the 63 built.20 The decline of the fishing industry was drastic. Government policy, at the request of inshore fishermen, restricted technological innovation to the point that by 1939 there were only three Canadian trawlers operating. By the mid 1920s the navy had "become a largely land-locked reserve establishment"21 notwithstanding the arguments of the Chief of Naval Staff, Commodore Walter Nose that:

The most vulnerable point open to attack in Canada, the point where the most vital damage could be effected to her national existence, lies in her overseas trade...In addition...there is a danger of Canada being drawn into a state of belligerency due to her inability to undertake the obligations of neutrality through having insufficient force at hand to prevent the perpetuation of unneutral acts of belligerence in Canadian territorial waters. 22

19 Canada, House of Commons, Debates, 1922, Vol II p 1739. The Minister, Mr. George Graham, also remarked "that Canada must maintain something of a naval service." Ibid., p 1736.

20 A.W. Currie, Canadian Transportation Economics, p 617.


22 Minutes of Defence Council, Aug. 29, 1930 as quoted in ibid., p 273.
By 1935, there was sufficient concern about the international situation that the navy received increased appropriations, and this policy continued until the outbreak of the war. The government's policy was to increase defence expenditures; but only for the direct defence of Canada, and was "utterly inadequate to the scale of the coming emergency."\(^23\)

Naval policy in the inter-war years failed to create a credible autonomous inshore navy or an ocean going navy. The Naval Service was incapable of coastal defence or of making a contribution in an alliance structure to the maintenance of freedom of the seas. The policy of Mackenzie King was no commitments and Dominion autonomy. This policy meant that any Canadian naval policy should stress autonomy; i.e. the creation of an independent naval capability designed at least to provide coastal protection. Yet the policy of reducing the navy to a land locked reserve and the disbanding of the Naval College meant that the Royal Naval influence was deepened and precluded the development of a Canadian naval tradition.\(^24\) The policy of no commitments meant that


no arrangements could be made for coastal defence and defence of trade in peacetime. Autonomy was meaningless unless the navy was large enough to sustain independent functions whether they were for local defence or defence of trade. Autonomy and Canadianization were directly related to the size of the navy and its role.

The strategic conditions for the operation of a small inshore navy did not change in substance from the pre-war period. These were Anglo-American supremacy in the Atlantic, and any challenge in the Pacific being countered by the same powers. The same options as before were open to Canada. Canada chose to rely on geographical isolation, the Monroe Doctrine, and what protection the Royal Navy was prepared to provide. Under the policies of autonomy and no commitments, Canada was to enter the Second World War as dependent on British naval power as it had ever been in colonial times. It was to finish the war as a world class seapower with maritime interests spanning the traditional spectrum of a revitalized fishing industry, a large ocean going merchant marine, and a massively expanded shipbuilding industry.

The Rise of Canada to be a Maritme Power

The RCN began the Second World War with 13 ships and 3600 personnel. It ended the war with 939 vessels (of which 373 were considered fighting ships) and 93,000 personnel, making it the third or fourth largest navy in the world. The Canadian Northwest Atlantic Command, created on 30 April, 1943, was the only independent allied command held by Canada
or by any other allied power, other than the United States and the United Kingdom.

Because of the no commitments policy, the RCN entered the war with no war plans other than the protection of harbours and trade in Canadian waters, and was not officially included in the plans of the RN. The Chief of Naval Staff had assumed that the RCN would be an integral part of the RN's arrangements for defence of the Empire's sea communications. His request that the RCN's six destroyers "be placed under Admiralty orders" was refused on constitutional grounds and the destroyers were directed "to cooperate to the fullest extent with the forces of the Royal Navy." 25 This was changed to operational control in early 1940 when a more direct threat to Canada was perceived. The weakness of the RCN was such that it could not alone protect the Canadian coast and shipping, but Admiralty assistance could not be expected unless the RCN gave the fullest co-operation. The policy followed was to transfer Canadian destroyers to Admiralty control for overseas service and build up an anti-submarine warfare (ASW) capability at home.

The ASW role appealed to the Canadian government because it was defensive and seemed the best role for the small Canadian navy. A further reason to specialize in ASW was the Canadian industrial capability to mass produce corvettes

but not destroyers. The RN requested that the RCN increase its ASW force and extend its patrols to Newfoundland. The declared objective then became to create a "minimum Navy which will be of reasonable protection to trade in our harbours and in the focal areas in the vicinity of our Canadian coasts." This committed Canada to operations outside the immediate coastal zone.

The ABC-1 plan had divided the Atlantic Ocean into eastern and western zones of responsibility. Once the United States entered the war, it was to assume responsibility for the strategic direction of British naval forces, and the RCN, in the Western Atlantic except for "the waters and territories in which Canada assumes responsibility for the strategic direction of military forces, as may be defined in United States-Canada joint agreements." ABC-1 was agreed to by the United States and the United Kingdom in March 1941 without any Canadian participation. This was before the United States had failed, because of Canadian resistance, to bring Canadian territory and Newfoundland under United States strategic direction under ABC-22 (Basic Defence Plan-2) ABC-1, with this "exception", and if the United States had achieved the command relationship it wanted, would have given

26 Ibid., p 11. Quoted from Chief of Naval Staff to Minister, memorandum of 29 September 1939. N.S. 1650.

27 Ibid., p 21. Quoted from ABC-1 Agreement.
it complete control over the entire Canadian eastern and western coastal areas.

The United Kingdom seems to have abetted the United States in this endeavour and simply ignored Canadian protests. Canadian protests had stated that Canada was not prepared to place the RCN under United States strategic direction. However, Canada acquiesced to United States control of Canadian ships to avoid damaging the war effort, when in September 1941, the United States assumed strategic direction in the Western Atlantic. This experience did generate a later desire within the RCN to establish a separate command, independent of direct interference from both the United States and the United Kingdom.

In June 1941, Commodore L.W. Murray became Commodore Commanding Newfoundland with his headquarters in St. John's Newfoundland, and was given command of the newly established Newfoundland Escort Force. This resulted in extending Canadian operations out into the Western Atlantic and provided a greater Canadian military presence in Newfoundland.

After the United States assumed strategic direction in mid-September 1941 in the Western Atlantic, Admiral E. King, the United States CINCLANT, simply imposed a higher headquarters, commanded by a United States Admiral. This was a somewhat galling arrangement because the United States Navy was largely ignorant of ASW, whereas the RCN had been engaged in it for two years. In addition, the United States
contribution, because of the demands of other theatres, dwindled to two coast guard cutters by February 1942. Canada was soon providing 48 per cent of the total North Atlantic escorts.

Various incidents occurred which caused the Canadian naval headquarters to launch a campaign for a revised command structure. This campaign, over considerable United States resistance and little help from the British, resulted in the calling of an Atlantic Convoy Conference in March 1943. There Canada secured operational control of all surface and air ASW escorts in the area west of 47 degrees West and north of 40 degrees North. Admiral Murray was designated Commander-in-Chief, Canadian North West Atlantic. The campaign had been won because of the RCN's large contribution to the winning of the Battle of the Atlantic.28

The Canadian naval staff had undertaken and won their campaign without political support. The Cabinet War Committee was kept informed but chose to play no role. It was the strength of the RCN and the extent of its contribution, that compelled a reluctant United States to concede to Canada strategic direction of her own naval forces and in waters contiguous to Canada but of vital importance to both states.

Canada had entered the war grossly unprepared even to defend its contiguous waters. This meant that, however politically desirable it was for the RCN to cooperate only with the RN, the requirement for RN assistance in defending

28 Ibid., p 60.
Canada resulted in RCN ships being placed under operational control. A consequence of this weakness was that Canadian interests were ignored in the Anglo-American decision to transfer strategic direction of the RCN in the Western Atlantic to the United States. Although Canadian resistance to United States strategic direction under the ABC-22 had been successful, it was to prove a pyrrhic victory at sea. The vital significance of the North West Atlantic, its indivisibility for the purpose of naval operations, and Canadian weakness preordained United States strategic direction. The political desirability of independent command of Canadian ships in waters of vital significance to Canada could only be obtained when Canadian naval strength compelled it to be acknowledged.

The expansion of the RCN had been a remarkable feat of organization but it had had its teething troubles; principally in the equipment field. Nevertheless, the war ended with the RCN having two light fleet aircraft carriers, two cruisers, 14 destroyers and hundreds of smaller ships. Canada, by 1945, had become the third or fourth largest naval power in the world, but a naval power whose capability was largely limited to the North Atlantic and ASW operations.

Complementing the expansion of the RCN, was the creation of a government owned merchant marine. Its creation resulted, as had happened in the First World War, from the expansion
of the Canadian shipbuilding industry. The opportunity was used to create a merchant marine which could be turned over to private shippers at the peace. 29 By 1946, Canadian shipyards, which had not built an ocean going vessel between 1924 and 1939, had produced 1,000 vessels including 398 merchant vessels. The government retained 150 of these merchant vessels as the basis for the new merchant marine. The shortage of food caused the government to revitalize the fishing industry by encouraging technological innovation.

Canada, under the exigencies of war, had been forced into becoming a major seapower and had used the opportunity to create a merchant marine, to expand shipbuilding capacity and to revitalize its fishing industry. A maritime dimension to continental and industrial development had thus been created from almost nothing. For the first time since the end of the age of sail, Canadian maritime activity was underlaid by a modern technological base. Yet within a few years, the Canadian merchant marine had been disbanded, the shipbuilding industry only sustained in skeleton form by subsidies and government orders, and the fishing industry allowed to decline.

The RCN was maintained in the form of a small balanced fleet unit concentrated in the North West Atlantic. Royal Naval presence in Canadian waters came to an end and Pax Britannica and the Anglo-Canadian alliance ceased to be a factor in Canadian naval development. It was replaced by

Pax Americana and continental defence. Presumably the "colonial" attitude to naval defence would no longer pertain.

**Balanced Fleet to Specialization**

Naval post-war planning was begun in 1943, with the intention of having a post-war fleet designed as a task force rather than an escort force. The initial hope of the naval staff was for a fleet consisting of "at least five cruisers, two light fleet carriers, and three destroyer flotillas." This ambition was to be somewhat diluted in size but not in concept. In 1945, the main purposes of the peacetime RCN were stated to be: to repel all but heavy task forces in waters adjacent to Canada, to protect trade routes and maintain sea communications, to cooperate in hemispheric defence, to prevent unneutral acts in territorial and coastal waters, and in general to support national policies and interests. The concept and tasks were those of a balanced fleet unit or task force for which the proponents of a Canadian navy had been arguing for half a century.

The tasks and fleet requirements were well within what Canada, as an industrial power could support. The policy was strategically sound as it meant that Canada had virtual command of the seas in its contiguous waters, barring the


31 Ibid., p 489.
collapse of United States naval power in the Atlantic and Pacific oceans. It was politically beneficial because it removed Canadian dependence on foreign naval powers for defence in vital contiguous waters. It allowed Canada to project power overseas, either independently for limited tasks, or as part of a multi-national operation. It had the structure and flexibility of a small independent fleet which could operate in defence of Canadian interests either in waters contiguous to Canada or overseas.

After the war, the government set manpower ceilings that reduced the size of the post-war navy, but by 1950 the RCN had one light fleet aircraft carrier, two cruisers, 11 destroyers, eight escorts and nine mine sweepers. The Cold War rearmament programme resulted in an extensive shipbuilding, modernization, and conversion programme. This programme was not complemented by any other form of maritime expansion, rather the reverse. There was considerable debate over the disbanding of the merchant marine. The arguments were summarized in the Second Report of the Canadian Maritime Commission in 1949. The case for disbandment rested "on the thesis that the nation or nations which can give the best service at the lowest cost should conduct the carrying trades". The cost of operating Canadian shipping was then the second highest in the world, and there was strong opposition to discriminating

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against foreign shipping as the United States was doing. The Commission argued that "the justification of the Canadian shipping and shipbuilding industries must finally rest upon the grounds of national security" as "Canada has reached a stage in her development when she should no longer be entirely dependent upon others for her security".  

The Commission recommended that a nucleus fleet be maintained on security grounds. The government initially accepted the nucleus argument, but after the Korean War, when the question of subsidies arose, the government was not prepared to engage in a subsidy war with the United States. Transfers to British registry were permitted and by the end of the 1950s Canada had only ten deep sea ships, with 78 on foreign registers.

In 1946, Canada was the fourth largest shipbuilder in the world. By 1950, Canadian yards had orders for only three ships and in 1961 a subsidy programme was introduced primarily to support Great Lakes shipbuilding.  

Canada, by the early 1950s had reverted to its traditional laissez-faire policy towards maritime activities. Aside from coastal defence, protection of Canadian overseas trade, which was entirely carried in foreign shipping, was the only maritime interest requiring protection.

33 Ibid., p 46.

34 For an analysis of shipbuilding subsidies see the Committee on Shipbuilding in Canada, Report 1970, Forward and Summary, privately printed, pp 13-14.
Canadian naval expansion of the 1950s was related to the Soviet threat to sea communications and not to any Canadian maritime expansion programme. Naval capital expenditures rose from $50 million in 1950-51 to a high of $261 million in 1953-54 but fell below $200 million in 1957-58 and to slightly over $100 million by 1967-68. This fleet expansion programme resulted, by 1960, in a fleet consisting of one aircraft carrier, nine destroyers, 34 escorts and nine minesweepers. The RCAF maintained squadrons for ASW operations. The aircraft carrier Bonaventure carried Banshees, which were capable of air defence and attack roles, in addition to fixed wing and rotary wing aircraft. These capabilities allowed it to operate in both anti-submarine and fighter operational roles. This new fleet had the capability for ASW operations in contiguous waters, convoy escorting, mine-counter measures, seaward defence of Canadian ports, support of the army in its defence of Canada and United Nations roles, and of operating as an integral fleet unit of a larger force. In the period of the late fifties and early sixties, the RCN had a more balanced and powerful fleet than Canada has ever had, except perhaps for the very last years of the Second World War.

The RCN became an integral part of NATO's naval forces

35 For an examination of naval capital expenditures see G.M. Dilljon, Canadian Naval Forces Since World War II: A Decision Making Analysis, occasional paper of the Centre of Foreign Policy Analysis, (Halifax: Dalhousie University, 1972) p 16.

in the North Atlantic when SACLANT (Supreme Allied Commander Atlantic) was formed in 1952. The RCN was given command of the CANLANT (Canadian Atlantic) zone whose boundaries were the same as those of the Canadian North West Atlantic zone of the Second World War. The command arrangements were and are that "Canadian maritime forces... earmarked for assignment to NATO... are placed under SACLANT's command and control by a decision of the Canadian government when the appropriate alert measure is declared by the Defence Planning Committee of NATO". 37 These forces are then assigned to various commands such as the Commander-in-Chief Western Area (CINCWESTLANT) and the Commander-Canadian Atlantic Sub-Area (COMCANLANT). Today, COMCANLANT is also the Commander Maritime Command (CANMARCOM). The majority of Maritime Command's ships are deployed in the Atlantic. The details of the decisions that led to Canada committing the RCN to NATO command and specializing in ASW are not known, but there is no evidence that it was not perceived as natural and logical.

The dominant experience of the RCN in the war had been in ASW operations in the North West Atlantic under Anglo-American command. The Mahanian tradition of seapower with its concept of indivisible command of the sea was as fundamental to the thinking of Canadian naval officers as it was to British and United States officers. 38 It had been accepted in


38 Discussions with Commander Douglas.
1944, as the basis for future expansion of the RCN, that Canada could not defend itself alone against a strong enemy fleet attempting to dominate Canadian coasts. The requirement to depend on allies against this threat was acknowledged, and post-war statements by naval officers have reiterated this dependency. Under NATO Canada obtained, apparently without question, the independence of command and the protection it required.

Once the Canadian government committed forces to Europe and made Europe the strategic frontier of Canadian defence, then the maintenance of secure sea communications across the Atlantic was a sine qua non. There was no sovereignty issue over the commitment of the RCN to NATO as there was over air defence. The fleet was still in Canadian waters, and the naval tasks of national, continental, and NATO defence were in practice the same. There was not the problem of requiring different ships for the two tasks as there was for aircraft for North American and European air defence. A predominately ASW navy was superimposed on the small fleet unit concept of the immediate post-war period as a natural and logical contribution. The NATO strategic doctrine of the 1950s was for a protracted European conflict and therefore SACLANT's main task was to secure the sea communications of the North Atlantic. The threat came from the increasing size of the Soviet submarine force which was assumed to be designed for guerre de course operations. In the 1950s, Canadian naval policy and
experience meshed into the NATO strategy with an ease not present in other areas of defence activity.

The period 1958-63 marked a turning point in NATO strategy and Canadian defence policy. Because sufficient conventional forces were not available in Europe, the NATO strategy was to reply to Soviet aggression with nuclear weapons very early after any fighting began. A prolonged campaign was seen as highly unlikely, and therefore North American resupply of Europe on a large scale would not be possible in time to influence the result. Defence of shipping against Soviet guerra do course operations became a much lower priority than before. The new rationale for ASW operations became defence against the Soviet missile launching submarines, which began to slowly make their appearance during this period. Canadian naval operations became directly linked to the nuclear balance in a damage limitation role.

Initially, Soviet missile launching submarines were few in number, carried few missiles (often of the cruise type) with short ranges, and were diesel powered. It was not until the middle sixties that ballistic missile nuclear powered submarines (SSBNs) made their appearance, and not until the late sixties that they were deployed in appreciable numbers with submarine launched ballistic missiles (SLBM) of ranges exceeding 1,000 miles. In fact, even by the late 1960s there may have been no more than two or three deployed off the east
The role and composition of the RCN was little questioned in this period. Few questions were raised when, in 1960, the Minister of National Defence, Major General G.R. Pearkes, V.C. (when referring to Soviet missile launching submarines) testified to the House of Commons Committee on Defence Expenditures:

Whereas the original concept of war at sea was a requirement to convoy large numbers of ships from the North American continent to Europe, the outlook is now changed... One of the most important tasks of the supreme allied commander Atlantic, therefore, is to make provision for the detecting, hunting, and killing of hostile submarines in the NATO area on the outbreak of any hostilities.

In 1963, a Special Committee on Defence was created to examine the whole Canadian defence effort. It undertook a study of the role and organization of the RCN. The Chief of Naval Staff, Admiral H.S. Rayner, appeared with Mr. Hellyer, the now Minister of National Defence, before the Committee to present a brief on the RCN and for questioning. Admiral Rayner saw the Soviet submarine force as the dominant maritime threat to Canada, with Soviet long range aviation and fishing fleet activities as lesser threats. He defined the purpose of the RCN in traditional terms as "To ensure that Canada in co-operation with allied and friendly nations will have unrestricted use of the seas in peace and war." On the


assumption that some form of collective defence was essential for Canada, the role of the RCN was to support Canada's external and defence policies through the provision of versatile naval forces.

By the time Admiral Rayner gave his testimony, the Banshee fighters had been retired and not replaced because of the difficulties of operating an advanced jet aircraft from the Bonaventure. The Second World War Tribal class destroyers had been retired or converted to ASW ships. The projected replacement for the Tribal class destroyers had been eight general purpose frigates which were to carry a dual purpose gun and missile armament for use in surface-to-surface and surface-to-air engagements. Mr. Hellyer cancelled this project almost immediately on becoming Minister in 1963. However, he did not cancel the three Oberon class submarines then on order.

Much of Admiral Rayner's testimony derived from the Report of an Ad Hoc Committee on Naval Objectives which had reported in 1962. The committee apparently had been directed to define the purposes of the navy and make recommendations for the future. The report derived its conclusions from its appreciation of likely future political, economic and strategic conditions. The committee was much concerned with the con-

41 Canada, House of Commons, Special Committee on Defence, Evidence, 26th Parl., 1st sess., No 4, July 9, 1963, p 89.

42 The Report of the Ad Hoc Committee has never been published but the writer was given information on its contents.
sequences of the nuclear impasse. It apparently considered that general nuclear war was highly unlikely, but that limited nuclear or non-nuclear war was quite possible. It laid stress on its forecast that non-nuclear forces would be the only kind of military forces that could be rationally employed to support policy. It saw the continued need for Canada to participate in collective defence arrangements. Seaborne trade was considered to be Canada's primary maritime interest but the importance of the "maintenance of sovereignty in the Arctic" from the maritime aspect was stressed.

Although ASW was considered to remain of paramount future importance, the committee laid considerable emphasis on the need for more general purpose forces to preserve peace outside the NATO context. The significance of this report, presented in 1962, is that it would seem to have had an appreciable influence on the formulation of Mr. Hellyer's defence policy. It seems reasonably apparent that the basic thinking, certainly on naval policy, had been done by the military staffs in the very early 1960s and it was upon this analysis that the 1964 White Paper on Defence was based.

The 1964 White Paper on Defence reiterated the primacy of the ASW role for the RCN or Maritime Command as the RCN became in 1964.\textsuperscript{43} The paper said that the relevancy of developing a capability against missile launching submarines would

\textsuperscript{43} The 1964 White Paper on Defence, pp 14 and 23.
be determined largely by the deployment or non-deployment of ABM missile systems. Consideration was being given to the purchase of nuclear-powered submarines. The Report of the Special Committee was presented three months after the 1964 White Paper on Defence was published, and it argued that Canada could not afford a naval force capable of all functions, and therefore must continue to specialize. The first priority should be the modernization of ASW ships and the second should be the acquisition of ships to provide logistic support for naval operations and for the transport of ground forces. This recommendation was in line with the general philosophy of the 1964 White Paper on Defence, which was to develop a more versatile and mobile capability for the Canadian Armed Forces.

The primacy of ASW operations was reiterated by Admiral Landymore, who, appearing before the Standing Committee on National Defence in 1966, was relatively confident that the threat of the nuclear powered submarine could be met. He saw the best strategy as attacking Soviet submarines when they were in transit to their deployment areas. He considered it unwise to commit too many forces to close-in defence of North America and suggested that SACLANT should adopt a forward strategy and concentrate on the transit routes, rather than having forces tied down to small divisions of the oceans.

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44 Canada, House of Commons, Special Committee on Defence, Fourth Report, 26th Parl., 2nd sess., No. 17, October 1, 1964 p 610.
His strategic rationale was a somewhat more protracted war at sea than perhaps the NATO European strategy envisaged, but he made it clear that large scale convoying would not be a primary task. He saw that in "the earlier stages of an emergency our first role would be to clear the high seas of shipping, temporarily, so that we could devote ourselves to a purely offensive operation, with little or no interference from merchant shipping." Once the submarine menace was under control, then the shipping could begin again and be given some naval protection.

For twenty years after the Second World War, Canadian naval policy was predicated on maintaining command of the sea in contiguous waters with the capability for overseas operations in the furtherance of Canadian interests. The underlying assumption was that Canadian maritime interests and defence requirements were coincidental with those of the United States and the NATO alliance. The fundamental interest was the continuation of Western naval supremacy to ensure command of the seas in war, and to derive the commercial benefits from the right to trade freely over-seas in peacetime. Canada continued to be a beneficiary of Anglo-American naval supremacy.

What drew Canada into making a substantial contribution to the continuation of this supremacy was the acceptance that

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Canada, House of Commons, the testimony of Admiral Landymore, Standing Committee on National Defence, Evidence, 27th Parl., 1st sess., No. 12, June 23, 1966, p 346.
neither a no navy policy nor a small inshore navy policy was applicable to the strategic position of Canada. Canada was a terminus of the most vital and vulnerable trade route in the world. It was a supplier of vital raw materials and had a modern industrial base. What had isolated Canada in the past was not geography, but British and United States naval supremacy. Any challenge to that supremacy removed that isolation and forced Canada to become a naval power. But it had to become a naval power in an alliance context, because the task of protecting shipping was beyond the resources of even the greatest naval power operating independently after the end of Pax Britannica. The naval expansion of two world wars had made it clear that Canada did not have the option of allowing another power to provide for Canadian naval defence in its own interests. Canada had to do it or it would not be done, and the nature of the submarine threat made a cooperative effort a strategic imperative.

The maritime geography of the North Atlantic and the development of ocean going submarines precluded an inshore naval capability making any practical contribution to ASW operations. Canadian naval operations were forced out to the extent of the CANLANT Zone to ensure continuous convoy control across the Atlantic. This meant warships had to have an ocean going capability and a seaworthiness that an inshore navy would not require. Because the most likely threat was Soviet
submarines and not Soviet surface task forces, ASW operations received priority. This led to the construction of a highly specialized fleet which replaced the balanced fleet concept of the immediate post-Second World War period.

Although Canada has employed limited naval power more often than is generally recognized, the cost of maintaining a balanced fleet unit could not be justified. The oceanic capability inherent for CANLANT Zone operations did provide Canada with means of projecting power overseas, either independently on a very limited scale, or by participating in a joint operation.

It was not SACLANT or NATO that determined Canadian naval policy, but strategic acceptance of the threat. If the threat had been perceived as less, then Canada would have retained a more balanced or general purpose fleet. However, even if NATO had not been formed, SACLANT would have existed informally because of the indivisibility of the North Atlantic, and Canadian and European dependence on continued United States naval supremacy. Canadian naval policy would have been predicated on the likely challenges to United States seapower whether or not NATO or continental defence arrangements existed.

The Reopening of the Inshore Navy Debate

The RCN reached a peacetime peak in number of ships and
manpower during the period 1954-1966. This period also witnessed a steady trend in ship procurement for ASW operations and a decrease in shipholdings for more general purpose operations. In 1962, it was decided to build eight general purpose frigates to provide a more balanced fleet. This programme was cancelled in 1963. A new programme, which also had been recommended by the ad-hoc committee, called for four "280" class destroyer escorts equipped with helicopters (DDIs) fitted as "leaders" and capable of point air defence, shore bombardment, transportation and helicopter embarkation of 200 troops, and ASW operations. The construction costs of these ships exceeded original estimates because of the sophisticated systems that came to be incorporated into the design, but they are today probably superior to anything in their class.

The reversion in Canadian naval policy in the mid 1960s to a more balanced and general purpose fleet resulted from the belief that non-nuclear and limited naval operations should receive more emphasis. Such operations were seen as likely to be outside the NATO area and related to peace-keeping and peace enforcement operations. The policy was to build greater flexibility into the fleet structure, while retaining ASW operations as the primary function. The emphasis on a naval role in peace-keeping and peace enforcement operations was simply the traditional naval role of being able to protect naval power over a greater spectrum of conflict situations. Peacekeeping provided the rationalization for the continuance
of a role inherent in the balanced fleet concept.

The reversion to a more general purpose fleet did not mean a weaker navy, but a more flexible one. The additions to the fleet, the four 280 DDMs and three Oberon submarines, were war fighting additions. It was a fleet whose primary task was the destruction, in war, of Soviet submarines in Canadian contiguous waters whatever their mission. It was this task which came under criticism in the late 1960s. Coupled with the presumed new requirement for sovereignty protection, this resulted in the reopening of the inshore navy debate which had been dormant since the inter-war years.

In 1969, the Standing Committee on External Affairs and National Defence had noted that it had not obtained sufficient information on Canada's maritime forces. The result was the formation of a Subcommittee on Maritime Forces (SCMF) in October 1969, which interpreted its terms of reference to include "all maritime forces maintained by the Canadian Government insofar as these have relevance, or potential relevance, for the maintenance of Canadian sovereignty in all its manifestations and the furtherance of Canadian foreign policy with respect to national security and other national interests". The immediate political impetus given to the Subcommittee was Prime Minister Trudeau's policy of reviewing all aspects of foreign and defence policy, and the increasing

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attention being paid to the protection of sovereignty, particularly Arctic sovereignty.

The Subcommittee heard considerable evidence about the changing nature of undersea warfare and ASW, and paid particular attention to the increasing deployment of SLBM submarines, to the development of hunter-killer submarines, bottom detection systems, and to the application of underwater technologies for military and non-military exploitation of the seabed. It concluded that ASW operations against SLBM submarines and anti-shipping submarines were clearly differentiated operations. The former were a component of an overall defence system involving non-maritime components.

Witnesses, such as Prof. L.W. Martin, Dr. G.R. Lindsey and Rear Admiral J.A. Charles, argued that the priority to be given to ASW operations against SLBM submarines was dependent upon the priority given to ABM missile defence.47 The overall priority was related to whether ABM missile defence was for damage limitation or for defence of the deterrent. If the latter, then the capability of SLBMs for counterforce first strike operations was the significant question. It was stressed by Dr. Lindsey that a capability for surveillance to determine extent and pattern of deployment was the minimum activity necessary. The Subcommittee was of the opinion that it was in Canada's interest "to make a limited contribution to the co-operative defence arrangements for

surveillance and control off the east and west coasts of Canada." 48 It considered that Canadian security depended upon the preservation of a nuclear balance and the United States would probably take over the "policing" of the CANLANT zone if Canada did not do it. This was not considered to be in the national interest.

The Subcommittee discounted the strategic considerations of convoying, limited nuclear war at sea, support of UN peacekeeping, and surface operations of a military nature in the Arctic archipelago. The primary strategic consideration was the maintenance of Canadian sovereignty and extra-territorial jurisdiction. It concluded that:

In essence the police function to be exercised is a manifestation of national sovereignty. Since the countries likely to challenge such assertions for commercial or other reasons include the USA and other NATO countries, the Subcommittee considers that Canadian maritime forces must be capable, unilaterally of carrying out any increased police functions. 49

For the Canadian contribution to collective defence, it concluded that a limited contribution was in Canadian interests, but the protection of the U.S. Fleet Ballistic Missile Submarines and other Western maritime strike forces were not suitable roles for Canada. A combination of forces with subsurface capabilities was an appropriate and effective

48 SCC! ND, Tenth Report p 17.
49 Ibid.
contribution of maritime forces to collective defence. It was also a means of ensuring that Canada's allies recognize that the responsibility for protecting the maritime approaches to Canada lies with Canada. These roles, it was considered, should employ similar forces to those required for the maintenance of sovereignty and the enforcement of extra-territorial jurisdiction.

The emphasis in Defence in the 70s was on restructuring Canada's maritime forces "with the long term objective of providing a more versatile general purpose capability." The degree of emphasis on ASW operations against SLBM submarines was to be reduced. Naval forces would continue to be earmarked for assignment to NATO and contribute to the Standing Naval Force Atlantic (STANAVFORLANT). Consideration was being given to the development of a subsurface perimeter surveillance system, particularly to cover the channel connecting the Arctic Ocean to Baffin Bay and Baffin Bay to the Atlantic Ocean. An under-sea programme of national benefit was being developed.

In 1972, the major functions of Maritime Command were spelt out in the new annual review of defence, called Defence 71. These were:

50 Defence in the 70s, p 28.
1. to provide surveillance and to maintain sovereignty over territorial waters and contiguous seas areas;

2. to contribute maritime forces and facilities for assignment to collective alliances in the defence of North America;

3. to contribute to the maritime defence of the NATO North Atlantic Ocean areas as well as those areas adjacent to North America to be defended jointly with the United States;

4. to contribute to international peacekeeping operations;

5. to provide emergency communications, quick reacting transportation, and engineering and scientific knowledge required in the event of disasters or emergencies, including those resulting from oil spills or other forms of pollution; and

6. to command and control Naval Reserves (2,200 all ranks) stationed in 16 naval reserve divisions from coast to coast.

The new functions made no mention of defence of shipping, but in the annual review Defence 72, the following statement on maritime defence appeared under the defence activities for North America:

Virtually all of Canada's trade with its major trading partners on other continents is carried in ships plying the sea lanes. Canada has a major
national interest in ensuring that the oceans remain open to this commerce and that, in times of international tension or war, control of the sea lines of communications and of the maritime approaches to Canada do not fall into hostile hands.

In addition to the capabilities required for the protection of Canada's maritime interests, Canada's maritime forces should provide, in conjunction with U.S. forces, open ocean surveillance of the approaches to North America, and a task group for the protection of shipping the Atlantic or in the Pacific. They should also provide surface and subsurface surveillance in those waters off the Canadian coasts for which the Canadian Maritime Commander is responsible under existing Canada-U.S. and NATO arrangements. 52

Because of the naval construction time lag, the full effects of the new policy will not be felt for some years. It does presage a navy with a much lower capability for even inshore naval operations in contiguous waters. In the past, the policy of an "autonomous" inshore navy has proved insufficient to meet even minimal naval defence tasks when challenged. To what extent a "colonial" attitude has come again to dominate Canadian naval policy will not be known until new ships are provided. The proof will be in the eating, not the menu.

The recent debate over the future Canadian naval policy has concentrated on the requirement to protect Canadian sovereignty and has downgraded other threats to Canadian maritime interests and security. The underlying assumption is that these two are not related. The threat to Canadian sovereignty comes not from Soviet naval activity, but primarily from the United States. It assumes that the continued maintenance of Western naval supremacy is either not sufficiently threatened or is not sufficiently relevant to Canadian security to warrant a continued substantial Canadian contribution. It denies the historical tenet that Western naval superiority is the sine qua non for Canadian naval policy. Some have gone much further and argued that Canada can again adopt with impunity the no navy option. 53

Throughout the recent debate, there has been no comprehensive attempt to analyze and define contemporary Canadian maritime interests and relate them to naval tasks. "Protection of Sovereignty" has been used as an umbrella term to cover the unanalyzed and the undefined. The SCMF simply accepted

that Canada "has great maritime interests and obligations now and in the foreseeable future there can remain no doubt [sic]." 54

The shift from the traditional naval tasks in the context of an alliance structure to national surveillance and policing tasks has created a vagueness about future naval tasks. The problem is to define the new tasks and design the maritime forces to implement them, while still carrying out collective defence tasks, which in turn are becoming just as difficult to define.

This apparent dichotomy is more fundamental than that between an ocean going navy and an inshore navy, because for the first time in its peacetime history, since the 1880s, Canada has become conscious of having maritime interests that are purely national rather than of collective defence importance. However, these interests are of a coastal state that wishes to bury Grotius, not praise him. 55 They are interests of the second largest state in geography with the second largest continental margin in the world around which flows the waters of three oceans. Canada no longer adheres to the

54 SCEAND, Tenth Report, p 1.

55 The theme "I come not to praise Grotius, but to bury him" is a favourite of Mr. Allan Beesley of the Department of External Affairs. He has been the senior Canadian civil servant at the LOS III Conferences.
Anglo-American tradition of maximum freedom of the seas and of viewing the ocean as a common property. Today, the Canadian policy is one of creating nationally and internationally managed property rights over coastal waters and over the oceans. On the conceptual level, it is a turning away from the traditional freedom of the seas to a new concept of coastal state control over an extensive area of contiguous waters.
CHAPTER 6

COLLECTIVE DEFENCE AND CANADIAN NAVAL POLICY

New Technologies and Seapower

In the preceding chapter it was noted that professional Canadian naval thinking was deeply rooted in the British or Anglo-American concepts of seapower. However, professional naval thinking found little political resonance except in war. A Canadian navy was never perceived as an instrument of foreign policy. It was, for many Canadians, a political liability likely to draw Canada into unwanted wars while serving no credible defence function. Canada became a naval power in the Second World War and afterwards by strategic imperative and not by political choice based on any classical concepts of seapower of the Mahanian mould. When the strategic conditions allowed, Canada opted, by political choice, for no navy or at best a small inshore navy. In war, Canada accepted that command of the sea was indivisible. This view prevailed as the basis of the Canadian contribution to NATO supremacy in the North Atlantic. The contribution reached its peak at a time when the introduction of new technologies was resulting in the questioning of the classical concepts of seapower upon which Canadian naval policy was based.
The classical or Anglo-American concepts of seapower derived from experience and historical analyses of the uses of seapower during the era of European overseas expansion. The primary emphasis was the overriding importance of secure sea communications. Command of the sea and freedom of the seas became equated with the ability to use the sea as a highway and to deny this ability to your enemy. The underlying assumption was that the sea was indivisible and hence also command of the sea. Only one power or alliance could attain worldwide command; it was not divisible. In peace, all states could use the sea, and therefore command of the sea did not exist except in war when the seapower of the enemy had been destroyed or neutralized. In the past, command of the sea became a fact only in war, but today, "in an era of cold war, limited war, and undeclared war,

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1 Mahan's emphasis on secure sea communications is well known. He went so far as to state that "the necessity of a navy ... springs ... from the existence of a peaceful shipping, and disappears with it ..." A.T. Mahan, *The Influence of Sea Power Upon History 1660-1783*, (Boston: Little Brown, 1911) p 26. Sir Julian Corbett stated that "The object of naval warfare must always be directly or indirectly either to secure the command of the sea or to prevent the enemy from securing it." Julian Corbett, *Some Principles of Maritime Strategy*, (London: Longmans Green, 1911) p 87. Sir Herbert Richmond defined seapower as "that form of national strength which enables its possessor to send his armies and commerce across those stretches of water, sea and oceans which lie between his country or countries of his allies, and those territories to which he needs access in war ..." Admiral Sir Herbert Richmond, *Seapower in the Modern World*, (London: G. Bell and Sons, 1934) p 252.
the simple and straightforward concept of indivisible command of the sea loses much of its validity. "2

Even before the development of nuclear weapons, the gaining of command of the hydrospace and the air were necessary before command of the sea in its complete sense could be achieved. 3 The land and the sea became linked for naval operations. This has allowed coastal states, which do not have or do not need an ocean going fleet, to develop substantial inshore navies in contiguous waters. The development of tactical missiles has further supported the efficacy of inshore navies backed by land based airpower. Soviet naval policy in the immediate post-war period was based on this concept. 4


Less powerful coastal states have developed inshore navies that can at least act as a deterrent to foreign naval operations in contiguous waters.\(^5\)

The technologies of the nuclear age have been primarily responsible for lessening the validity of the concept of the indivisible command of the sea. It is possible today to destroy whole groups of ships by using land based and sea and air launched tactical nuclear weapons. Clearing the seas of enemy ships will not allow use of the seas if land based missiles can be targeted continuously on ships at sea by satellite. Superimposed on the influence of tactical nuclear weapons have been the effects of strategic nuclear weapons. The inhibitions on any naval activity likely to cause escalation into general war have led to the theoretical categorization of the uses of seapower in the nuclear age.\(^6\)

The crucial question is whether in the nuclear age, short of general war, it is possible both to use the sea

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\(^5\) There is no study of medium and small navies but even a cursory examination of Jane's Fighting Ships over the last twenty years demonstrates the expansion of medium and small navies. The increasing costs of navies may result in a levelling off of this expansion and greater emphasis on relatively cheap systems such as missile armed gunboats.

and to deny its use to your enemy; in essence, whether command is indivisible or divisible. Certainly, contemporary experience, particularly the Vietnam War, has demonstrated that the superior naval power, the United States, was not prepared to exercise its superiority to deny other states use of the sea when it was at war. Naval operations in the Middle Eastern and Indo-Pakistani wars suggest that command of the sea is divisible. 7 This divisibility has arisen at a time when commercial and military dependence on the sea has increased dramatically because of increased seaborne trading, the increased demand for the products of the sea, and the development of the SSBN as a crucial component of the nuclear balance.

The SSBN has made dependence upon the sea for nuclear powers even greater. The apparent strategic imperative to counter United States SSBNs has probably been the primary reason for Soviet naval expansion in

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7 In the Arab-Israeli wars, the Israelis have gained command of the sea against the Arab naval forces in contiguous waters but have been unable or unwilling to challenge the operations of the Soviet naval forces or stop resupply of the the Arabs by sea. In the last Indo-Pakistani War, the Indians gained command of the sea against the Pakistani Navy but were unable or unwilling to do anything about the operations of the United States, Soviet and British naval forces, which were all attempting to influence the outcome. See James M. McConnell and Anne M. Kelly, Superpower Naval Diplomacy in the Indo-Pakistani Crisis, Professional Paper No 8, (February 1973) Center for Naval Analysis, Arlington, Virginia.
the last fifteen years. This expansion has generated fears that the Soviets are building a blue water navy to challenge Western naval power. The wider the deployment of SSBNs, the more extensive have become naval operations and base requirements both to protect and to attack SSBNs.

Although the SSBN can be targeted to destroy naval formations and bases, it is not designed to play a role in any struggle for command of the sea. In practice, its role has been restricted to that of an essential component of the nuclear balance. However, it is extremely difficult to separate naval activity related to SSBN operations from other naval activities. The continuing debate over Soviet and United States naval operations in the Indian Ocean is a prime example of this difficulty. Coastal states, whether or not they

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8 The principal proponents of this thesis are Robert Herrick, Soviet Naval Strategy and Michael MccGwire, "Soviet Naval Capabilities and Intentions." Their thesis appears to be accepted for the period up to the late 1960s. The present debate is whether it still remains the basis of Soviet naval policy. For pro and con argument, see published papers given at the Soviet Naval Developments Conference held at Dalhousie University in 1972, 1973 and 1974. In particular see Michael MccGwire, "The Evolution of Soviet Naval Policy 1960-74." paper for the 1974 conference.

9 The United States is constructing a naval base on Diego Garcia, presumably related to SSBN operations. The Soviets appear to be searching for bases and have initiated regular deployments. Determining intentions is complicated by the importance of the Indian Ocean for other uses. See Geoffrey Jukes, The Indian Ocean in Soviet Naval Policy, The International Institute of Strategic Studies, Adelphi Paper No 87, London, May 1972.
are involved in alliances with naval functions related to the nuclear balance, cannot ignore naval activity in contiguous waters presumably related to the nuclear balance.

The issue is further complicated by the questions of whether operations against SSBNs are possible or advisable, in the context of the mutual assured destruction doctrine. If a coastal state considers such operations neither possible nor advisable, but a superpower continues them in waters of vital interest to that state, what should be its naval policy?

Today the problem is to reconcile the many undoubted uses of seapower with the restraints of the nuclear age. This reconciliation is not confined to states that have, or aspire to have, large navies, but also to all coastal states in and out of alliances. The classical concepts of seapower no longer provide (if they ever did) a universally accepted criterion for naval policy. Because the clear division between peace and war no longer obtains, naval policies must be adapted to a wide range of tasks across a wide spectrum of possible conflicts. The requirement is to develop naval policies based on national interests and requirements which differ from state to state, from ocean to ocean and from alliance to alliance.

As long as Canadian naval policy was predicated on contributing to the capability of the NATO alliance to gain command of the sea in general war, there was little difficulty in defining its tasks. The difficulties began once command of the sea became strategically
irrelevant and perhaps impossible. The difficulties were somewhat disguised by the shift to operations against Soviet SSBNs using the same forces in the same area of operations as before. This task is dependent on the Soviets continuing to use contiguous waters for transit of SSBNs and how, if at all, the United States intends to counter Soviet SSBNs. Both of these are variables over which Canada has little influence. Furthermore, Canada may disagree with the strategic correctness of United States policy, but it can only opt out of anti-SSBN operations at the risk of losing control over contiguous waters.

The Nuclear Balance and Canadian Naval Policy

The difficulties of providing credible strategic rationales for ASW operations has complemented the similar difficulties for air defence. The basic reason for this has been the apparent acceptance that active defences against Soviet strategic nuclear forces are both technologically impossible and destabilizing. The United States decision not to construct a nationwide BMD system has relegated the argument over ASW operations against Soviet SSBNs to whether they have a surprise first strike capability.

Until 1969, when the Yankee class SSBN with 16 launchers and with a SLBM range of 1500 nm was introduced, the Soviets had difficulty in maintaining a credible seaborne nuclear force of much more than three SSBNs at a time.
off the coast of eastern North America. There was considerable confidence that these could be destroyed.\textsuperscript{10}

The introduction of the Delta class with its SLBM of 4200nm (SS-N-8) and the SALT I Agreement allowing for a ceiling on the number of SSBNs and SLBMs each superpower may have, means that a form of parity in deterrent seaborne forces may be reached soon.\textsuperscript{11}

If the ceiling on SLBMs holds over the next decades, it is quite possible that there will be fewer SSBNs, but ones carrying more SLBMs in the pattern of the Trident system.\textsuperscript{12} This in itself will not bring any major change, but what is likely to change are the deployment areas of SSBNs and new developments in ASW operations emphasizing hunter-killer submarines and static bottom detection and destruction systems. The combining of sonar and new developments in computer technology may produce significant advances in ASW operations.


\textsuperscript{12} The Trident is to have 24 SLBMs (the Polaris class have 16) with a projected total of 10 SSBNs. The Trident SSBNs are to replace 10 Polaris class and by the early 1980s the U.S. will have 26 more SLBMs than SALT permits. If the SALT total is to be adhered to, then the United States will have to reduce its SSBN total.
The deployment of United States SSBNs in waters contiguous to the Soviet Union led to the Soviet Navy embarking on a forward deployment strategy designed to pose a permanent counter to United States SSBNs and carrier forces. This strategy, coupled with the deployment of SSBNs, would ensure "that the post-exchange nuclear balance was preserved." This insurance was, and apparently remains, essential to Soviet doctrine, which is primarily a war-winning, rather than a purely deterrence, doctrine.

It seems only logical for the Soviet Union and the United States to maintain SSBN invulnerability by deploying their SSBNs in areas where ASW operations are the least possible. In the Soviet case, this would be the Barents Sea and mid-ocean areas. The United States has decided to base all ten of its Trident SSBNs at Bangor in Washington State to outflank Soviet ASW operations. If these deployments take place, then the requirements for Soviet SSBNs to use the CANLANT zone for transiting and deployment will decrease over the next decades. But

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14 It is generally accepted that Soviet doctrine has been a war winning doctrine in the sense that the objective is to ensure that Soviet society would survive a general nuclear war in better shape than United States society.

15 See United States, Senate, Committee on Armed Services, Research and Development, Trident Basing, 93rd Congress, 2nd sess., S.3000, Part 7, April 23, 1974, pp 3769-71. The basing decision appears to be a precautionary measure to offset any Soviet breakthrough in ASW operations over the next decades.
the decision to base the Tridents on the west coast may have already drawn Soviet naval activity to that coast. In August/September 1971, a Pacific Fleet detachment may have been conducting a reconnaissance in force. They were intercepted by Canadian naval units. This has been considered as presaging a gradual Soviet build-up to counter the Trident SSBNs.16

Considerable publicity has been given to under the ice operations by nuclear powered submarines, but there is no evidence that either the Soviet Union or the United States has used the Arctic Ocean as a patrol area or transit route. The Arctic Ocean proper consists of a series of relatively shallow basins divided by ridges and surrounded by broad continental shelves. Navigation for SSBNs is hazardous and SLBM ranges of 2500nm or more are required if the Soviets were to use the Arctic Ocean as a deployment area.17

As long as the Soviets consider it necessary to deploy SSBNs off the coasts of North America, they have available,


17 The Soviet Sawfly (SS-N-6) with a range 1500-1750 nm mounted on the Yankee class boats could reach SACIHQ near Omaha, Nebraska from Hudson Bay or the general area of the Northwest Passage. For the difficulties of SSBN operations in Arctic waters see the testimony of G.R. Lindsay, SCFAND, Evidence, 28th Parl., 2nd sess., No 34, January 27, 1970, pp 162-70. Hubert Scoville, Jr., "Missile Submarines and National Security" in Arms Control: Readings from the Scientific American, (San Francisco, W.H. Freeman, 1973) pp 235-47 contains, with good polar projections, an excellent discussion of changing United States and Soviet SSBN capabilities. Recent hydrographic work has confirmed that submarines can operate in almost all the Canadian Arctic archipelagic waters.
in Canadian Arctic waters, an alternative transit route to the Greenland, Iceland, United Kingdom (GIUK) gap. This route is via Canadian Arctic archipelagic waters or the Nares Strait (between Canada and Greenland), Baffin Bay and into the Atlantic or Hudson Bay. The Arctic route has had, and continues to have, the advantage that Soviet SSBNs could operate totally undetected until entering the Atlantic unless trailed by nuclear powered attack submarines (SSNs). The disadvantages of hazardous under the ice navigation and greater distance seem to have caused the Soviets to use the GIUK gap route.

Canada has been giving consideration to the establishment of a limited subsurface perimeter detection system in Canadian Arctic waters. Defence in the 70s is somewhat vague over the areas to be covered and the reason for the system. It suggests that such a system would cover the channels connecting the Arctic Ocean to Baffin Bay and Baffin Bay to the Atlantic. This system would detect both Soviet and United States nuclear powered submarines entering the eastern Canadian Arctic and the Atlantic Ocean. There is no published information on the extent of United States involvement. There is a joint Canadian-United States bottom detection system on the east coast continental shelf, apparently called NUTMجر and similar to the United States CEASAR/COLOSSUS system. Canada probably has the necessary

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18 Defence in the 70s, p 18. The subject is mentioned under the section on the Protection of Canada.
technology to develop a bottom based passive system of either real or historical time capability. 19

If Canada is moving to develop independently an Arctic waters bottom detection system, then such a system would be designed presumably for the protection of sovereignty. The gaining and passing of information about Soviet SSBNs, as a contribution to collective defence, would be secondary. If the United States is involved to any extent, then this would be a sign of its determination to pursue new ASW technologies in an area of great Canadian sensitivity. The thrust of Defence in the 70s was the downgrading of ASW operations for collective defence. If Defence in the 70s is to be believed, and if the United States is involved in the sub-surface perimeter project, then again there must be differing Canadian and United States threat perceptions. Presumably, Canada is adopting its traditional policy of making a sufficient contribution in resources and geography to ensure that vital Canadian interests are

19 For an optimistic assessment of barrier systems see John P. Craven, Ocean Technology in the 1970s, Adelphi Paper, No 46, March 1969, (London: Institute of Strategic Studies, 1969) p 42. There has been no discussion of barrier systems in Canadian defence literature; yet Canada has been involved in them for some years. Information on these systems is highly classified. See for example, United States, Senate, Committee on Armed Services, Research and Development Subcommittee, Briefings on Undersea Surveillance Program for FY 1974, 93rd Congress, 1st sess., S.1263, Part 4, February 1973. The Stockholm International Peace Research Yearbook of World Armaments and Disarmament 1969/70 Chap 3, discusses and lists bottom detection systems in operation or projected.
protected. Canada may be getting out of ASW operations as traditionally conducted in the CANLANT zone, only to continue them with new technologies in Arctic waters.

Hard evidence on NATO operations in the GIUK gap is lacking, but there is evidence that thought is being given to new systems. The United States has 61 nuclear powered hunter-killer submarines, one of whose tasks is to track Soviet SSBNs. There are apparently many difficulties and "an effort to carry out passive acoustic tracking reliably at a range of 10 kilometers or more in the face of changing sea conditions, normal variations in sound velocity, sea noise and the evasive measures readily available ... seems doomed ... to failure."

There is, however, the alternative of active acoustic tracking by sub-surface, surface and above surface means in conjunction with detection barriers. To carry out successfully a counter SSBN task would require the assignment of tracking forces to each Soviet SSBN which would "escort" them.

Another system which may be finding favour is the concept of an anti-submarine minefield across the GIUK gap. Mines, which have the capability to drive themselves either upwards or downwards when they detect a submarine, are probably under development in the United States and

in the Soviet Union. It may be possible to create "a barrier across the 1,000 kilometer strait between Greenland and the British Isles." Such a system, until activated, would not prevent Soviet SSBNs from entering the Atlantic, but on activation would preclude further deployment. Some Soviet SSBNs would always be at sea, and if the aim was to destroy them before launching their missiles, these would have to be tracked continuously and destroyed on command. Increased ranges of Soviet SLBMs could mean deployment could be restricted to north of the GIUK gap.

To establish such a system or systems with the clear aim of destroying the presumed invulnerability of Soviet SSBNs would be a departure from present United States strategic doctrine. It would not be logical to do this unless it was accompanied by other measures, such as extensive BMD systems, and acceptance of a doctrine that emphasized defence over deterrence. It might be logical if the Soviet SSBNs were perceived to have a significant first strike capability against United States assured destruction forces.

Both the United States and the Soviets have the strategic option of deploying SLBMs with depressed trajectories. The United States maintains coastal radars to provide early warning of SLBMs. The greater the range at which Soviet SLBMs are detected, the greater the time for United States assured destruction forces to react. The further away from United States coasts Soviet SSBNs are deployed, the longer the missile flight and the greater the degree of warning. If, however, Soviet SLBMs were fired close to United States coasts on depressed trajectories, then

21 Ibid., p 256
they would pose a counterforce threat. There has been no evidence so far that the Soviets are testing depressed trajectories for either the SS-N-6 (fitted on the Yankee class) or the SS-N-8 (fitted on the Delta class). However, the SS-9 modification 3(ICBM) has been tested in the depressed trajectory role. Depressed trajectories systems would be excellent counters to BMD systems. If the Soviet Union should deploy depressed trajectory SLBMs, Canadian contiguous waters would assume a strategic significance equivalent to Canadian air space in the era of the manned bomber. The political and military pressures and choices facing Canada would be very similar.

The arguments over the efficacy of counter SSBN operations are part of the debate between the minimal deterrence school and those who believe there is a "delicate balance" which requires constant adjustment. If the United States adopts a comprehensive counter SSBN strategy, then there would be increased demands on Canadian resources and geography. Any barrier system across the GIUK gap would have to be continued across the Greenland-Canada gap. Soviet SSBNs operating in

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22 See United States, Department of Defence, United States Military Posture For FY 1975, Statement by Admiral Thomas H. Moorer, p. 12.

23 Present United States ASW policy is to conduct attrition operations in the GIUK gap to reduce the enemy submarine threat before the submarines reach their operational deployment areas. See United States, Senate, Committee on Armed Services, Research and Development, ASW Operations, 93rd Congress, 2nd sess., S.3000 Part 7, April 1974, pp 3551-67.
the CANLANT zone would have to be tracked continuously. However, the performance gap between Soviet SSBNs and Canadian ASW capability could widen if improvements are not made in this capability. There could arise the paradoxical or ironical situation of Canada becoming more involved in highly sophisticated ASW operations for continental defence than ever before. Canada would be faced with the now traditional question of how much Arctic geography should be put at the disposal of the United States and how much effort should be allocated to ensure that contiguous waters remain under Canadian control.

The above may not come to pass and there are strong reasons against the adoption of such strategies. However, it does seem that a change in the method of conducting ASW operations is taking place rather than a downgrading of ASW operations. This is being caused by technological advances that favour the submarine and bottom detection and destruction systems over the more traditional systems for countering SSBNs. The first and continuing priority to counter the SSBN will require the maintenance of a sophisticated surveillance capability. The Trudeau government has accepted this priority by its apparent decision to buy a replacement for the Angus long range patrol aircraft.

Canada is already involved with the United States in coastal bottom based detection systems. The question
of such a system in the Arctic is more complicated. The Canadian Arctic is losing its strategic significance, but there could develop strong United States pressures to "close off" the Arctic as an alternative route for Soviet SSBNs if the United States decides upon a comprehensive counter SSBN policy. The United States motives could include national ones that would have little relation to continental defence and be inimical to Canadian interests. If the changes in NORAD are instituted, as earlier suggested are likely, United States involvement in the Canadian Arctic will be reduced to a minimum. If the United States becomes involved to any great degree in the maritime defence of the Arctic, Canada will be faced with a permanent United States military presence in the Arctic. This, coupled with United States economic involvement in the Arctic, could result in de facto loss of control over the destiny of the Canadian Arctic. Whether or not Canada has legal sovereignty would be of little importance.24

If Canada wishes to continue to exercise control over contiguous waters, then Canada must retain an ASW capability to monitor and destroy Soviet SSBNs in these waters for the foreseeable future. If few Soviet SSBNs use these waters, then less overall effort will be required, but not less sophisticated effort. Canada can never opt out of sophisticated ASW operations without accepting United States de facto control over Canadian contiguous waters.

24 For a discussion of de facto and de jure sovereignty see Colin S. Gray, Canadian Defence Priorities, pp 126-7.
Defence of Shipping and Canadian Naval Policy

It was the strategic necessity to defend shipping that forced Canada to become a naval power. It was the influence of new technologies on seapower that destroyed the main rationale for Canadian naval policy. Yet there remains a degree of uncertainty about eliminating this task. This derives from continued Canadian dependence on overseas trade and a vague recognition that today's strategic logic may not be tomorrow's strategic reality.

Canadian waterborne trade and shipping is one of disparate patterns. Canadian flag shipping with no ocean-going merchant marine carries nearly 30 per cent of Canadian international waterborne trade. 25 This derives from the extent of Great Lakes and Pacific coastal trading which is dominated by Canadian flag shipping. The carriage of the remaining 70 per cent is dominated by the flags of Liberia, United Kingdom, Norway, Greece, Japan and West Germany. Canadian trading within the Western Hemisphere is generally over 50 per cent of total Canadian waterborne tonnage and is nearly all with the United States, but it does include essential bulk imports of oil and bauxite from Central and South America. 26 Western Europe accounts for about 23 per cent and Japan for about 11 per cent. In terms of value of exports and imports, the extent of hemispheric trading is even more marked with generally each amounting to over 70 per cent of the total value of Canadian exports and imports.

26 Ibid.
Overseas, as opposed to hemispheric, exports generally account for over a quarter of Canada's exports and over 5 per cent of its GNP.

The disparity in trading patterns is most marked in the export/import tonnage imbalance. Canada traditionally has been a bulk exporting state, and today Canada's exports to Western Europe and the Mediterranean area are nine times the tonnage of its imports and to Japan, 14 times its imports. The bulk exports of coal, iron ore and grain account for over 65 per cent of overseas exports. The production of these exports is very regionally based; grain from the Prairies, coal from Alberta and British Columbia, and iron ore from Quebec and Labrador. The main bulk imports are oil and bauxite, and if Canada becomes sulfur-sufficient in oil, the tonnage imbalance will be even greater. Canada is not dependent on any vital overseas imports other than oil and to a lesser extent bauxite for survival. Canada is dependent on overseas bulk exports for its high level of prosperity. The recent emphasis on increasing overseas trading to lessen dependence on continental trading will increase dependence on overseas trading.

The dependence on overseas bulk exports is most marked for the Western Canadian economy. This has become related to the growth of Pacific Rim trading in the last two decades. By 1972, nearly double the tonnage of Canadian overseas

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27 Figures derived from Statistics Canada, Shipping Report, Part V, annual, Cat. No 54-207.
exports went to Pacific Rim countries than elsewhere overseas.\footnote{28}{For an expansion of Pacific Rim trading see \textit{The Pacific Rim: An Evaluation of British Columbia Trade Opportunities}, Government of British Columbia, August, 1972.} Japan has become Canada's second most important customer after the United States, and 80 per cent of the exports to Japan come from the Western Canadian economy. The massive exports of wheat to China and the Soviet Union have contributed to this new trading pattern. Australia has become the largest market for Canadian manufactured goods after the United States. The Pacific Rim has become a trading area as important to Canada as Western Europe.

Canada is one of the world's primary sources of renewable and non-renewable resources. Any interference in seaborne trading that affected Canadian exports would have serious implications for Canada, but for some importing countries it could be disastrous. Probably Canada could survive economically a serious interruption of seaborne trading, but for many states, it could mean economic disaster if not starvation. The dependence of other states on Canadian exports would make it impossible for Canada to avoid being drawn into measures to restore normal seaborne trading.

The question remains whether the contemporary threats to seaborne trading are of sufficient magnitude to require Canada to retain a naval capability for the defence of
shipping. Are the threats so minimal that Canada can leave any responsibility to the major maritime states? If Canadian exports are vital to some states, should they not assume complete responsibility for the defence of shipping in their own interests? Canada has no ocean going merchant marine, so why should Canada maintain a naval capability to defend British, German and Japanese shipping? Present Canadian naval policy would appear to accept that the threats are not of sufficient magnitude to require a defence of shipping capability in the future, other than as a very secondary task.

Canada is concerned with shipping in the North Atlantic and the North Pacific. It is also concerned with shipping for military operations in support of NATO and for peacekeeping. In the past, Anglo-American naval doctrine had a clear answer for the defence of shipping; gain command of the sea. Today, analyses of threat and solutions proffered for the defence of shipping vary from ocean to ocean, from the scenarios of general war to those of terrorism and piracy.

In the North Atlantic, the threat is the capability of the Soviet ocean going submarine fleet. The debate has been over how the Soviet submarine capability is related to strategic intentions and requirements. In essence, has the Soviet submarine fleet been primarily designed for guerre de course operations against Western shipping or

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29 Sir Julian Corbett argued that there was no direct relationship between the amount of trade and the force requirements for its protection. Rather, the "effective vulnerability of seaborne trade is not in direct but in inverse proportion to its volume." Julian Corbett, Some Principles of Maritime Strategy, p 280. Whether the second statement holds true may be debatable, but the volume of trade in itself is not a valid premise for basing naval protection requirements.
for other tasks such as defence of contiguous waters and countering United States seaborne deterrent forces. The fact remains that if the Soviets chose to disregard all other tasks they could deploy from the Northern fleet 130 submarines and from the Baltic Fleet another 67 for guerre de course operations. Accepting a one in four ratio on patrol, the Soviets, at a maximum, could have 50 submarines (10 nuclear and 40 diesel) on patrol at any one time. It is this potentiality coupled with the dependence of the NATO states on overseas shipping that maintains the continuing

30 The official United States view is that "Their long term objective apparently is to weaken our ties with our overseas allies and prevent us from coming to their assistance in time of war" and "the Soviet Navy general purpose forces have been designed primarily to disrupt our sea lines of communications and obstruct the projection of our seapower across the oceans." United States, Department of Defense, projection of our seapower across the oceans. United States Military Posture for FY 1974, Statement by Chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer, USN, Before the Defense Appropriations Subcommittee of the Senate Committee on Appropriations, March 26, 1973, p 43.

31 The figures were derived by an analysis of Soviet submarine numbers and capabilities as given in Jane's Fighting Ships, 1971-1972. Mr. Elliot Richardson in 1973 stated that the Soviets had 275 cruise missile and attack submarines to challenge United States sea lines of communication. By the late 1970s or early 1980s a large percentage will be nuclear powered. United States, Department of Defense, Annual Defense Report FY 1974, Statement of by Secretary of Defense Elliot L. Richardson Before the Senate Armed Services Committee on FY 1974 Defense Budget and FY 1974-1978 Program March 28, 1973, p 36.

concern, even though the political and strategic inhibitions against Soviet guerre de course operations would appear to be very strong.33

The scenarios are almost endless about how the Soviets would conduct a guerre de course campaign, and how NATO should react. The crucial question is whether a guerre de course operation could be conducted without escalation into general war. Because the question is unanswerable, the threat will remain as long as a Soviet ocean-going attack submarine fleet exists. The vital significance of the North Atlantic to North America and Europe means that as long as even a minimal threat exists, there will also have to be a naval capability to impose at least a "maritime pause" to provide time for finding an option between surrender and escalation.34

The naval means employed for the defence of shipping may change, but any system must be complete across the Atlantic. If Canada should withdraw from all responsibility for the defence of shipping, then the resulting vacuum will be filled in an emergency by the United States as best it can. The inability to defend shipping in contiguous waters would mean that Canada would not only lose control over its contiguous


waters but also over its overseas trade. Canada would have minimal influence over what Canadian exports were shipped and where. The United States would be in position to direct Canadian exports through United States ports to United States determined destinations. Even if the interruption to normal shipping was short, the damage to Canadian trading patterns could be extensive. Even an overt threat could make Canadian overseas trade an appendage to that of the United States.

The means to ensure the safe passage of shipping may change from the historically successful convoy system. If the anti-submarine minefield meets performance expectations, then it could prove a key system in limiting any Soviet guerre de course operations. Again, if such a system was deployed across the GIUK gap, an equivalent system would presumably be necessary to block Arctic gateways. The inability of surface ships to support this system could result in the need for nuclear powered submarines. Also, again, if Canada wants to maintain control in waters of vital importance, then it must be prepared to maintain the necessary capability. A sophisticated under the ice capability is not one that can be acquired quickly.

The perceived threat of Soviet guerre de course operations may not increase above the present level, but it cannot be dismissed in the foreseeable future. Canada has a clear and permanent interest in the maintenance of an ASW capability.

that can ensure the defence of shipping in waters contiguous to Canada. In the Canadian Arctic waters this may require bottom detection systems and an under the ice capability. In the CANLANT zone, the more traditional surface and air capability may suffice.

Although the Soviets maintain an attack submarine force in their Pacific Fleet, an overt challenge in the form of guerrilla course operations seems highly unlikely. Rather, the threat lies in the interruption of international shipping because of localized conflicts. Increased coastal state jurisdictional claims by states such as Indonesia and the Philippines may pose a threat to shipping. However, the vast bulk of Canadian trade does not pass through the commercially and strategically significant water passages in South East Asian waters.\textsuperscript{36} In fact, very little Canadian trade today passes through waters that are likely to be in jurisdictional dispute. There is no conflict of interest between Canadian coastal waters jurisdictional claims and Canadian overseas trading patterns. For Canada, the "freedom of the seas" principle applies only in the oceanic areas of the North Atlantic and North Pacific where there are no jurisdictional disputes and none are foreseen.

The threat to Canadian seaborne trading in the Pacific lies outside the context of cold war scenarios. The threat

\textsuperscript{36} In 1972, just under a million tons passed through South East Asian waters that originated from Vancouver, and just over one million tons from the Atlantic coast ports, compared to the total Canadian overseas export tonnage of 80 million tons.
is in the possibility of serious disputes involving China, the Soviet Union and Japan. A confrontation between the Soviet Union and China could be extended to interference with the importation of vital commodities such as wheat by China. Japan could be involved in disputes that would have maritime extensions. The traditional principle of the right to trade freely for non-belligerants would be the main issue, and its resolution could require some form of joint naval action. A failure by Canada to make a naval contribution would mean that Canadian commercial interests would be sacrificed to those states that did so. China and Japan would be beholden to purchase United States and Australian wheat rather than Canadian. Whether or not Canada decided to make a naval contribution, the lack of a suitable naval capability would leave Canada with no option but to sacrifice its commercial interests by default.

**Overseas Commitments and Canadian Naval Policy**

As long as Canada maintains ground forces for overseas, there will be a requirement for the defence of military related shipping. The Canadian air lift capacity is insufficient to supply even a battalion group in operations, for example, in northern Norway.\(^{37}\) The majority of supplies will have to come by sea and these will require protection. This also applies to any peacekeeping/peace enforcing

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\(^{37}\) The writer was an air trans-shipment officer for Exercise Winter Express in 1966. For this exercise much cargo had to come by sea, even with the largest airlift in Canada's military history.
operations. A number of commentators have ruled out the naval requirement as "inconceivable given today's political climate." The difficulty with this assessment is two-fold. First, Canadian governments have a habit of accepting commitments which declaratory policy and logic suggest are more than unlikely. The Canadian expeditionary forces sent to South Africa in the Boer War, Russia in 1918, Hong Kong in 1941, Korea in 1951 and more recently peacekeeping forces for the Middle East, Vietnam and Cyprus are prime examples. Canada in 1974 had more troops on peacekeeping duties in the most volatile situations since Canada first went into peacekeeping, and after peacekeeping had been relegated to the lowest defence priority.

The second difficulty is the assumption that if anything goes wrong, the presumed coincidence of superpower interest will save the day. In 1967, when Egypt ordered the United Nations Emergency Force (UNEP) out, the Canadian contingent only just got out because Canada had the necessary air lift and put on a naval demonstration that apparently was instrumental in the Egyptian decision to allow the Canadians to be flown out.

38 Colin S. Gray, Canada's Maritime Forces, p 25.

39 Interviews, Ottawa, October 1973. There is no mention of this use of naval power by Canada in James Cable, Gunboat Diplomacy: Political Applications of Limited Naval Force, Studies in International Security, No 16, The Institute of Strategic Studies, (London: Chatto & Windus, 1971). He does note the Anglo-Canadian task force deployed off Egypt after a coup d'etat in 1952. Canada provided one of the two aircraft carriers, p 211. Commander W.A.B. Douglas in his "Canada and the Withdrawal of the United Nations Emergency Force," Canadian Defence Quarterly, Vol 2, No 3, (Winter 1972/73) states "as soon as the crisis began to deepen, three Canadian warships had been despatched towards the Mediterranean in case withdrawal would have to be carried out by sea." p 50.
The other contingents did not have this recourse and suffered in the ensuing fighting. A serious deterioration in the position of the Canadian Cyprus contingent in 1974 could have required a naval demonstration. In fact, it could have been the only option open to Canada to protect the Canadian troops. The presumed coincidence of superpower interests presaged by detente appears to have some limitations. The protection of Canadian peacekeepers may or may not be a high priority with the superpowers in the era of detente.

It is possible to construct numerous scenarios demonstrating the use of Canadian naval power in support of overseas commitments and it equally possible to rule them out. Yet the fact remains that overseas commitments and operations are apparently here to stay for the foreseeable future. As long as this situation continues, there will be a naval requirement to support such operations; the form being decided by events unlikely to be under Canadian control.

The requirement to maintain naval forces for independent use overseas is the most difficult requirement to justify. There is the requirement to evacuate Canadian nationals. A destroyer was sent to stand off South Vietnam in 1973 while Canadian truce supervisors were operating, though this activity hardly falls under the heading of gunboat diplomacy. Scenarios can be developed to envisage Canadian warships engaging in gunboat diplomacy to protect Canadian nationals, to escort Canadian ships in areas of dispute, and to provide limited protection to Canadian overseas interests. Such
scenarios may have increasing merit because of the expansion of Canadian overseas interests and the growing intra-state and inter-state conflicts in the developing world.

Canada, for example, has large interests in the West Indies and in some islands it is the dominant foreign (imperial) economic power. In the tourist season the islands suffer a large influx of Canadians. In today's climate of terrorist activity, it is quite possible that serious disturbances could threaten the lives of a relatively large number of Canadians marooned on an island. The pressure on the Canadian government to use the "navy" would be considerable. Canadian governments, when pressed, find little difficulty in disregarding previous declaratory policies. The retention of a naval capability to intervene on a limited scale in areas where Canadian nationals and interests are threatened will remain a naval requirement for the foreseeable future, however difficult it may be to construct supporting scenarios to justify it. The

40 Canadian naval activity in the Caribbean has been "redolent of gun-boat diplomacy" on five occasions between 1915 and 1963, see Richard A. Preston, "The R.C.N. and Gun-Boat Diplomacy in the Caribbean", Military Affairs, Vol XXXVI No 2, (April 1972) pp 41-3. The recent Nigerian Civil War is an example of Canadian involvement against the wishes of the government. Basically the government supported the Nigerian "Federal" government but humanitarian motivated pressures resulted in using the armed forces transport aircraft to airlift supplies into Biafra. In another similar situation, the government could decide to use naval vessels because they would be more suitable. It is unwise to have too rigid scenarios about what Canadian governments would do or not do when faced with real situations.
requirement can be met from normal naval forces as long as an oceanic capability is retained which is capable of operations in a limited hostile environment.

Options and Collective Defence

Canadian security is ultimately dependent upon the avoidance of nuclear war between the United States and the Soviet Union \(^41\) and hence the importance to Canada of the nuclear capabilities and strategies of both states. ICBMs have reduced the requirements for air defence, but neither superpower has ceased in its efforts to develop the necessary technologies and strategies to counter the SSBN. Nor is there any evidence that either intends to do so in the foreseeable future. \(^42\) The technologies and strategies to counter the SSBN are likely to continue to emphasize underwater operations over surface operations against the SSBN, but not necessarily for other ASW requirements such as the defence of shipping. This has resulted in a growing incompatibility between naval forces required for SSBN counter operations and other naval tasks.

For Canada, the structural reconciliation of a more general purpose naval capability with a continued operational

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\(^41\) Defence in the 70s, p 6.

\(^42\) The United States effort remains extensive particularly in research and development; see United States, Senate, Hearings Before the Committee on Armed Services, 93rd Congress, 2nd sess., in S. 3000, Part 7, Research and Development, ASW Operations April 15, 1974 pp 3551-3617. The Soviets are building the new "Kuril" class carriers apparently for ASW operations. If the "Kuril" class develops into a strike carrier class, this would be a clear indication that less emphasis is being placed on ASW operations.
requirement to counter SSBNs may prove more difficult that is presently foreseen. The present policy of emphasizing surveillance is based on the assumption that the requirement for operations to counter SSBNs is lessening and perhaps will become non-existent. The main weakness is that a change in Soviet naval strategy could result in Canadian waters becoming of even greater importance than in the past. This change could result from the development of a United States BMD system and a successful system to counter the SSBN that would force Soviet SSBNs to use Canadian waters. Canada would be in the same political and military predicament as it was in the Second World War and in the 1950s over air defence.

The passive surveillance option is only viable if there is very minimal or no use of Canadian waters by Soviet SSBNs. If there is more than minimal use, the surveillance capability would have to be upgraded and include a credible destruction capability. This could only be done through collective defence arrangements and the greater the Canadian participation, the less United States involvement in Canadian waters.

The task of maritime defence in contiguous waters can no more be dissociated from the naval strategies of the superpowers today, than it could be dissociated from contributing to Western naval capability to gain command of the seas in the past. In the past, there were basically two options for Canadian naval policy: no navy, or a navy that could make a substantial contribution in war to gaining
command of the seas. Today, the options are still two: Canada can opt out of any maritime defence related to the nuclear balance, or make a credible contribution as part of a collective defence arrangement.

The adoption of a passive surveillance policy has blurred the choice between the options as did the inshore naval policy in the past. The inshore naval policy was in fact the adoption of a no navy policy and it failed when tested. The passive surveillance policy can serve only as a credible option if the naval strategies of the superpowers do not require use of Canadian contiguous waters. If they do so require, then Canada has chosen, by default, a no navy policy.

The price for a no navy policy will be paid for in peacetime. It will take the form of the loss of any means of controlling Soviet and United States activity in contiguous waters and greater pressure for United States involvement in Canadian defence. Canada, by default, will have lost its principal means of control: a naval capability to ensure a reasonable degree of control over foreign naval operations in contiguous waters.

The loss of control will take place in peacetime and will be for an indefinite period. It will severely restrict the ability of Canada to undertake naval tasks which should be purely national responsibilities. The emergence of new Canadian maritime interests in contiguous waters has produced a requirement to protect these interests. Their protection
cannot be an alliance responsibility. The naval requirements for operations in contiguous waters, independent of any alliance arrangements, are at the core of the debate for a more general purpose navy.
CHAPTER 7

NATIONAL MARITIME INTERESTS AND CANADIAN NAVAL POLICY

New Technologies and the Emergence of New Maritime Interests

The influence that new technologies have had on seapower has been complemented by their influence on the maritime interests of coastal states. Canadian maritime interests before the 1960s were one-dimensional, that is, predominantly concerned with oceanic surface shipping in peace and its protection in war. In the 1960s new maritime interests emerged, which were both coastal and multi-dimensional, encompassing large areas of contiguous waters and the continental margin. The emergence of new maritime interests in offshore fishing, offshore oil and gas potential, and in the Arctic has led Canada to adopt the policy of functional national control over coastal waters and sovereignty over the continental margin.

These new maritime interests are not divorced from Canadian continental developments, but part of them. For the first time in Canadian history, there is a commonality of maritime interests between maritime Canada and continental Canada. It is this commonality of interest that has changed Canadian maritime perceptions. For the first time, it is possible to speak of national maritime interests that can be readily perceived as such by Canadians in peacetime.
Canada, in accordance with many other coastal states of the world, has adopted the policy of claiming as national property the renewable and non-renewable resources of its coastal waters and continental margin. Canada has found a new frontier, a maritime frontier, to exploit using the traditional instruments of Canadian continental expansion: occupation from a contiguous and firm base; military/police/civil presence; diplomatic efforts to obtain recognition of Canadian sovereignty; and national legislation that supports Canadian claims, but is often less than explicit in affirmations of sovereignty.

**Offshore Fishing**

It was the Canadian fishing industry which first felt the impact of new marine technologies. The arrival in the 1960s off both coasts of high technology foreign fishing fleets has dramatically increased fishing in contiguous waters. The overfishing on the Atlantic coast has reached serious proportions. Fishing catches in the International Convention for the North West Atlantic Fisheries (ICNAF) area, stretching from Greenland to off the American east coast, reached a peak in 1968 of 4.5 million metric tons but declined by 1972 to 4.2 million metric tons. In 1964, the Canadian percentage of the total ICNAF catch was 22.7 per cent and by 1970 had risen to 28 per cent as the direct result of increased Canadian offshore fishing. However, by 1972, Canada had dropped back to
the 1964 level while the Soviet Union had increased its percentages, rising from 17.7 per cent in 1964 to a high of 27 per cent in 1972. ¹ Similar increases have been recorded for Poland and East Germany. These percentage increases resulted from overfishing of the maximum sustainable yield of many stocks. The Atlantic coast herring fishery collapsed completely, and the cod fishery may be in balance.

The depletion of stocks has become a world wide phenomenon. It is now estimated that the total global catch cannot go any higher than 100 million tons from the present 70 million tons. ² This has produced growing demands for coastal state control over coastal fisheries. In Canada's case, the demand is for fisheries jurisdiction to be extended to 200 miles or to the edge of the continental margin, whichever is greater. ³ Furthermore, Canada wants to take all the fish it needs (or can market), but would be prepared to make any excess available to


other countries under suitable Canadian control provisions. A 200 mile limit encompasses all the Pacific continental shelf fisheries and about ninety per cent of the Atlantic coast fisheries. It is unlikely for some years that Canadian fishermen could utilize all the fish now being caught in the ICNAF sub-areas off the Canadian east coast. Some foreign fishing is likely to continue for some time even if Canadian coastal management is attained.

The potential for expansion of the Canadian fishing industry is appreciable if foreign fishing is excluded or restricted. On the Atlantic coast alone, the potential is probably two or three times the 1972 Canadian catch of 854,000 metric tons. It has been estimated that by 1980 the market value of Canadian fish caught could double to one billion dollars. Canada certainly would become the largest fish exporting state in the world.

4 The potential is based upon the estimated maximum sustainable yield. One estimate based on the Food and Agriculture Organization and the Canadian Department of Fisheries is 2.8 million metric tons for cod, small flatfish, haddock, red fish and herring, the main species fished internationally in the ICNAF zone. The margin of error may range from plus 45 to minus 45. See John M.A. McKay, The Future for Manpower in the Canadian Sea Fisheries: A Framework for Strategic Planning, Department of Manpower and Immigration, January 1972, pp 9-10.

5 For the billion dollar estimate see Fishing Limits and the High Seas, Notes for a speech by the Honourable Jack Davies, Minister of Fisheries, Carleton-Charlotte Liberal Association, Annual Meeting, St. Andrews, N.B., May 26, 1973, p 9. The figure for 1972 was $519.2 million.

6 Canada exports generally over 70 per cent of its catch and ranks fourth in the world with $282.1 million (1971) compared to first ranking Japan with $367.4 million. Because of the small Canadian market any increase would be largely exported.
This potential is in balance because of depleting stocks caused by extensive high technology Canadian and international fishing.

Offshore Oil and the Continental Margin

Drilling for offshore oil and gas began off Canadian coasts in 1965 and by 1973, 80 wells had been drilled. There have been no commercially significant finds but some interesting ones on Sable Island, in the Gulf of St. Lawrence and off the Labrador coast. The estimate of ultimate recoverable potential on the east and west coasts is 51.1 billion barrels of oil (B.bbls) and 328.7 trillion cubic feet (Tcf) of gas. This is about 50 per cent of the total Canadian potential excluding the 300.2 B.bbls from the Alberta Tar Sands. Canada imports all its oil needs for the areas east of the Ottawa Valley with the remainder of the country supplied from Western Canadian sources. Western Canadian oil reserves are due to run out by the early 1980s. The search for national self-sufficiency in energy has become a national imperative in which offshore oil is a significant factor.

7 Statement of the Minister of Energy, Mines and Resources, Mr. Donald Macdonald, SCEAND, Evidence, 29th Parl., 1st sess., No 27, December 12, 1973, Appendix N, p 39. In the North Sea it took 400 exploratory wells to find six commercial gas fields and about 10 exploitable oil fields, for an overall success ratio of 1 in 25. This is considered to be an extremely high success ratio compared to most sedimentary basins.

The development of offshore oil potential solely or mainly for Canadian use may be complemented by the adoption of policies designed to maximize Canadian benefits. Crucial to such policies will be the decision to restrict the participation of offshore support fleets to the Canadian flag. This, of course, is United States policy and it will probably be essential if the Canadian maritime-oriented industries are to benefit substantially from offshore oil. Such a decision would be a clear indication that Canada was adopting a protectionist policy towards its maritime interests rather than a continuance of laissez-faire policies. The more protectionist Canadian maritime policies become, the less favourably received will be the extensive Canadian claims to sovereignty over the continental margin.

The continental margin of Canada is the second largest in the world. Excluding the continental rise, which Canada claims as part of the margin but is not easily delineated, the Canadian shelf and slope comprise a total area of about 2.3 million square miles, which is

See H.J. Darling, Report of Inquiry on the Coasting Trade of Canada and Related Marine Activity, Canadian Transport Commission, Ottawa, 1970. The Darling Report has been one of the most influential factors in changing government thinking. It argued very forcefully for the restriction of coastwise shipping, and in particular offshore oil support shipping, to the Canadian flag. The government has decided to withdraw from the Commonwealth Merchant Shipping Act (1931) so as to restrict coastwise shipping to the Canadian flag, but as yet has not implemented the recommendation for offshore oil support shipping.
about half as large as Canada's entire land area.
The continental shelf on the Pacific coast is narrow, ranging from 50 to 100 miles. However, the maximum width off Nova Scotia is about 150 miles; off the south coast of Newfoundland it is about 300 miles; off the east coast of Labrador about 125 miles; and off the Arctic it varies from 50 to 300 miles. The continental margin off Newfoundland goes out to about 650 miles in the Flemish Cap area.

The distances have significance if international agreement should be reached in limiting national jurisdiction of the continental shelf to an economic zone of 200 miles or to the 200 metre isobath and eliminating any further exploitability distance clause. If a limit of 200 miles were agreed to, Canada would gain 117,000 square miles on the west coast but lose 320,000 on the east coast, where over one half the total permits for petroleum exploration have been issued and cover an area of 500,000 square miles. It is on the east coast, in

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10 This is more than a possibility. See Douglas M. Johnson and Edgar Gold, The Economic Zone in the Law of the Sea: Survey, Analysis and Appraisal of Current Trends, Occasional Paper No 17, (June 1973), Law of the Sea Institute, University of Rhode Island. They estimated in 1973 there were 70 states favouring an economic zone but with a limit of 200 miles. p 18. See also SCEAND, Evidence, 29th Parl., 1st sess., No 22, November 6, 1973, testimony of Mr. Sharp, Minister of External Affairs, pp 22-5.

11 D.G. Crosby, Authorization and Control of Offshore Oil and Gas Activities, Speech to the International Association for Pollution Control, (Montreal, June 5, 1973) p 2. Mr. Crosby was Director, Resource Management and Conservation Branch, Department of Energy, Mines and Resources.
an arc of 2,000 miles stretching from the Gulf of Mexico in the south to Baffin Bay in the north, where the geological conditions appear to favour the finding of petroleum.

Canada "claims and exercises rights over the whole of the continental margin comprising not only the physical continental shelf but the continental slope and rise as well." The Canadian position is based on three legal foundations. First, there is the 1958 Convention on the Seabed, which is the only convention of the 1958 and 1960 Law of the Sea Conferences that Canada has ratified, and only then in 1970. The Convention defined the limits of the continental shelf in very elastic terms; the limit being either to a depth of 200 metres or beyond that depth that will admit of exploitability. The second legal foundation is the 1969 legal decision of the International Court of Justice which divided up the North Sea continental shelf among the bordering states. The third legal foundation is state practice. The present Canadian position on the law of the sea emphasizes the role of state practice because "Unilateral solutions are perhaps the oldest means of developing international law; state practice often develops into custom and eventually into norms of international

Article 1 of the 1958 Convention, which defined the limits of exploitation, was incorporated into the Oil and Gas Production and Conservation Act, 1972 (RSC, C.30). This states that the Act applies to those submarine areas adjacent to the coast of Canada to a water depth of two hundred metres or beyond that limit to where the depth of the superadjacent waters admits of the exploitation of the natural resources of the seabed and subsoil thereof.

(Chapter 0-4, 3(b), emphasis added).

The Canadian position on the use of the shelf for military purposes was made clear by the Canadian delegate to the Eighteen-Nation Committee on Disarmament in May 1969. Mr. Ignatieff, when discussing reserving the sea and seabed beyond the limits of national jurisdiction exclusively for peaceful uses, stated the Canadian position was that:

"...we cannot accept the proposition that Canada should be prohibited from placing in coastal waterways, straits and the ocean depths at far greater distances than twelve miles surveillance devices which can detect the approach to our shores of ships, submarines or weapons, so long as these military vehicles have freedom to navigate in the approaches to our shores."

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13 Third United Nations Conference on the Law of the Sea, p.7. For a defence of Canadian actions see A.E. Gotlieb, Deputy Minister of Communications and C.M. Dalfen, Professor of Law, University of Toronto, National Jurisdiction and International Responsibility: New Canadian Approaches to International Law, Speech at the First Annual Conference of the Canadian Council on International Law, October 13, 1972. The authors argue that Canadian anti-pollution legislation is functional, preventative and non-acquisitive, p 31; but the Canadian position on "ultra-territorial resources is virtually acquisitive." p 40.
Moreover... it is difficult to reconcile the coastal State's sovereign rights with freedom of military activity of any sort by foreign states on its continental shelf. Certainly Canada could not accept such activity on its continental shelf.

**Arctic Waters**

The new offshore oil technologies combined with the national imperative for self-sufficiency in energy has resulted in an explicit Canadian sovereignty claim to the second largest continental margin in the world. But, it was the Manhattan voyages of 1969 and 1970 that produced the greatest impact upon Canadian policy. The voyages amplified for Canada the interrelationship between new maritime technologies, national resource policies, and Arctic waters sovereignty. The Manhattan voyages were predicated on using advanced surface shipping technology to transport Alaskan oil to the east coast of the United States through the Northwest Passage. Canada was concerned primarily for three reasons; sovereignty, the ecology, and the effects on national planning for the exploitation of Arctic resources.

The question of sovereignty in both polar regions still continues to exercise the skills of politician and jurist alike. In the Arctic, the issue of sovereignty

over readily definable land has been settled, but
the contiguous water and ice covered areas remain
areas of dispute.\textsuperscript{16} The uniqueness of the Arctic en-
vironment complicated the issue of sovereignty in
the past and does so even more today when related to
territorial waters, ice islands, undersurface navigation,
and the use of airspace.

Today, the issue of Arctic sovereignty has become
etwined with the disputes over the law of the sea.
It is the maritime aspect of the Arctic region as a
quasi-oceanic area and the application of the traditional
legal principle of "freedom of the seas" to the region
that has caused the present disputes to arise. Both
Canada and the Soviet Union have adopted policies
of restricting the principle of the freedom of the
seas in Arctic waters in opposition to the United
States which supports the principle.\textsuperscript{17}

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\textsuperscript{16}See Gordon W. Smith, "Sovereignty in the North:
The Canadian Aspect of an International Problem,"
Arctic Frontier, ed., R. St. MacDonald, (Toronto:
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\textsuperscript{17}For the Soviet position see William E. Bulte,
The Soviet Union and the Law of the Sea, (Baltimore and
United States attempts, using icebreakers, to challenge
Soviet sovereignty/control see Capt. Gerald E. Synhorst,
"Soviet Strategic Interest in the Maritimo Arctic,"
Naval Review Issue, Proceedings, United States Naval
\end{flushright}
The United States has been concerned about the right of passage through the Northwest Passage because of its possible economic and strategic significance. The two voyages of the *SS Manhattan* only highlighted the problem of jurisdiction for surface traffic. In 1960, the United States submarine *Seadragon* had sailed through the waters of the archipelago from east to west with a Canadian representative on board. Similarly, the *SS Manhattan* was escorted by a Canadian icebreaker and had Canadian representatives on board. At the time of these voyages, Canada still adhered to the three mile limit.

After a national debate, two acts were passed by Parliament in 1970 designed to increase Canadian sovereignty and jurisdiction over contiguous waters. The *Arctic Waters Pollution Prevention Act*, 1970 defined Arctic waters as frozen or liquid waters "adjacent to the mainland and islands of the Canadian arctic within the area enclosed by the sixtieth parallel of the north latitude, the one hundred and forty-first meridian of longitude and a line measured seaward from the nearest Canadian land a distance of one hundred nautical miles..." An exception is that a line equidistant between the Canadian Arctic islands and Greenland is substituted for the 100 mile line where the equidistance is less than 100 miles.

from the Canadian coast. In addition, "Arctic waters" includes waters adjacent to the above areas, waters above the continental shelf in so far as the act applies to exploring for, developing or exploiting natural resources in submarine areas. The act extends Canadian functional jurisdiction, but not sovereignty, over these Arctic waters. It is designed to regulate shipping that would be a threat to the environment. Mr. Mitchell Sharp, the then Minister of External Affairs, stated in the House that the approach evolved was "a constructive and functional approach that distinguished between jurisdiction and sovereignty...". He also stated that "Canada has always regarded the waters between the islands of the Arctic archipelago as being Canadian waters. The present government maintains that position." The principal justification used in support of this unilateral action was that existing international law was either inadequate or non-existent on the rights of a state to protect itself against marine pollution.

The Arctic Waters Pollution Prevention Act was complemented by amendments to the Territorial and Fishing Zones Act of 1964. These amendments had two main provisions.


20 Gotlieb and Dalfen argue in National Jurisdiction and International Responsibility that by excluding International Court of Justice jurisdiction over disputes arising from the Act, the government avoided "the necessity of seeking compromise agreements," p 15.
First, 12 miles was substituted for the three mile limit and the nine mile fishing zone was incorporated into the new 12 mile limit. Second, the government was authorized to create exclusive fishing zones comprising areas of the sea adjacent to the coast of Canada. The first provision meant that both Barrow Strait between Somerset and Cornwallis Islands, and Prince of Wales Strait between Banks and Victoria Islands were now declared Canadian waters. Thus the Northwest Passage is protected as Canadian waters as well as supporting the Canadian position that the Passage is not an international strait under customary or conventional internation law.  

The United States Department of State issued a press release rejecting the unilateral action by Canada. The United States was prepared to accept the 12 mile limit but only as part of an agreed international treaty also providing for freedom of passage through and over international straits. The Canadian government replied that the waters of the Arctic Archipelago had always been regarded as Canadian and that it could not accept the internationalization of Canadian waters. This means that the Northwest Passage is held to be "historic

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22 Reprinted in ibid., pp 154-6.

23 Summary of Canadian reply to the United States press release is in ibid., pp 154-6.
internal waters." There is therefore, no right of "innocent passage." To justify the right of innocent passage, it must be demonstrated that the internal waters in question previously had the status of high seas, which is what the United States claims. The Northwest Passage has never been a viable or commercially used route, and Baffin Bay and the Beaufort Sea are ice covered for most of the year.24

The two legislative enactments can be interpreted as part of gradualist policy of securing sovereignty over the waters of the Canadian Arctic archipelago and limited jurisdiction over extensive areas of Arctic waters.25 The Soviet Union has never officially delineated a 12 mile limit around its Arctic islands. If it should do so and also claim limited jurisdiction beyond them for whatever reason, an even more extensive area of Arctic waters will come under national jurisdiction. If Denmark (Greenland) should duplicate Canadian legislation, then the whole of Nares Strait, Baffin Bay and Davis Strait will come under limited national control.


25 See Ibid., p 2 for the "gradualist" interpretation.
The issue of maritime sovereignty has somewhat declined in importance because of the United States decision to move all Alaskan oil to the west coast of the United States. The United States has therefore no immediate requirement to use Canadian Arctic waters. The issue will arise again when major exploitation of Canadian Arctic resources begins. If Canada adopts an open door policy to foreign shipping, using, as a means of control, the Arctic Shipping Pollution Prevention Regulations (P.C. 1972-2443, 5 October, 1972), the opposition is likely to be muted. If, however, Canada decides on a policy of flag preference or complete exclusion of foreign shipping, opposition could be considerable. Whatever policy develops, it is clear that who uses Canadian Arctic waters and for what purposes has become a national maritime interest.

A Maritime Frontier

New technologies and their consequent effect on the strategic environment appear to have ended the era when the indivisible command of the sea was a possible strategic objective. For many coastal states, the new technologies

26 In 1970, the government directed that all government cargo for the Arctic be carried by Canadian flag vessels. Canadian coastwise shipping restriction to the Canadian flag is to apply to the Arctic but foreign shipping for international routes is to be allowed in. The Darling Report argued that: "These pioneer large-scale industries in the Arctic underline the need for a comprehensive shipping policy, both on the Arctic and on the Coast," p 134. A comprehensive policy could include exclusion of all foreign shipping, cargo preferences and/or indirect government support. The options are still open.
have ended the era when the seas could be considered as indivisible for economic use in peace. The new marine technologies have linked the continental margins, and to a lesser extent, the waters above the margin to their land masses. This has resulted not just from the capabilities to explore and exploit the potential wealth on and above the margin, but also from the realization that coastal states have a clear national interest in controlling contiguous sea areas. Control provides them with the unilateral right to exploit their wealth, to keep the activities of strong maritime powers at a greater distance, and to use their control to gain concessions from maritime states who want to use their contiguous waters. This new consciousness of coastal states, many of which do not have traditional maritime interests, has resulted in the traditional doctrine of freedom of the seas losing much of its comprehensiveness and its universal applicability. The wide divergence of view between the traditional maritime states and the coastal states at the Law of the Sea Conference III (LOS III) demonstrates the change in perceptions that argues for the divisibility of the seas. 27

By unilateral actions and at the United Nations, Canada has been, both in its claims and in its diplomacy, one of the strongest adherents to the cause of coastal state management and ownership of offshore resources.

The Canadian action in 1970 of establishing a 12 mile territorial sea was generally accepted, except by the United States because of the Northwest Passage issue. However, the declaration of exclusive fishing zones in 1970 in the Bay of Fundy, Gulf of St. Lawrence, Queen Charlotte Sound, Necate Strait and Dixon Entrance did not meet with approval with states having distant water fishing fleets. Their opposition has been lessened by phasing out agreements which will see all foreign fishermen out of these waters by the end of the decade.

Canada did not declare sovereignty over these areas, although a strong argument could be made that, for example, the Gulf of St. Lawrence is internal waters. The Arctic Prevention Pollution Act met with far stronger diplomatic protest from most of the states with traditional maritime interests.

Canada, which has not been noted for its diplomatic aggressiveness, has embarked on an aggressive legislative and diplomatic campaign. The objectives are to gain

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28 Nearly all the NATO states and other maritime states such as Japan protested the Canadian action. Interview, Department of External Affairs, October 1973.
confirmation of its acquired sovereign jurisdiction over the seabed of the second largest continental margin in the world; to secure exclusive management over the fisheries of one of the world's most lucrative fishing areas; to control shipping in contiguous waters for pollution preventive purposes; and to restrict marine research to ensure that the results of research are used for the benefit of Canada. Canada, in fact, has discovered a new frontier.

The Canadian policy of gaining international acceptance for increased coastal state control has met with considerable resistance. Landlocked and shelf-locked states favour a very restricted area of coastal state jurisdiction in order to derive maximum benefits for themselves from international management of ocean resources. Some of the developing states that have shipping interests are opposed to higher shipbuilding standards caused by national pollution prevention laws. The traditional maritime states are opposed to national control over free navigation through straits and other coastal waters. The distant water fishing states stand to lose their right to free fishing in the most lucrative areas. For offshore oil and fishing, what Canada as a coastal state gains, others will lose. Even if the concept of an economic zone is accepted at LOS III, there are likely to be many restrictions placed on national
control. Many of these will be aimed directly at Canada which has more to gain from increased coastal state control than perhaps any other state. The working out in the next decades of the limits of coastal state control shows every evidence of being far more difficult than had been anticipated by its advocates. Canada has staked its claim to its maritime frontier, but its gaining will be difficult, expensive and demanding.

The Canadian diplomatic campaign has been supported by a reasonably energetic government and industrial program. The allocation of resources for marine science and technology has much increased and Canada has been spending over $50 million annually, placing it third behind the United States and the Soviet Union. It has been estimated that there are more than 30 federal agencies, five universities and about 100 companies significantly engaged in marine science and technology activities. Government spending is estimated to rise to $112 million by 1980, with private spending to $1 billion. This level of spending is estimated to be able to support 60,000 jobs by 1990. The Minister of State for Science


and Technology has issued a paper called Canada’s Ocean Policy in which the underlying theme is that “Canada must develop and control within her own borders the essential elements needed to exploit off-shore resources.”

One writer has argued that:

It is just possible that for Canada to become a great ocean research power would yield security benefits no less substantial than those claimed to flow from the provision of up-to-date fighting forces...

...if the priorities outlined in Foreign Policy for Canadians and reflected in Defence in the 70s are to be taken seriously, then a much more substantial programme of hydrographic and oceanographic research ought to be considered, in competition (if necessary) with the present duties of Maritime command.

This comment has its appealing features, and puts forward the argument that in the allocation of resources for maritime interests, it is naval forces that should have a relatively low priority. It raises the question of what roles naval forces should have in protecting the acquired maritime interests and what should be their structure. The first point that should be made is that Canada does not plan to become a "great ocean research power", rather it plans largely to confine its activities


32 Colin S. Gray, Canada’s Maritime Forces, p 52.
to contiguous waters with the clear aim of exploiting their wealth. Canadian activities are protective and acquisitive. And because they are protective and acquisitive, there is a security problem. There is a problem, to quote Dr. Lindsey, that:

If a country claimed ownership over a substantial area of the sea bed [which Canada has done]... it may still be unable to prevent prospecting or even removal of minerals by foreign submarines, unless it is able to detect and identify them while engaged in illegal activity. It might even be necessary to drive them off, capture or destroy them.

This may seem a somewhat far-fetched view but "the projection of deep-ocean technology is such that in the period beyond 1980, we may expect a socially-significant proliferation of non-military submersibles and equipment of low-cost, capable of operating throughout the water column at/or on the bottom and capable of exploiting the sea bed or the resources of the sea bed."34 If Canadian claims are in doubt or go against prevailing international law, then no amount of research will sustain the claims. The claims can only be sustained by civilian and military presence in a form that maintains sufficient surveillance and enforcement capability to counter any challenges.

Once a state embarks on a territorial acquisitive

33 G.R. Lindsey, Canadian Maritime Strategy, p 15.

programme, and that is what Canada is doing today, the security or protective problem cannot be avoided by diplomatic argument or assumptions that political logic precludes challenges. The law of the sea is in a highly unstable state and the stakes for many powers are high. To assume, because the Canadian claims are on the side of the gods of pollution control and conservation, that overt challenges are so improbable that research and naval power can be equated for security purposes, underestimates the potential security problem.

Pollution control and conservation are strong ethical, legal and diplomatic arguments, but they cannot discount the obvious acquisitive motive of contemporary Canadian maritime policy. In the past Canada has been fortunate, considering its weakness, in its territorial acquisitions. The Canadian Northwest frontier was acquired without much opposition by a railroad and two military expeditions. The land frontier of the Canadian Arctic was acquired by civilian and military presence and diplomatic activity. There was the advantage that no other state seriously wanted the Arctic. Once the potential wealth of the Arctic was realized, state perceptions changed and disputes with the United States and, to a lesser extent, with other maritime states have arisen over Arctic waters.

Today, Canada has embarked on another acquisitive
frontier venture and the same integral combination of civilian presence, low-level military activity and diplomatic activity is being employed. In the past, this combination was sufficient to offset Canadian military and demographic weakness. It may well suffice again, but the importance of naval presence and activity may prove, in the long term, to be highly significant. The reason lies in the extent of the surveillance and enforcement requirement and the high technological requirement to institute even a reasonable level of activity. The problem could be immense, as the continental margin is over half the size of the land space of Canada and the hydrospace runs into millions of cubic miles. An insight into the problem can be gained from Dr. John Craven's assessment that: "The maximum we can project now in hunting for an object is a search rate for a given vehicle of about one square mile a day and there are 273 million square miles in the sea."  

Fisheries Protection and Naval Policy

Canada is almost unique among the foremost fishing

35 There is apparently a major DND study underway on the requirements for surveillance and enforcement for Canadian contiguous waters. For enforcement problems see Captain J.R. Hill, RN, "The Rule of Law at Sea: The Capability and Suitability of Maritime Forces for the Enforcement of International Law at Sea," a thesis written at King's College, London, for the Ministry of Defence, London, 1972

states in that it has a fisheries protection service completely separated from its naval forces or coast guard. The protection of fisheries is the responsibility of the Department of the Environment. Conservation and protection are seen as integrally related. The fisheries branch of the Department operates a fleet of 82 fishery protection vessels ranging in size from 30 feet to 180 feet. Only six of these vessels are capable of extended offshore work and the present plan is for only a three vessel increase.\textsuperscript{37} The Canadian fishery protection service has been, and still is, primarily concerned with the inshore fisheries and with Canadian fishermen. Even today "Canada has 23,374 vessels under 25 tons each and the majority of these will likely be found within the 12 mile limit, and in exclusively Canadian fishing areas."\textsuperscript{38}

The above figures are somewhat misleading because the number of boats bears little resemblance to catch quantities. In the 1960s, there took place a rapid expansion and modernization of the Canadian Atlantic offshore


\textsuperscript{38} D.A. Grant and Lieutenant P.R. Rygh, Surveillance of Fishing Activities in the ICNAF Areas of Canada's East Coast, Operational Research Branch, Maritime Command, Halifax, N.S., (June 1973) p 7.
fleet which paralleled the arrival of large distant water fishing fleets. By 1972, vessels of 70 feet or over, or just over 1 per cent of the total Canadian Atlantic fleet, accounted for 53 per cent of the total Canadian groundfish landings.\(^{39}\) The present and projected capability of the fishery protection service is inadequate to meet any extensive offshore surveillance and regulatory requirements. It is this fact that has brought Maritime Command into a larger role for fishery surveillance and regulation.

Maritime Command has always been available for fishery protection and has been used on occasion. In 1966, a destroyer sent a boarding party aboard a Russian fishing vessel on the Pacific coast, and destroyers have made an appearance when foreign trawlers have been slow to leave Canadian waters. Generally, relations with foreign fishermen have been acceptable and a naval presence now and then has been all that has been required. However in late 1974, the government used one destroyer as a full time fishery protection vessel as an experiment. Present indications are that the policy will be continued with 2 to 6 on patrol at a time.\(^{40}\) Until recently,

\(^{39}\) \textit{Canadian Fisheries in 1972, Fisheries Fact Sheet, Fisheries and Marine Service, Environment Canada, p 1.}

\(^{40}\) There have been rumours that other states may deploy destroyers in the ICNAF Zone as fishery protection vessels. This may in part explain the Canadian action. If this happens, operational cost differentials between naval ships and fishery protection service vessels will become of much less importance. For the cost differential arguments see Colin S. Gray, \textit{Canada's Maritime Forces}, pp 45-6.
increased involvement by Maritime Command was limited mainly to conducting aerial and surface surveillance of offshore fishing activity to gather information. However, the emphasis has been shifting to enforcement with a greater commitment of resources.

The present situation is that out of the 50,000 fishing vessels registered with ICNAF, less than 2,000 are foreign and these are nearly all over 25 tons, and the vast majority are over 50 tons and easily identifiable. Generally, only 32 per cent, or 248,000 square miles, of the ICNAF area is fished where Canada would have responsibility for regulation. It appears "that the seemingly overwhelming number of fishing vessels can be arranged in categories of manageable proportions, and that a significant degree of expectancy can be assumed with respect to their location at a particular time." If there is internationally accepted Canadian management control, the Fisheries Protection Service will be involved primarily in management rather than enforcement. The structure of the service will be dependent on the management system chosen. For example, the restriction of the number of vessels allowed to fish would reduce the enforcement requirement. Such a restrictive licensing system

41 D.A. Grant and Lieutenant P.R. Rygh, Surveillance of Fishing Activities in the ICNAF areas of Canada's East Coast, p 7.

42 Ibid., p 34.
could be complemented by more complete freedom to fish. The smaller the number of vessels allowed to fish, the less the difficulty in exercising control and hence less the need for naval involvement.

There is the possibility of Canada becoming involved in a naval confrontation over the fisheries. This could arise from Canada enforcing unilateral control over the fisheries within a 200 mile zone because of the fear of further depletion of the stocks. Much will depend on the final outcome of LOS III. An unfavourable outcome could force Canada into the position of acting unilaterally and accepting the consequent risks or acquiescing in the collapse of the Canadian fishing industry.

The response to any unilateral Canadian action is unlikely to take the form of an overt foreign naval presence designed to challenge directly Canadian jurisdiction. Rather, intense diplomatic pressure complemented by some naval activity is more likely. The Soviet Union is the only naval power presently fishing in Canadian offshore waters that is likely to challenge Canada. It has the most to lose from extended Canadian jurisdiction but other states might well provide diplomatic support.

Canada could expect considerable activity by Soviet trawlers to disrupt Canadian fishing using tactics of
ramming and destroying nets and lobster pots, etc.\textsuperscript{43} A Soviet naval task force could deploy outside a 200 mile limit, or legitimately sail up to territorial waters to signify Soviet opposition. The weaker the Canadian naval capability, the more vulnerable Canada would be to Soviet pressure. If the Soviets consider that they could operate in contiguous waters with impunity, then Canadian protestations would not be likely to have much effect. If, however, Canadian naval capability was strong enough so that the Soviets would have to intervene actively to stop the arrest of Soviet fishing vessels, while unsure of the outcome, the Canadian position would be immeasurably stronger.

Canada is certainly capable of having a naval capability that could pose a credible counter to a fairly strong Soviet task force lacking integral air support. Even if the Soviets deployed a substantial fleet, the problems of sustaining this operation would militate against a protracted deployment. Generally, a strong Canadian naval capability operating in contiguous waters would provide the necessary counter to Soviet naval intervention unless the confrontation went beyond

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\textsuperscript{43} Soviet ramming of the smaller Canadian vessels has taken place on a number of occasions on the west coast. In September 1974, Soviet trawlers destroyed $100,000 worth of east coast lobster pots. The motivation behind these acts is unclear but it appears to be a combination of accident and deliberate acts of individual captains.
the bounds of the use of limited naval power for a limited objective.

Fisheries protection is clearly a national or independent task which is outside any alliance structure. A Canadian quarrel with a foreign fishing state over unilateral Canadian claims to extended maritime jurisdiction is hardly likely to be perceived as a United States quarrel. In fact, United States pressure to abandon the claim with suitable diplomatic facesaving, as being in the United States national interest, is more likely. Also it would not necessarily be desirable to rely on the United States because the price exacted for support could well be inimical to the very interests presumably being protected. Canada could well find itself forced into an agreement that would preclude effective jurisdiction over contiguous waters for the foreseeable future. Great powers have a propensity for neutralizing the interests of smaller powers. A Canadian naval capability not strong enough to protect a maritime interest in contiguous waters would leave Canada vulnerable to both overt and subtle pressures, and would severely restrict policy options. It would be a clear indication that Canada was prepared to allow the collapse of the Canadian fishing industry to the benefit of foreign fishing states.

**Sea Control and Naval Policy**

The traditional or classic answer to the requirements
for the protection of Canadian maritime interests in contiguous waters is the naval capability to gain and maintain command of the seas when faced with challenges. This is also the most satisfactory answer, but one that is only in part obtainable, because indivisible command of the seas even in the local sense is no longer completely possible. It is possible to have the naval capability to pose a reasonable counter to foreign naval intervention in the pursuit of limited objectives. This, for fishery protection, is highly desirable, if not essential. However, supplementing, and integral to such a capability, is the requirement to be able to exercise sea control over contiguous waters. For Canada, sea control means the ability to enforce national policy in sea areas under Canadian sovereignty or functional jurisdiction. Sea control requirements are most applicable to the continental margin and Arctic waters.

A Canadian naval capability designed to pose a reasonable counter to foreign naval intervention will not necessarily have the integral capability to enforce national policy on a continuing basis. The challenges to Canadian control, except when backed by foreign naval intervention, are likely to be of the surveillance and policing type. Presumably the more Canadian jurisdiction

44 This definition of sea control comes from a working paper of the Dalhousie University Conference on Canada's Maritime Forces, Halifax, N.S., April 19, 1972.
is internationally accepted, the more routine and civilian can be the control exercised. If the converse, then the requirement for naval "policing" will become more extensive. The extent and technological sophistication of a Canadian requirement to exercise sea control cannot at present be determined with any degree of accuracy other than to state that there is a requirement. The variables that will affect this requirement will depend upon technological advances, acceptance or non-acceptance of Canadian jurisdiction, and the uses to which the continental margin, its waters, and Arctic waters are eventually put.

To meet this requirement, balances will have to be struck for the naval capability necessary between technological sophistication and numbers of systems employed; between systems for ice covered waters and ice free waters; between maritime defence and maritime surveillance/enforcement tasks; and between naval and civilian responsibilities. Certainly a prime future requirement will be for submersibles to supplement surface ships and aircraft. There is a clear need for a civilian and naval submersible capability and it is likely to be of sufficient extent to require an inter-departmental government programme. This would allow for the rational allocation for research, reconnaissance, inspection and other tasks which will arise as new technologies are devised to use the seabed and hydrospace above for commercial and military operations.
Another requirement will probably be for helicopter platforms that will allow the extensive and flexible use of helicopters for both civilian and military tasks. Patrol frigates may also prove useful. All these capabilities should be able to undertake or to assist numerous civilian and naval tasks such as research, repair, inspection, and policing. Their multi-purpose character will probably preclude a high level of technological sophistication but their availability in sufficient numbers could offset this disadvantage.

One of the most difficult decisions will be over Arctic waters requirements. The key question will be whether Canada should have some or all the capabilities necessary for going under the ice, through the ice and over the ice. In the early 1950s, the RCN built an armed icebreaker, HMCS Labrador, but it was shortly after turned over to the Marine Service of the Department of Transport which, in 1962, became the Canadian Coast Guard.

The Canadian Coast Guard, which is an unarmed civilian agency of government, has seven heavy icebreakers suitable for use in Arctic waters. The most powerful is the

45 For an analysis of the characteristics required of maritime units in the enforcement role see Captain J.R. Hill, "The Rule of Law at Sea," pp 111-22. During interviews at Ottawa the importance of helicopters and submersibles was emphasized to the writer.

46 For a list of coast guard ships see Colin S. Gray, Canada's Maritime Forces, Appendix B, pp 65-7.
St. Laurent of 13,000 tons with 27,000 shaft horse power (shp) and cost $22 million. In 1972, the government announced the decision to construct four 15,000 shp diesel electric icebreakers for use primarily in the St. Lawrence, but in 1975 reduced the number to two. Some Canadians have urged the building of a 120,000 shp super icebreaker for all year round operations in the Arctic. The government has allocated $100 million for the construction of a polar class icebreaker, but no announcement for its construction has been forthcoming.

In contrast to normal seaborne trade patterns where sovereignty at best is a minor factor, in the Arctic, shipping and sovereignty have become entwined. And because any Arctic shipping pattern is dependent on icebreakers, these have become means of establishing sovereignty and sovereignty symbols in themselves. The United States has made use of icebreakers to challenge Soviet claims. The United States wanted one of its icebreakers to accompany the Manhattan, but no United States icebreaker was powerful enough. The

47 Richard Rohmer, The Arctic Imperative: An Overview of the Energy Crisis, (Toronto: McClelland and Stewart, 1973) pp 173-88. Mr. Rohmer has been an unpaid adviser to Mr. Trudeau.


task was left to the Sir A. Macdonald. Over the last two decades, Canadian icebreakers have followed a pattern of sovereignty voyages, culminating in the St. Laurent's voyage into the Lincoln Sea, north of Ellesmere Island in 1971. This was the furthest north ever reached by a surface ship from the Western World. Icebreakers are an essential means for the Soviets to establish control/sovereignty. Of course, these icebreaking activities have normal and natural research and development objectives, but these in turn cannot be dissociated from the sovereignty issue.

The present pattern of world icebreaker construction suggests that the sovereignty question is becoming increasingly significant. The Soviet Union appears to be embarking upon a major construction programme. It has ordered three large and powerful diesel icebreakers from the Finnish firm Wartsila. Two nuclear powered Arktika class, each of 25,000 tons and 30,000 shp, have recently been completed. Two nuclear powered Arktika class, each of 25,000 tons and 30,000 shp, are being built. In addition, the Soviets are planning to build the most powerful icebreaker in the world. It will be nuclear powered with 80,000 shp. The United States has recently launched the Polar Star and is completing another one of the same class. Both, with 60,000 shp, will exceed

50 Icebreaker data comes from Jane's Fighting Ships, 1973-74.
the power of any icebreaker afloat including the Soviet nuclear powered Lenin. It is argued that these are long overdue replacements for operations around Alaska and in Antarctica.

The Canadian advocates of a polar icebreaker generally mean a "true" polar icebreaker; that is, one that could operate all year long anywhere in the Canadian Arctic. Such an icebreaker would be in the 33,000 to 36,000 ton class and develop 120,000 shp. Canada could build such an icebreaker but at a cost running into hundreds of millions. The projected Canadian polar icebreaker will be of much less capability, if the government estimate of $100 million is accepted as likely cost.

Government and commercial shipping in the Canadian Arctic waters has averaged annually at slightly less than 200,000 tons. This will increase as more minerals are extracted and oil exploration supply requirements increase. It is possible "that re-supply tonnage for oil exploration work alone could reach over 350,000 tons a year in a very few years."51

An optimistic assessment of future shipping in Arctic waters is "that within the next decade there will develop a demand for ship capacity to move out of the Arctic annually some five million tons of ore and concentrate, 288 million barrels of oil and two million tons of liquidfied natural gas." This could require annually some three hundred voyages of bulk carriers of the 200,000 ton class. The immediate future shipping pattern is likely to stress the movement of minerals from the eastern Arctic and not involve east-west shipping through the passage. For Canada, the crucial questions will be how much Arctic shipping will be reserved for Canadian ships and the extent of investment in icebreakers.

It is impossible to predict what the future shipping patterns will be in the Arctic. It is possible to state that the presence of foreign icebreakers would not be in the Canadian interest. Also the greater the amount of shipping that is Canadian owned, the less will be the sovereignty problem. Furthermore, the sovereignty problem is not likely to become critical unless the Northwest Passage is used extensively for

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east-west shipping on a regular basis. Because of the
hummocky multi-year ice west of the 95th meridian, use of
the Passage even for seasonal shipping on a regular basis
poses immense problems which can only be overcome at very
high cost. Even then, icebreakers would be needed in
case ships got stuck. The technology is available to
build icebreaking supertankers for the Passage but the
costs favour pipelines across Alaska, up the MacKenzie
River Valley, and perhaps also from the high Arctic islands
and south around Hudson Bay.

53 Admiral Stors, former director of Marine Operations
Branch, Department of Transport, estimated that for year
round work in the Passage a polar icebreaker would have
to be of 30,000 tons displacement and have a minimum of
100,000 shp. SGEAND, Evidence, 28th Parl., 3rd sess.,
No 10, February 11, 1969, p 23. Commercial icebreaker
tankers would have to be of 300,000 tons displacement
and develop 150,000 to 180,000 shp. In January 1975 there
were rumours that the United States was thinking of a fleet
of 62 nuclear powered icebreaking tankers of 240,000 tons.
These ships would need icebreaker assistance and this
"presumably would be supplied by the U.S. Coast Guard".
Halifax Chronicle Herald, January 28, 1975. The rumours
derived from a United States study on "Advances in the
Development of Commercial Ice-Transiting Ships". The
study does not recognize a boundary between the Canadian
and United States Arctic areas. See John W. Langford,
"Marine Science, Technology, and Arctic Sovereignty: Some
Questions and Guidelines for the Federal Government."

54 For a pre-Middle Eastern crisis comparison of
costs see G.D. Quirin and R.N. Wolff, "The Economics of
Oil Transportation in the Arctic", Law of the Sea Workshop:
Canadian-U.S. Maritime Problems, ed., Lewis M. Alexander
and Gordon R.S. Hawkins, Law of the Sea Institute, (Kingston:
University of Rhode Island, 1972) pp 32-46. For an analysis
of various surface and under the ice shipping concepts and
comparison of costs see G.T. Gorman, "Bulk Shipping and
Icebreaker Support in the Arctic", Proceeding of the Arctic
There does not seem to be a requirement for an armed icebreaking capability in high Arctic waters. If, in the future, the need arises, then Coast Guard icebreakers can be armed, and if necessary transferred to naval control. For naval surface operations, icebreakers can always be borrowed. There is a requirement for naval surface presence in waters contiguous to the Arctic, such as Baffin Bay, where initial shipping patterns are more likely to develop, so that national jurisdiction can be enforced. This could result in a requirement for ice-capable ships for operations in the area of the 60th parallel.

A substantial naval requirement could arise if under the ice operations develop on an extensive scale for either military or commercial reasons. There have been designs for cargo submarines up to 300,000 tons, but interest has declined because pipelines appear to be more suitable. There remains the possibility that the transport of oil and gas from the high Arctic may prove to be only economically possible by cargo submarine. A shipping pattern could develop that would result in the use of Canadian Arctic waters and the Arctic ocean.

55 See General Dynamics Presentation on Arctic Submarines Transport Systems to Standing Committee on Indian Affairs and Northern Development, Evidence, 28th Parl., 2nd sess., No 20, May 21, 1970, pp 5-47. The writer also has had access to a still classified United States study on the use of submarine crude oil tankers in the Arctic.
proper, with trans-shipment at Iceland or somewhere on the eastern Canadian coast. There appears to be no question that cargo submarines can operate throughout the Canadian Arctic waters. 56

Canada has no under the ice capability at all, although there are some initial projects for such operations. Canada, sooner or later, will have to develop such a capability if economic and scientific advances in the Arctic are to take place. The maintenance of Canadian control over the destiny of the Arctic is a protracted and multi-facet operation of which an under the ice capability is only one aspect. In the maritime context, it is an area where military and commercial operations could develop, and for that reason, Maritime Command is likely to be intimately involved in the development of a Canadian under the ice capability.

There is a clear requirement for a Canadian naval general purpose capability for sea control operations in contiguous waters. This general purpose capability could be enlarged or reduced as required with relative ease because the sunk costs would be relatively small for each system. Each system could be sold or transferred to other departments or industry because of their multi-purpose uses. Once the basis of this general purpose capability was established, its growth could be rapid,

56 Ibid.
or remain static, depending on the nature of likely future requirements. It is possible that the likelihood of overt challenges will not materialize and therefore the emphasis could shift to routine tasks. However, the presumed inherent flexibility of these general purpose capabilities would allow for relatively easy and rapid adjustment.

A General Purpose Naval Capability and National Maritime Interests

The 1960s witnessed the emergence of new maritime interests that were both coastal and purely national in character. The exploitation and protection of these interests will require a completely independent Canadian effort. Forms of international cooperation, such as the continuance of ICNAF, could mean tangible economic loss to Canada. Therefore, the basic principle for future Canadian naval policy must be the preservation of sufficient naval capability to protect those interests as a completely independent function. Reliance on United States naval power for other than collective defence tasks

57 For a pessimistic assessment of the continuance of ICNAF see Francis T. Christy Jr., "Northwest Atlantic Fisheries Arrangements: A Test of the Species Approach," Ocean Development and International Law Journal, Vol 1, No 1, Spring 1973. He argues that effective management is vital, is not being done by ICNAF and "in order to prevent failure, modifications of an economic nature will have to adopted. And those will be of such significance that the result will constitute an economic zone." p 91.
can only prove to be counter-productive. In fact, Canada must accept United States opposition to the expansion of Canadian maritime interests, particularly in the Arctic and on the continental margin. The indivisibility of the coincidence of maritime interests between Canada and the United States and other major maritime states has ended for the foreseeable future.

There is no question that the protection of the new maritime interests requires a more general purpose fleet than the present naval capability. There is a requirement for more balance and more flexibility in the naval force structure than there is at present. However, a naval capability that is incapable of posing, independently, a credible counter to foreign naval intervention and undertaking sea control operations, is neither general nor purposive. There is no way that the strategic future can be analyzed to produce a series of clear answers for future requirements. The peacetime formulation of Canadian naval policy has to be an ongoing process. There is no need to embark on a large naval construction programme as there was in 1939 and in the 1950s. The requirement today is to combine the naval capabilities to undertake both independent and collective defence naval tasks.

Independent Naval Tasks and Collective Defence Tasks

The end of the indivisibility of command of the seas in war as a naval objective; the end of the indivisibility
of the seas for universal economic use in peace; and
the end of the indivisibility of the coincidence of
maritime interests between Canada and the major maritime
states have in large part destroyed the traditional basis
for the formulation of Canadian naval policy. Any
new policy must be able to reconcile the requirements
for independent naval tasks and those for collective
defence. This reconciliation must be an ongoing process,
but the basic criterion must be a naval capability that
can ensure the unhindered use by Canada of its contiguous
waters, continental margin and their resources. This
requires that no naval vacuum develop through a lack
of Canadian naval capability. No foreign naval activity
should be allowed to operate with impunity in Canadian
contiguous waters for any purpose.

Because in practice it is impossible to dissociate
naval activity in the context of the nuclear balance
from "national interest" tasks, opting out of nuclear
balance related activity does not solve any problems.
In fact, it complicates the problem because a naval
vacuum by default is created. The creation of a vacuum
that is filled by foreign naval activity will make more
difficult, and over a protracted period of time, perhaps
impossible, Canadian sea control operations. Canada
does not have the option of concentrating on independent
naval tasks at the expense of collective
defence tasks until the latter are non-existent. It is not a question of priority between independent and collective defence tasks, but of building onto the naval capability for collective defence the necessary capability for independent naval tasks. The greater the likelihood of challenges, the greater the capability that will be required for independent naval tasks, and the more important it will be to ensure no naval vacuum is created.

The degree of independence any Canadian naval capability will have in relation to United States naval power will be related directly to the ability to carry out tasks independently. The less capability, the more dependent Canada will be on United States seapower. Independence or dependence is not a function of Canadian involvement in collective naval defence tasks but of Canadian naval capability. Canadian withdrawal from collective defence arrangements would not change the naval strategies of the superpowers and hence Canadian naval requirements. Canadian independence can only be enhanced if Canada maintains a naval capability sufficient to ensure unhindered use of its contiguous waters, margin and their resources.
CHAPTER 8

THE CANADIAN ARCTIC, TERRITORIAL DEFENCE AND NATO'S NORTHERN FLANK

The Canadian Arctic

Canadian Arctic developments until the late 1960s have been an extension of those of the Northwest frontier of the 19th and early 20th centuries. The extension has not been into the true Arctic but into the sub-Arctic regions of the Yukon and Mackenzie River Valley. The true Arctic divides from the sub-Arctic along the tree line which runs from Fort Churchill on Hudson Bay in a northwesterly direction to the mouth of the Mackenzie River. Above the tree line lies the true Canadian Arctic, embracing the mainland territory and the islands of the high Arctic archipelago. The true Arctic is 32 per cent of the total area of Canada.

Only small parts of Alaska, Norway and the Soviet Union are classed as true Arctic. For purposes of this analysis, the term Arctic is defined arbitrarily as the region above 60 degrees North. This covers the northern areas of Canada and the USSR, and Alaska and Norway completely.
Canada did not assume sovereignty over the Arctic until the late 19th century. It was the beginnings of United States interest in the Arctic that prompted the British government in 1880 to hand over the responsibilities for sovereignty to the new Dominion. Not until 1897 did Canada make any overt act to assert Canadian sovereignty, when the first of a series of sovereignty voyages was initiated. The unfavourable result of the Alaska Boundary Treaty in 1903 and activities of United States whalers prompted increased RCMP presence and greater efforts to ensure respect for Canadian sovereignty. It is generally accepted that Canadian sovereignty in international law over the land areas of the present Canadian Arctic was confirmed by the 1930s. The United States never fully accepted Canadian sovereignty until the DEW line Agreement of 1954.

Canadian military activity in the Arctic began in 1898 with the sending of the Yukon Field Force to maintain order and sovereignty during the Gold Rush.

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1 For Canadian Arctic sovereignty and international law see Gordon W. Smith, "Sovereignty in the North," pp 196-211 and V. Kenneth Johnston, "Canada's Title to the Arctic Islands." Canadian Historical Review. Vol XIV, No 1, (March 1933) pp 24-41.

2 See George F. Stanley, Canada's Soldiers, pp 275-7.
In the inter-war years, the Royal Canadian Signal Corps developed and manned the first radio-telegraphy stations of the Northwest Territories and Yukon Radio System. The RCAF engaged in aerial survey work, mercy missions, and assisted scientific expeditions in the Northwest and Hudson Bay areas.

Military activity in the Second World War was concentrated in the Northwest with peripheral activity in the eastern Arctic. It was the Cold War and the development of the long range nuclear armed bomber which gave the Arctic region a strategic significance because of the air routes over the eastern Arctic. The principal SAC targets were in European Russia and those of the Soviet Long Range Airforce in central and eastern United States. The emphasis for territorial defence was in the northwest and the protection of the Northwest Highway System.

Territorial Defence and the Arctic

Planning for the post-war force structure of the armed forces began in 1943, but it was not until 1947 that the services took the form they wore to have until rearmament in the early 1950s. The first peacetime estimates allowed for an army of between 20,000 and 25,000

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4 See James Eayrs, Peacemaking and Deterrence, pp 77-96.
and it was an all volunteer force. The government was not prepared to provide any justification other than that the proposed structure provided for "a basic military establishment and which [could] be added to or developed as future circumstances require."  

In 1947 Brooke Claxton became Minister of National Defence. In attempting to plan the peacetime roles of the services, he concluded that Canadian forces would not be required to fight in Europe for at least five years, and only after a fairly lengthy mobilization period. There was no requirement to maintain extensive mobilization stocks or equipment. North America would be a secondary theatre subjected to bombing to hinder reinforcement of the European theatre. Attacks "on North America of the kind envisaged would not require large forces immediately ready to meet them but require a relatively small, highly trained force."  

This small, highly trained force of brigade group size became the only active force available in the army,

5 Douglas Abbot, Minister of National Defence, Canada, House of Commons, Debates, 1945, 2nd sess., Vol 1, p 1135.

6 Quoted in James Eayrs, Peacemaking and Deterrence, p 92 from a memorandum entitled "Observations on the Defence Needs of Canada," dated January 17, 1945. Professor Eayrs gives no reference but presumably it is from the Claxton papers to which he had access.
which by 1947, had only an establishment of 14,185.
The Mobile Strike Force, as the brigade group became
known, consisted of three airborne battalions. In 1948,
the RCAF procured 23 North Star transports to provide
the necessary air transport for the force. The requirements
for territorial defence were considered small because the
threat was so remote. General Foulkes appreciated that:

For the actual territorial defence they [the
planners] do not look to attacks on this country
to be of a serious nature. As I mentioned earlier
we expect spasmodic raids designed to tie down as
many troops in this country as possible and to up-
set morale. We can expect landing parties, up to
a battalion, to be landed in the Canadian North,
either by air or by ice-breaker. The main thing
is we must be prepared to see off any landings in
the Canadian Arctic. 7

No formation training was undertaken in the North
until 1949 when Exercise Eagle was conducted in the Peace
River Valley. This was a battalion exercise designed to
study attack methods against enemy lodgements. This was
followed in 1950 with a joint Canadian/United States ex-
ercise called Sweetbriar. 8 This was the first one of its
kind, undertaken in mid-winter and with airdrops. The ex-
ercise scenario was the defence of the Northwest Highway
against an enemy attempting to fight his way down it.

7 "Extracts from an address by the Chief of Staff,"
Lieutenant General Charles Foulkes, as reprinted in James
Eayrs, Peacemaking and Deterrence, p 392.

8 Canada, House of Commons, Debates, 1950, 1st sess.,
Vol 1, p 853-4 for a description of the exercise.
In the period 1950-54, a series of exercises were conducted to test the capability of the Mobile Strike Force to operate in the Arctic. These exercises demonstrated a somewhat greater concern for defence of the Arctic. When troops were sent to Korea and Europe, they were specially recruited, and the Mobile Strike Force was retained for the defence of Canada.

The emphasis on continental air defence and the central European front in the late 1950s and the 1960s pushed territorial defence far into the background. In 1963, the then Chief of the General Staff, Lieutenant General Walsh, stated that he considered a major attack on North America highly unlikely. There was the possibility of small raiding parties designed to create a feeling of insecurity and thus affect civilian morale. To counter such a threat, there was a Defence of Canada Brigade, successor to the Mobile Strike Force, consisting of three battalions for Arctic operations. The joint Canadian-United States plans for the territorial defence of continental United States, Alaska and Canada were reviewed each year, but the exercises of the early 1950s were no longer conducted. The 1964 White Paper on Defence was little concerned with territorial defence. Churchill as a winter warfare training centre was closed to achieve a

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a financial saving. In January 1974, it was announced that it would be re-opened.

The North Alaska slope oil discoveries in the late 1960s and the possibility of massive gas and oil reserves in the Canadian Arctic revived the issue of Arctic sovereignty. The Canadian Arctic is one of the largest remaining unexplored geological areas in the world. There are known deposits of sulphur, lead, zinc, coal and high grade iron ore. There is sufficient geological evidence to predict the eventual discovery of gold, copper, uranium, tungsten and other base metals. By 1969, it was being estimated that the Arctic sedimentary basin, which includes northern Yukon and nearly all the islands of the archipelago, contained vast oil and gas reserves. The idea of using the armed forces as a means of protecting sovereignty came to the fore once again. The then Minister of National Defence, Mr. Cadieux, stated: "Although we do not consider there is a military threat to the Arctic at the present time, we feel it is essential to develop the capability of keeping


11 Oilweek, November 3, 1969, pp 34-5. The Geological Survey of Canada in November 1973 estimated the ultimate recoverable potential of oil and gas in the Arctic region (land and offshore) as 42.9 billion barrels of oil and 782.9 trillion cubic feet. This total is slightly less than half of the total Canadian ultimate recoverable potential.
on top of this situation, particularly in view of prospective commercial developments."\(^\text{12}\)

Mr. Cadieux's statement came after the 3 April prime ministerial announcement on the new priorities for the armed forces; the first priority being the surveillance of our territory and coast lines, i.e. the protection of our sovereignty. There was considerable political capital to be made in setting this as the first priority. The government was under intense pressure over the issue of Arctic sovereignty.\(^\text{13}\) The government was also faced with making a decision on Canada's NATO commitment and, if it was to be reduced, finding justifications that would be acceptable at least at home. It has been argued that the Government ... deliberately manipulated the issue of Arctic Sovereignty ... to withdraw its armed forces from Europe, thereby further contracting the legitimate opportunities of its generals in the independent exercise of high command, staff work and intelligence liaison, and reasserting that degree of political control which since 1945 the technological enhancement of military power and its perpetuation within a formal European alliance structure has done much to erode.\(^\text{14}\)

\(^{12}\) SCEAND, Evidence, 28th Parl., 2nd sess., No 16, March 3, 1970, p 9. Mr. Cadieux as successor to Mr. Benson agreed with Mr. Brown M.P. when the latter stated "we are now contemplating not a major attack or a major attempt to establish military forces on Canadian soil, but what might be called small scale incidental invasions of our sovereignty,"


\(^{13}\) See Peter Dobell, Canada's Search for New Roles: Foreign Policy in the Trudeau Era, (Oxford University Paperback, 1972) pp 69-70.

Defence in the 70s assumed that Canada's sovereignty and independence depended ultimately on security from armed attack. However, it stated that defence policy must consider other challenges to Canada's sovereignty and independence, mainly non-military in character. Aside from any challenge to internal security, "Challenges could occur through the actions by foreign agencies or their nationals involving territorial violations or infringements of Canadian laws governing access to and activity within these areas." Defense in the 70s specified the following activities as relevant to counter these challenges:

1. general surveillance of foreign fishing fleets off the coasts;
2. specific reconnaissance missions on a quick-response, short-term basis to locate fishing fleets when they move and fail to appear when expected;
3. area surveillance of offshore waters to detect and report suspected illegal seismic and other exploratory activities;
4. assistance in ice reconnaissance operations;
5. surveillance when needed of Canadian waters off the East and West coasts and in the North to detect pollution at sea;

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15 Defence in the 70s, p 8.
6. surveillance of Canadian territorial waters to detect and report foreign vessels illegally present therein;
7. surveillance of sites of mineral exploration and exploitation projects in the North when verification of their location and status is required; and
8. during the appropriate seasons, provision of observer space on aircraft engaged in northern surveillance operations to permit wildlife observation.¹⁶

Most of these activities involve the air and maritime elements of the armed forces rather than those of the land element. Defence in the 70s simply said that the three combat groups and the Canadian Airborne Regiment provided air transportable and airborne forces for operations in the North and "In the event of a requirement to defend the land mass of North America, a mutual support arrangement exists with the United States."¹⁷

A northern region headquarters had already been established at Yellowknife with a military liaison staff at Whitehorse. It has the responsibility for co-ordinating the implementation of the objectives of contributing to the maintenance of Canadian sovereignty; maintaining

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¹⁶ Ibid., p 19.
¹⁷ Ibid., p 24.
operationally ready forces capable of dealing with the situations encountered; providing effective search and rescue in Canadian territory and making co-operative contributions in adjacent international areas; and contributing to northern developments. 18

To implement these objectives, no new equipment was purchased. If the government had considered that major capital expenditures would have been necessary, it is doubtful if protection of sovereignty would have received the priority it did. Since 1969, northern activities by the armed forces have been fairly intensive. Argus long range patrol aircraft have been flying "sovereignty surveillance" flights. 19 Mobile Command has conducted annual exercises the North and for the first time in the high Arctic.

The sovereignty role did provide a rationalization for the employment of the 115 CF-5s. In 1964, Mr. Hollyer had chosen the CF-5 over the F-4 Phantom as the aircraft to meet the requirements of tactical air support. 20 It was chosen because of its relatively low cost of $1.5 million per aircraft and the arrangements to manufacture it under license for foreign sales. The aim was to provide


20 See "The CF-5: best of the second best," by John Gellner, Toronto Globe and Mail, March 4, 1966. The ferrying range is 1250 miles and speed 1000 mph. Its cost was less than half the F-4 Phantom.
the newly organized air transportable brigades with their own integral tactical air support for reasonably high level operations. Considerable emphasis was given in the 1964 White Paper on Defence on providing a new force structure for peacekeeping/peace-restoring operations up to and including a Korean War type campaign. For this scenario, the CF-5 had much merit as a fighter bomber and battlefield surveillance aircraft.

Two Boeing 707s have been fitted to provide an in-flight refueling capability for the CF-5 for quick deployment overseas and within Canada. It has the capability to operate from make-shift runways such as highways or ice, but it is generally restricted to hard-top runways. Its principal disadvantage was its short range, but in-flight refueling has minimized this. 21

The CF-5s began to come into service just as the government had revised its defence priorities and relegated peacekeeping to the lowest priority. The 115 CF-5s were an embarrassment. Defence in the 70s announced that they would be employed to provide a quick-response photographic reconnaissance capability in Canada and over the waters off Canadian shores. Two squadrons were allotted to Allied Command, Europe (ACE) Mobile Force but are to be Canadian

21 For a discussion of the CF-5 see Colin S. Gray, Canadian Defence Priorities, p 171.
Much criticism has been levelled at the CF-5 aircraft because it is ill-suited to a purely surveillance role. For operations in the Arctic, more and better airfields are required. For operations off the east and west coasts, its advantages can be better put to use because of the greater availability of bases. It is well equipped to deal with any use of limited naval power in Canadian contiguous waters. It could be used in any future peace-keeping/peace-restoring operations. In general, it provides the necessary tactical air support for the territorial defence of Canada and its contiguous waters with a capability for overseas deployment as required.

The protection of sovereignty role is a vague way of increasing military involvement primarily in the Arctic without being overly specific about the reasons or the threat to Canadian sovereignty. The reasons are probably no more than it appears to be a good thing at this time, has domestic political advantages, and should be inexpensive. It implies that the territorial defence of Canada is not a credible defence role because the threat of actual attack is too minimal to justify any serious concern. Protection of sovereignty implies a very low level of challenge;

22 Defence in the 70s, pp 18 and 35.
in fact really a commercial rather than a military challenge. The idea that territorial defence is a requirement is out of favour and considered to be a hangover from the Second World War. Canadian planners have never given much credence to the military lodgement; except in a general war and with the intention of diverting Canadian efforts from the European theatre.

Analysis of the Military Threat

The Soviets could seize a northern installation by an airborne operation. Small raiding parties could be landed by submarine. It is not the lack of capability which minimizes the threat but the lack of suitable objectives. Of the purely military objectives, only Alert could be classed as important. Frobisher Bay and perhaps Resolute Bay are the only civilian objectives in the eastern Arctic.

The seizure of Alert could have strategic implications, but unless Thule was seized as well, it could be sealed off and operations mounted from Thule and Frobisher Bay to recapture Alert. Frobisher Bay could be sealed off more easily and recaptured using Fort Chimo as a mounting base. The key factor would not be so much enemy opposition as the weather.

23 The testimony of Dr. Arnell, SCEAND, Evidence, 28th Parl., 1st sess., No 40, May 1, 1969, pp 1374-5.
Other than a protracted general war there is no scenario for a Soviet lodgement in the Arctic that has a military objective. Incursions from the sea using nuclear submarines could become a threat if counter SSBN operations using land based systems become more extensive.

During the 1960s, there was and there remains some concern over the Soviet fishing ships operating in the Western Atlantic and Eastern Pacific. The fear is that if the international situation suddenly deteriorated, the crews of these ships would pose a threat to coastal installations. They are also a form of hostage in that they could be sunk at will. If war should break out or if it appeared likely, the Soviets would have little option but to land on the coasts or face being sunk. The fishing fleet has certain para-military functions and the large numbers of fishermen who might be forced to land (perhaps as many as 10,000) would pose a threat far exceeding any Arctic lodgement.

To counter such a threat "ready forces" were organized in the 1960s to deal with a series of landings by para-military forces. As the likelihood of East-West confrontations on the scale of the Cuban Missile Crisis has lessened, there has been less emphasis on countering this


25 The writer commanded the Ready Force Company for one year on the Atlantic coast.
threat. Yet it is a more dangerous and more probable
one than Arctic lodgements because of the annual presence
of the Soviet fishing fleet.

It may well be legally possible to set up stations
on Arctic ice that have an explicit military role, such
as radar or underwater listening devices. There is no in-
dication that such action is contemplated. The reasons
appear to be both political and military. The military
advantages compared to other means available would seem to
be minimal. There could be some advantage to the deploy-
ment of underwater listening devices if the need should
arise to undertake systematic detection of submarines op-
erating under the pack ice. Politically, the deployment
of military bases would be provocative but less so in
the central Arctic basin area than if contiguous to land
areas. If the United States should deploy ice bases con-
tiguous to the Soviet Union or vice versa then strong
pressures would be generated to increase national juris-
diction over extensive areas of the Arctic Ocean and the
air space above. The Arctic would become an area of in-
creased strategic significance in which the differentiation
of national, alliance, military and commercial objectives
would become very difficult.

The Canadian Military Response

Paradoxically, the land and air elements of the armed
forces have a greater capability for territorial defence
than they have ever had. Since the 1964 White Paper On Defence, the re-equipping and the re-structuring of the land and air elements have increased mobility and flexibility of these forces to counter any threats to Canadian territorial integrity. In Canada today, there are the Canadian Airborne Regiment and three combat groups (light brigade groups) with two squadrons of CF-5s available for the territorial defence of Canada.

The concept for the territorial defence of Canada calls for the creation of tasks forces tailored for particular tasks. Operations would be commanded, controlled and supported through the establishment of bases (mounting, supporting and forwarded bases) and of an airhead as close to the objective as possible. Since the new priorities were announced, the land forces have carried out the most intensive training yet for Arctic and sub-Arctic operations with territorial defence scenarios. Joint Canadian-United States exercises have been resumed under the aegis of the Alaska, Western Canada, Western United States (ALCANUS) defence arrangement.

The force structure and training programmes are clearly oriented towards territorial defence, that is, the destruction of any enemy forces which impinge on Canadian territorial integrity. The declaratory policy is protection

26 The writer was the primary author of the manual for Canadian and European Arctic tactical operations.
of sovereignty, which is related to non-military challenges to Canadian sovereignty. This dichotomy between force structure and declaratory policy derives primarily from two factors. The first is the sunk costs in structure and equipment deriving from the 1964 White Paper on Defence with its emphasis on mobility and war fighting capabilities. Second, the training and equipment for territorial defence operations is ideal for northern Norway operations. Thus, the force structure and training of the Canada based forces is dominated by overseas and alliance commitments as an inheritance of the 1964 White Paper on Defence.

The protection of sovereignty declaratory role is so nebulous as to be artificial. If an increase in land forces' presence is required, then territorial defence exercises are one of the most suitable means of providing it. It is not possible to train or exercise to protect Canadian sovereignty.

The artificiality of the protection of sovereignty role should not disguise its inherent weakness. The force structure and training required for the protection of sovereignty tasks are of a minimal nature. If the logic behind them should become the dominant influence in deciding the force structures, Canada would have no war fighting capability for land operations at all. Canada would be left completely vulnerable to any form of attack, incursion

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27 Interviews with Treasury officials in September 1972 suggest that this logic is held by some sectors of government.
or lodgement. It would be dependent completely on the United States and this would be counter-productive for the protection of sovereignty, whatever meaning is given the term.

No matter how minimal the threat, geography and climate require a force structure that has both strategic and tactical mobility and sufficient reserves to deal with a number of perhaps widely dispersed threats/challenges. A force structure designed for the territorial defence of Canada and overseas operations can meet all the requirements for land based sovereignty tasks. It ensures, in the context of the continental imbalance, that all the responsibilities for Canadian territorial defence can be carried out by Canadian forces. It ensures that collective defence arrangements are an extension of, and not a substitute for, Canadian defence responsibilities.

The fear that increased Canadian military activity may "set back the peaceful use of the whole circumpolar north" and may not be well viewed from "beyond the north pole" has been voiced. 28 Considering the extensive Soviet activity on their side of the pole, it seems somewhat incredible that any increased Canadian activity confined to Canadian territory would be provocative. The fear is

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really a red herring of those who want some form of internationalization of the north, including reciprocal arrangements to organize an "open area" for scientific investigation and the total removal of arms.

The most often used analogy is that of the international arrangements for Antarctica. The analogy is a false one because, in contrast to Antarctica, all the land areas of the Arctic region are under sovereign control. But more importantly the Canadian Arctic is for Canada to develop to meet its own needs as an integral part of the Canadian state. The Canadian Arctic, no more than the Soviet Arctic, cannot be separated from the overall development and defence requirements of each state.

Any planning for Arctic defence must be long term and flexible enough to adapt to changing political, strategic and technological factors. The Canadian Arctic cannot be isolated from developments in the whole Arctic region. Planning must be based on a continuous appreciation of Canadian interests, changes in superpower strategic perceptions and the application of new technologies to economic and military uses in the Arctic region. Today, superpower attention is concentrated in the Norwegian sector of the Arctic and not the Canadian Arctic.

The Commitment to ACE Mobile Force (North)

The main impetus given to the review of foreign and defence policies derived from a dissatisfaction with Canada's defence commitments and the desire to put a ceiling on defence expenditures. The government in 1969 reaffirmed
the Canadian political commitment to NATO, but reduced its European based forces from 10,000 to 5,000 men and co-located the land and air elements at Lahr in southern Germany. The Canadian based commitment of one battalion group to be followed by the remainder of an air/sea transportable combat group to the ACE Mobile Force (North) was increased by two CF-5 squadrons for operations on NATO's northern flank. The history of this commitment to northern flank operations is interwoven with Canadian dissatisfaction with the commitment of forces permanently based on the central front.

Canada played an instrumental role in the formation of NATO but saw it as a means of politically reassuring a devastated Europe and "made no secret of the fact that one of the advantages ... of NATO in 1948 was that it seemed safer to join a multilateral alliance than a highly unequal bilateral alliance."29 It was assumed that NATO would be a means of pooling the members' military strength, thereby reducing "the total expenditures which each of the

twelve countries would have found necessary for their security had there been no pact. Canadian defence planning and the small rearmament programme begun in 1949, with defence expenditures rising to a little over $360 million, were based on the premise that the European theatre was the primary one. It was considered that Canada would have time to mobilize for a protracted conflict along Second World War lines. The Korean War changed Canadian perceptions of the Soviet threat from being primarily political to military. It "triggered" the large Canadian rearmament programme of the 1950s, with annual expenditures reaching a peak in 1953 of $1.9 billion (7.6 per cent of the GNP). This figure was not to be surpassed until 1972-73 in absolute terms and when less than 2 percent of the GNP was being spent on defence.

In 1951, General Eisenhower, the recently appointed Supreme Allied Commander, Europe (SACEUR), came to Ottawa and requested the temporary dispatch of troops to assist in reassuring Europeans of the North American commitment to the defence of Europe. A brigade group was recruited specially and dispatched in the winter of 1951-52. An air division of 12 squadrons of day fighters following in early 1953. In addition, Canada was committed to increase the


brigade group to a division after the first day of mobilization and to follow this with a corps headquarters and a second division if necessary.32

The brigade group was shortly after motorized, and with the exception of the Centurion tank, was largely equipped with United States equipment, as were the Canadian based forces. This complicated the logistical support for the brigade group because it was part of the British Army of the Rhine (BAOR) and dependent on British supply organizations to handle many non-British items.

The force structure of the Canadian Army became almost completely oriented to operations on the central front. The stationing of Canadian forces in Europe took on a permanent character. By the late 1950s, it was apparent that both the land and air forces based in Europe would have to be re-equipped to conform to NATO's newly adopted forward strategy involving the use of tactical nuclear weapons. At the same time the controversial NORAD Agreement was negotiated and Canada was faced with re-equipping its air defence forces and adopting nuclear weapons for them. The Honest John was selected as a mobile surface to surface nuclear rocket to provide intimate support for ground operations in Europe. The Honest John was really a divisional weapon, and its adoption added to the anomalies of the relationship of the 4th Canadian Infantry Brigade.

Group (4CIBG) and BAOR. General Foulkes summarized the anomalies:

However, as we have only one isolated brigade, we have to provide for that brigade all the support and facilities which would normally be provided by the division, by the corps and by the army... So we are in the position of having to meet all the requirements for a brigade as if it had a division, a corps and an army behind, and the majority of these will have to come from Canada.

As early as 1958, a retired Wing Commander, John Gellner, proposed the concept of "fire brigade" forces designed to contain local conflicts. He conceived these forces being ready at all times to go into battle at the shortest notice. They were to be flexible in structure so as to be able to fight under any climatic conditions, and mobile enough that they could strike swiftly, and in sufficient strength, to achieve the aim of peace enforcement. By 1963, he was advocating that the natural place for Canadian conventional forces assigned to NATO should be the NATO mobile force which was then taking shape.34

In 1960, serious consideration was given to the withdrawal of the Canadian brigade from its forward deployment to a mobile reserve position.35 This new

33 The testimony of General Charles Foulkes, Standing Committee on Defence, Evidence 26th Parl., 1st sess., No 15, October 22, 1963, p 497.


role was to be complemented by changing the role of the Air Division to that of air transport, a role much opposed by the RCAF. Consideration was also given to the cutting of the size of the Canadian forces in Europe. These considerations derived from the dilemma of having to mechanize fully the brigade if it was to retain its role and be deployed forward. At the same time the amount available for capital expenditures was decreasing as operations and maintenance costs continued to rise. Both these solutions were rejected, but no decision was made on re-equipping. It was apparent that re-equipping along fully mechanized lines would produce major incompatibilities in organization and equipment between the needs of the European based forces and the Canadian based and peacekeeping forces.

The desirability, for political, financial and organizational reasons, of reducing those developing incompatibilities was demonstrated during the hearings of the Special Committee on Defence in 1963. Lieutenant General Guy Simonds, a retired Chief of the General Staff recommended a tri-service or integrated force which would be used for early intervention to prevent escalation, and would meet both NATO and other peacetime requirements. He explained:

I believe that a role which is suited to a country of our size having regard to the financial burdens possible
to be borne over a lengthy term, would be a tri-service force whose main objective was peacekeeping. I believe its organization should be very much like that of the United States Marine Corps which is mobile force complete with all its ancillaries and able to meet what are commonly called brushfire situations.\footnote{Testimony of General Foulkes, \textit{Evidence}, 26th Parl., 1st sess., October 22, 1963, p 507.}

General Foulkes, recently retired Chairman of the Chiefs of Staff Committee, argued for a mobile ready reserve, available immediately for NATO deployment, to meet UN tasks anywhere in the world, or to maintain Arctic sovereignty.\footnote{Testimony of General Foulkes, \textit{Evidence}, 26th Parl., 1st sess., October 22, 1963, p 507.} He foresaw such a structure allowing for all Canadian troops to be Canadian based. He reiterated a proposal he had apparently made to the government as Chairman in 1960. He advocated withdrawing the brigade group from its forward role on the central front, and changing its role to that of an airportable mobile reserve, with the ultimate objective of basing it in Canada.

The debate was not just over the roles and equipment of the forces, but also over Canada's position in the world and what role it should be playing. In the early 1950s, both politically and militarily, Canada had been an important member of NATO whose contributions were significant. The determination to continue to make a significant contribution to collective defence had been behind the decisions of the Diefenbaker government, a determination shared by the
Mr. Pearson's role in the creation of the United Nations Emergency Force (UNEF) for service in the Middle East began to focus attention on peacekeeping as an international role. Contributions to UNEF were followed by ones for the Congo force and Cyprus. Peacekeeping came to be seen as the true role for Canada as a "middle power" as Canadians were calling themselves. It satisfied the "idealistic impulse" for a special role that differentiates Canada internationally from the other NATO states and qualified its support for the United States in the Cold War. It had added advantage that advanced weapons were not required, and therefore, defence costs could be held down. John Holmes writing in Foreign Affairs in 1963, after arguing that Europeans should provide more for their own defence, summarized these feelings:

In Canada there is also a strong opinion that its most useful services are those which it provides for international peacekeeping operations and that its armed forces should to an increasing extent be trained and organized for these middle-power functions.

The Special Committee on Defence in its December 1963 Report had recommended that: "Study should be given to the role of the two brigades that are presently committed in the case of emergency as back-up to the Brigade in Europe and to the transport and mobility of these forces as well.

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38 See Peter Dobell, Canada's Search for New Roles for a discussion of the "Idealistic Impulse," pp 132-42.

as that of Canada's brigade in Europe." It made no specific recommendations. In January 1964, it was rumoured that the possibility of transferring the Canadian brigade to Norway was being canvassed in high NATO circles. The move was considered to be primarily political so that the brigade would have a non-nuclear role. Also in any transfer to Norway, part of the brigade would be earmarked for duty with the Nordic contingent that Denmark, Norway and Sweden already had established for UN service.

In 1963, the Liberals came to power as a minority government. Mr. Hellyer, the new Minister of National Defence, espoused the idea of greater service integration and greater mobility for the services. He was firmly committed to the concept of collective defence and had agreed with Mr. Pearson's decision to accept nuclear weapons.

Mr. Hellyer's 1964 White Paper on Defence listed four parallel methods by which the objectives of Canadian defence policy had been pursued since 1945. There were: Collective measures for the maintenance of peace and security as embodied in the UN Charter; Collective Defence as embodied in the North Atlantic Treaty; Partnership with the United States in the defence of North America; and national measures for security and protection of Canada.


The 1964 White Paper on Defence outlined the new integrated force structure with the choice of priorities based on the following requirements:

1. Forces for the direct protection of Canada which could be deployed as required.
2. Forces-in-being as part of the deterrent in the European theatre.
3. Maritime forces-in-being as a contribution to the deterrent.
4. Forces-in-being for UN peacekeeping operations which were included in (1) above.
5. Reserve forces and mobilization potential.  

The first requirement and its corollary, the fourth requirement, were to be met by re-equipping two of the Canadian based brigades as an airportable force. These brigades would also provide the rotational personnel for the European brigade. The third brigade was to be turned into a special service force. To provide for the necessary strategic lift, 24 C-130 Hercules aircraft were purchased and three naval support ships were built. Tactical air support was to be provided by the CF-5. The 1964 White Paper on Defence programme was largely implemented by 1968, except the special force idea was dropped and the Canadian Airborne Regiment substituted.

For the second requirement, the 1964 White Paper on Defence announced that the European brigade would not be...
withdrawn in favour of making a contribution to an air-portable force based in Europe and available for employment on NATO's flanks. The reasons were: the brigade was a useful contribution in a vulnerable area; the importance of a Canadian presence on the central front; support could be moved from Canada to the flanks; it was considered to be more economical than the stationing of a mobile reserve in Europe; and it was more acceptable than withdrawing operationally ready front-line battalions for service on the flanks. The European brigade was re-equipped as a completely mechanized force.

The previous government had by no means committed its successor to mechanizing the European brigade. This was the Pearson government's decision. His government believed that Canadian interests were served by a continued presence on the central front and rejected a changed role. Yet the incompatibility of the newly structured air-portable, non-nuclear Canadian based forces and the fully mechanized nuclear armed European forces was widened to include organization, equipment, roles and training. The squaring of the circle was, however, begun with the commitment of one battalion group from the Canadian based forces to the newly formed ACE Mobile Force. Thus the desire for compatibility, a non-nuclear role, and wholly Canadian based forces was introduced into the military commitment to NATO's ground forces not by reconfiguring,

43 Ibid., p 21.
This new commitment was made evident when the Black Watch Battalion Group was lifted by air and sea from Canada to Norway in 1966. A second battalion was committed for operations on the southern flank, but this commitment was withdrawn in 1970 without any troops taking part in exercises. The commitment to the northern flank was further increased by the addition of the remainder of a brigade group to follow the deployment of the battalion group if necessary. A Canadian, General Giles Turcot, became the second commander of the ACE Mobile Force.

Thus at the time when Mr. Trudeau's government initiated its review of foreign and defence policies in the spring of 1968, mobility and compatibility were part of the force structure for some of the forces committed to NATO. Aside from the undesirability of the incompatibility in structure between Canadian and European based forces, there was a strong feeling that the Canadian political and military commitments to NATO required fundamental revision. In addition, decisions were due for the re-equipping of 4 Canadian Mechanized Brigade Group (CMBG) with a new tank. The most likely purchase was the British Chieftain for a possible expenditure of $150 million.

The nuclear armed strike reconnaissance CF-104s deployed in the early 1960s were becoming obsolete and the government was faced with the interrelated decision over role and a new aircraft. The only non-nuclear ones were those of close air support, air transport, and air defence. The
air defence role conflicted with the European pattern of territorial air defence forces. There was no air transport role except for movement to the flanks. The ACE Mobile Force contingents were exercised as little as once a year, and there was sufficient transport available already in Europe. The close air support role was the only acceptable one, but the CF-5 was not well suited for a central front role. The best aircraft would have been the Phantom F-4, but this aircraft had already been rejected because of cost and the government was in no mood to purchase Phantoms as well as CF-5s.

The opponents of NATO (and NORAD) saw it as a United States dominated alliance which restricted the development of an "independent" foreign policy, diverted resources which should be used for foreign aid, and lessened Canada's credibility as a peacekeeper.44 They wanted to withdraw from both NATO and NORAD or at least radically reduce any Canadian commitment. There was a strong moral crusading element in their outlook, and they represented an aspect of the idealistic impulse underlying much of declaratory Canadian foreign policy. They dismissed the political and

security functions of collective defence organizations and overstressed what an independent foreign policy could achieve.

The proponents for NATO and collective defence were generally on the defensive as defenders of the status quo. They stressed the need to make a direct contribution to European stability, the importance to Canadian interests of the influence achieved through military commitments, and the value of NATO membership as a counterbalance to continentalist pulls.

The final decision was a compromise that reflected a serious division in the cabinet. Mr. Trudeau's 3 April 1969 statement to the press reaffirmed Canada's political and military commitment to NATO but stated that Canada had decided to "bring about a planned and phased reduction of the size of the Canadian forces in Europe." On 12 April, the prime minister defended the new defence policy on the grounds that NATO had had too great a role in determining Canadian foreign policy and that "our defence policy, which flowed from this foreign policy of NATO, now was more to impress our friends than frighten our enemies." Also Canada should no longer close its options

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47 Pierre Elliot Trudeau, "The Relation of Defence Policy to Foreign Policy," *Statements and Speeches*, No 69/8, April 12, 1969, Department of External Affairs. Excerpts from an address by Prime Minister Trudeau to a Dinner of the Alberta Liberal Association, Calgary, April 12, 1969.
by devoting all its military strength to NATO. This last theme was subsequently more fully articulated in the European booklet, *Foreign Policy for Canadians*. In referring to future Canadian contributions to NATO, it said that:

The precise military role that Canada assumes at any given time will depend in part on the role of Canadian forces in the defence of Canada and North America and in part on the requirements for peacekeeping. It will also take account of the economic recovery of the countries of Western Europe and their enhanced ability to provide for their conventional defence.

The Canadian decision to reduce its European based forces was ill-received by other NATO members. The original decision had been for a two-thirds reduction but this was revised to only one-half because of NATO pressure. The CMBG was reduced to a mechanized battle group and the Honest John battery disbanded. In theory, Canadian land forces were now non-nuclear. In fact, they were just as involved in the nuclear business as before because they remained deployed on the central front. The only change was that direct tactical nuclear support would come from non-Canadian nuclear forces. The Air Division was reduced from six squadrons to three and the CF-104s were re-fitted for conventional bombing missions; a role for which they were particularly ill-suited.

*Defence in the 70s* reiterated the previous arguments for the reduction stating, that: "In addition, Government-wide financial restraints, and the resulting need for compatibility of roles and equipment for our home and overseas based Armed Forces, dictated the need for some adjustment:"

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48 *Foreign Policy for Canadians* (Europe), p 24.
49 *Defence in the 70s*, p 32.
Although Defence in the 70s confirmed that the government had no plans for further reductions, it had been decided "that the land force should be reconfigured to give it the high degree of mobility needed for tactical reconnaissance missions in the Central Region reserve role." And "the result will be enhanced compatibility of Canadian and European based forces, and a lighter, more mobile land force capable of a wide range of missions." The new policy gains the objectives of compatibility, reduction in size and non-nuclear roles, but not that of having all the forces Canadian based.

One of the arguments for a Canadian withdrawal from NATO had been that the previous forces had played no significant role for the defence of Europe. The new structure was far less significant militarily, but the political arguments for a retention of a Canadian presence on the central front proved effective once compatibility, a reduction, and a non-nuclear role had been achieved. The achievement of compatibility was somewhat diminished in 1973 when it was decided to delay purchase of a direct fire support vehicle (light tank) for central front operations.

Defence in the 70s, in announcing that the Canadian

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50 Ibid., p 35. The April 3, 1969 statement to the press had stated that "The structure, equipment and training of our forces must be compatible with [roles in collective security and peacekeeping activities], and it is the intention of the Government that they shall be."
commitment to the ACE Mobile Force would be increased by two squadrons of CF-5s, argued that this decision "will enhance NATO's deterrent strength and add to its ability to carry out the strategy of flexibility in response [sic], which requires emphasis on conventional capability."

The Canadian ACE Mobile Force commitment was retained and slightly increased. This was not because of new perception of the strategic threat to the northern flank or to the Arctic region as a whole. It was because such a commitment was compatible in structure and function with Canadian based forces and provided tangible evidence of the Canadian commitment to NATO.

The government, in its foreign and defence policy reviews, made no attempt to continue the previous declaratory policy that continental defence and NATO commitments were related organizationally. Their separation was accepted and emphasized in the new priorities. By continuing previous government policies designed to increase compatibility, to find non-nuclear roles, and to home base the maximum number of troops, the government was able to remove much of the dissatisfaction with Canadian foreign and defence policies.

The commitment of Canadian forces to a central front role was maintained because there was a mutual interest between Canada and the other NATO countries for a continued Canadian presence, however small. A complete

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51 *Defence in the 70s*, p 36
withdrawal could have had adverse political consequences. For all its rhetoric, the government was not prepared to chance losing too much influence. It was again demonstrated, that however tenuous or intangible, there is a relationship between a Canadian military commitment and political influence in Europe.

The strategic reasons given for the continued maintenance of Canadian forces in Europe "reflected the Government's judgement that Canadian security continues to be linked to Western Europe and that Europe is still probably the most sensitive point in the East-West balance of power." It is the area "from which any conflict, however limited, might most readily escalate into all-out nuclear war engulfing Canadian territory." 52 The government considered that hostilities could still occur over Berlin or from an accidental spillover from unrest in Eastern Europe. Canada has been somewhat uncertain over its relations with the EEC, but Defence in the 70s was unusually frank when it argued that the "community of interest we share with these countries through common NATO membership should be a positive factor in these negotiations" for trade. 53

The government of Mr. Trudeau, both in its composition and the public support it had, was in a very strong position to withdraw militarily from Europe. That it did not do so was a clear political decision. The political need

52 Ibid., p 33
53 Ibid., p 34
for influence in Europe and thus find a counterbalance to the influence of the United States and to help in overcoming the sense of psychological subordination that has developed in Canada in the post-war years.\footnote{Peter Dobell, \textit{Canada's Search for New Roles}, pp 86-101. Mr. Dobell makes a forceful argument for the importance of Canadian-European links. See also Leonard Beaton, "The Strategic and Political Issues Facing America, Britain and Canada," \textit{The Atlantic Community Quarterly}, Vol 9, No 4, Winter, 1971-72) for the importance of transatlantic links.} was a crucial consideration in the decision. The deeply entrenched Canadian desire to offset the continental imbalance by looking overseas, was again clearly the option chosen.

The choice was further emphasized by a series of government statements on the importance of Canadian-European relationships in the autumn of 1974. The 1975-76 defence estimates call for a 12 per cent increase to offset inflationary pressures for a budget of $2.8 billion, an increase of one billion since the 1969 ceiling. Even then, personnel reductions are forecast, but these will not affect Canada's NATO commitment or peacekeeping forces. They will be made in the protection of sovereignty and continental defence forces.\footnote{Speech by the Minister of National Defence, Mr. James Richardson, to the Canadian Defence Association, January 17, 1975, Transcript, provided by the C.B.C. in Halifax, N.S. On three different occasions while on trips to Europe in 1974-75, Mr. Trudeau has stated that the overall troop size of 5000 men for the Central Front commitment will not be reduced. The composition may change to an all-land or an all-air commitment. Press reports suggest the Prime Minister favours an all-land commitment but Mr. Richardson favours an all-air commitment. In this writer's opinion, the eventual decision will be a return to an mechanized brigade group equipped with main battle tanks, possibly German. Government statements have already reverted to calling the Canadian land component on the Central Front as the 4th Canadian Mechanized Brigade Group.} In practice, the 1969 priorities have been reversed.
The Strategic Significance of the Northern Cap

NATO's Northern flank includes both Norway and Denmark but the term Northern Cap is more relevant for purposes of strategic analysis. The term Northern Cap embraces the northern areas of Norway, Sweden, Finland and European Russia; in essence the European Arctic. Until the 1950s, the strategic significance of the Northern Cap was related to the use of Finnish territory as an invasion route into the Soviet Union. The deployment in the 1950s of intercontinental nuclear delivery systems changed this. The most fundamental change has come with the large expansion of the Soviet Northern Fleet and the general growth of Soviet maritime power.

The operational areas of the Northern Fleet have extended gradually westward under the requirements of a forward deployment strategy. Its area of operations now extends to all the Norwegian Sea and occasionally into the Atlantic. In case of war or a crisis situation, it seems that a Soviet "forward defensive zone" would be established in the Greenland-Iceland-Faeroes gap covering the access routes to and from the Atlantic. The Norwegian Sea affords

56 For a discussion of the definition of the Northern Cap see Nils Orvik, Europe's Northern Cap and the Soviet Union, with a forward by Henry Kissinger, Harvard University Center for International Affairs, Occasional Papers in International Affairs, No 6, (September, 1963) p 7.


the Soviet Union with its most important transit route for SSBNs. 59

It is reasonably clear that the principal tasks of the Northern Fleet are related to the nuclear balance and East-West tension. That these tasks are carried out by the Northern Fleet is a function of geography rather than any strategy related to Northern Europe.

The increasing capabilities of the Soviet navy for operations in the use of limited naval power are adding a new dimension to the problem of Nordic security. If the Soviet Union should maintain a permanent off-shore presence round the North Cape and along the coast of Norway, its ability to carry out limited naval operations at short notice and without warning would be greatly increased. Soviet maritime presence off Norway has become the principal factor in any analysis of Norwegian security. 60 The strategic significance of north Norway is related to the future east and west requirements for the command or denial of the Norwegian Sea.

Canadian Strategic Interests and a NATO Arctic Command

Throughout the protracted debate on Canadian defence policy, only one participant, Nils Orvik, has put forward


the concept of a strategic relationship between the Canadian Arctic defence requirements and those of the European Arctic. He argues that although the flanks and central areas are covered by existing NATO organizational arrangements, Soviet naval activity and technological developments have given increased strategic importance to the Arctic sectors of Western Europe and North America. To counter these developments he has proposed a NATO Arctic Command which would combine ground, naval and air responsibilities for the defence of these sectors.

The Canadian forces based in Europe, together with some United States and possibly some British forces, would be allocated a special responsibility for the security of the northern areas. These forces, being European based and having as their prime task northern defence, would offset the major weakness of the present NATO mobile forces, which are their small size and uncertainties about priorities for their use. Orvik argues that the Canadian basing of Canada's commitment to NATO's central front is not a satisfactory solution, and "Transfer to an Arctic command would give the Canadian forces assignment in Europe more firmness and purpose." Canadian forces would be involved "in surveillance of areas vital to Canadian security."62

The basic premise of Nils Orvik, upon which he does not

62 Ibid.
expand, is that there is a strategic relationship between the defence requirements of the Canadian Arctic and the European Arctic. The advent of the nuclear armed bomber increased dramatically the strategic significance of both Arctic regions, but in the European Arctic military developments were confined largely to the Soviet sector. It was the introduction of seaborne deterrent systems and the large expansion of the Northern Fleet that increased the significance of northern Norway. In contrast, the strategic significance of the Canadian Arctic has declined in importance. It is the waters contiguous to Norway that have increased in significance but there has been no parallel increase as yet for Canadian Arctic waters.

There is a threat to northern Norway of direct Soviet attack or incursions, but in Canada's case the threat is small. The structure, equipment and training of the Canadian forces for the territorial defence of Canada are equally applicable for operations in northern Norway. However, operational similarities, no more than geographical ones, should not be confused with strategic ones. The Canadian commitment to ACE Force developed out of the political desire to make a contribution to NATO that was Canadian based, compatible with other tasks, and was non-nuclear in role.

Although the transfer of role of the European based forces to European Arctic tasks makes considerable military

sense, such a change would affect the political reasons for maintaining a central front role. Canadian political and economic interests are in the central front area, not in the peripheral areas. Canadian forces would still be permanently based in Europe, but the political rationale for their presence would be weakened. This political problem can only be overcome if the central West European powers conclude that a Canadian contribution to northern European defence is as important politically as is a Canadian presence, however minimal, on the central front. It would make little sense for Canada to maintain forces permanently in Europe, if a change of role would mean a lessening of political influence without any compensating advantages. There will have to be considerable change in European political and strategic thinking before Canada is likely to agree to any geographical transfer of role.

Canada does have a strategic interest in contributing to European Arctic defence. If, as Defence in the 70s argues, Canadian security is still linked with Western Europe, and the increasing significance of northern Europe is accepted not as a regional security problem but as a European and North American one, then it should be considered as a sensitive point in the East-West balance. Any political and strategic deterioration in northern Europe would result in increased Soviet exercise of seapower in the area. The threat is that such an exercise of seapower could extend to trade routes and to Canadian contiguous waters.
Possible means of countering this development could be Canadian participation in a NATO Arctic Command that would be based on a coincidence of maritime and Arctic interests of Canada, the United States, the United Kingdom and Norway. Such a command would include security arrangements for Alaska, northern Canada, Greenland, Iceland, Norway and the contiguous waters. Its aim would be to secure the interests of these states as the Arctic area develops in strategic and economic significance for the littoral countries. However, no NATO, or for that matter, North American command structure, would be acceptable to Canada that would seem to impinge on Canadian sovereignty and control of the Canadian Arctic and its contiguous waters.

The strategic arguments for the interrelationship between Canadian and European Arctic defence will not make much impression unless the threat becomes considerably more perceptible to both Canadians and Europeans. There is a definite desire by the Canadian government to maintain a clear separation between the two. Its presumed fear is that Canadian Arctic defence policies would become as dependent on a northern NATO strategy as have been previous policies on a central front strategy. The nationalistic tenor of Canadian Arctic policies makes this politically undesirable. Such an interrelationship could become strategically desirable if the perceived threat increased. However, Canada would not consider it politically desirable unless Canada could withdraw from a central front role.
without loss of political influence, unless it helped to offset United States pressure for possible Arctic defence arrangements, and unless there was a clear recognition of Canadian control over contiguous waters of the Canadian Arctic.
CHAPTER 9

THE ARMED FORCES AND INTERNAL SECURITY

The Canadian Experience

Section 91 of the British North America Act begins by charging the federal government with the responsibility for the "peace, order, and good government of Canada." There is no mention of abstract rights in the BNA act. It is a very prosaic act of the British Parliament. In the hundred years since Confederation, Canadians have never been overly concerned about abstract principles and rights. Rather, they have been concerned about peace, order, and good government. Political pragmatism, emphasis on national development, and the regional and racial divisions in Canadian society have combined to submerge and localize any revolutionary or extra-parliamentary radical activity. However, there have been challenges to governmental authority, which have been violent in form or were perceived to be potentially violent.¹ Pre-Confederation and post-Confederation governments have reacted forcefully

¹ Challenges to governmental authority can, of course, take many forms, but here we are only concerned with those challenges that are overtly violent or are perceived to be potentially violent, and which, therefore, could require the use of the armed forces. There is no attempt to prescribe political strategy or military tactics because these are separate matters and outside the purview of this thesis. The aim is rather to provide a framework for analysis of future force requirements and structure.
to these challenges to their authority. In such situations, governments have shown little hesitation in employing the armed forces. In general, Canadian public opinion has supported government during the 1837 Rebellions, the Riel Rebellions of 1869-70 and 1885, the Winnipeg General Strike in 1919, and the October 1970 Front de Libération Crisis.  

The French-English division in Canadian society was a principal factor in the Lower Canadian 1837 Rebellion and the October 1970 Crisis. It was of much lesser significance as a factor in the Riel Rebellions, but the hanging of Riel seriously divided Canada along racial lines. Class divisions were prominent in the Winnipeg General Strike, the Upper Canadian 1837 Rebellion and to a lesser extent the October 1970 Crisis. The 1837 Rebellions

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were an overt challenge to government, but the Riel Rebellions were somewhat more complicated. There is much evidence to suggest that the actions of Riel and his Métis followers were primarily designed to gain concessions in order to maintain a nomadic way of life rather than as a complete rejection of Canadian governmental authority.

The Winnipeg General Strike was perceived by government at the time as a conspiracy to overthrow government. It is generally accepted today that "there was no seditious conspiracy and that the strike was what it purported to be, an effort to secure the principle of collective bargaining." The FLQ certainly was (and is) a clandestine movement whose aim was to bring about the secession of Quebec by violent revolution. However, whether the


4 For a good account of the aims and more particularly the psychology of the members of the terrorist element in the FLQ see Gustave Morf, Terror in Quebec: Case Studies of the FLQ, (Toronto: Clarke, Irwin, 1970).

Principal documents of the FLQ are three:


(ii) Strategie revolutionnaire et role de l'avant garde, a clandestine document, author anonymous, which was presented in camera to the Parliamentary Committee investigating the activities of the, by then, infamous Company of Young Canadians. It was published in the Montreal Gazette on October 31, 1970. The probable date of composition 1968-9.

kidnappings themselves were designed to bring about an insurrection at that time remains debatable. 5

However debatable the causes and aims of these challenges to government, there are a number of deductions that can be made which are relevant to internal security operations in Canada. First, there is no common or recurring pattern of cause and aim of relevance to any discussion of future challenges to government. Secondly, all these challenges were localized in character and in geography. Thirdly, none of these challenges were sufficiently protracted to gain a momentum that could overcome their localized character. Fourthly, violence has tended to be sporadic and minimal. Fifthly, government has shown little hesitation in reacting, if not overacting, to these challenges. The sophisticated, controlled response so much in favour today, has not been a predominant element in Canadian government reactions to perceived violent challenges to its authority.

When faced by an overt challenge, or what was perceived as an overt challenge, government has shown little hesitation in employing the armed forces. Martial law was proclaimed in 1837 and again during the Quebec

5 This is discussed later, but here it is suffice to point out that much depends on one's analysis of the "revolutionary" situation in Quebec at that time. In essence, would the two kidnappings have triggered off an insurrection? This writer has been unable to locate any source that is anything approaching an objective analysis. This writer's personal view is that the kidnappings could have triggered off fairly violent disturbances, but not an insurrection. Therefore, the use of troops was a sensible precautionary measure, but the invoking of the WMA was unnecessary.
City anti-conscription riots in 1918. Military force was used to crush both the Riel Rebellions. Troops were deployed during the Winnipeg General Strike in support of the police and again during the October 1970 Crisis. On both these latter occasions, the War Measures Act (WMA) was in force or invoked. However, there was, and is, no requirement to invoke the WMA before troops can be used.

In the past, the calling out of troops to aid the civil power in maintaining law and order was a fairly regular occurrence. The primary reason was the small size and decentralized organization of Canadian police forces. Throughout the 19th century, the Militia was regularly called out in the absence of effective local and provincial police forces. They were often "a magistrate's only resource for even such routine duties as guarding a hanging or breaking up a boxing match."\(^6\) Between 1876 and 1914, the Militia was called out on 48 occasions; on five occasions to prevent Orange-Green riots and 33 times to intervene in strikes. Sir Frederick Borden, as Minister of the Militia, claimed that "The principal objective [of the Militia] is perhaps upholding of the Civil Power in the different parts of the Dominion."\(^7\)

The Militia was called out under Section 27 of the

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1868 Militia Act which was based on a pre-Confederation act of the Canadas. This act simply required local officials, such as a mayor or magistrate, to request in writing the local Militia officer to call out his troops. The local Militia officer was required to recover his expenses from the local community. After 1904, the Department of the Militia assumed this responsibility. Also in that year, a new act stated that men of the permanent force were to be used before the Militia.

During the pre-World War I period, there was regular use of the Militia to break strikes. The confrontation between the strikers and the troops was seldom violent, and between 1867 and 1914, only one man was killed. This changed in the inter-war years as riots and disputes assumed a violent form and the troops and police used were often veterans, as were the rioters. The changed situation was first demonstrated during the March, 1918 anti-conscription riots in Quebec City. Uncontrolled rioting began over the arrest of a man by the RCMP, who later released him when they found his papers were in order. The mayor refused to read the Riot Act and the officer commanding the district called out the troops. His action was later legalized by an Order-in-Council (the WMA was in effect) which also specified that "the orders of the General Officer or of the Officer Commanding the troops shall in all respects be obeyed by the civil population and that offenders against the law, or persons disobedient to such military orders,"
shall be tried and punished by courts martial . . ."8

The troops used bayonets, cavalry, and machine guns to break up the rioters. Four civilians were killed and 58 arrested. The Quebec anti-conscription riots posed a threat to law and order but no threat to government. Yet the reaction of the government had been extreme and the political handling of the situation insensitive to say the least. However, it was not outside the Canadian tradition of strong government reaction. And it should be noted that, in general, the Quebec populace supported the government.

In contrast, in the Winnipeg General Strike of 1919 there were no riots until after the federal and provincial governments intervened and arrested the strike leaders. The Winnipeg General Strike is the only general strike Canada has had, although Quebec strikes of 1972 took on the semblance of an unplanned general strike. The Winnipeg

8 Order-in-Council, 4 April 1918, read in the House on 5 April 1918. Canada, House of Commons, Debates, 1918, pp 378-9. The Order-in-Council also stated

And whereas at common law it is the duty of a military officer with the troops under his command to interfere, when such interference is necessary, to put down riot, insurrection or civil disturbance.

If, the opinion of the General Officer or the Officer Commanding the Military district in which any riot, insurrection or civil disturbance takes place, the circumstances be such as to demand or justify the intervention of the military power, it shall be competent to and within the authority of the General Officer or the Officer Commanding the said military district to issue orders for such intervention . . .

General Strike was very much an event of its time. War weariness, high prices, a feeling that labour was being left out of the political process and the inspiration of the Russian Revolution all contributed to a highly militant radicalism in Western Canada. The pre-strike rhetoric of the militant labour leaders was out and out revolutionary, but their actions during the strike, which lasted 40 days, were the opposite. They urged restraint, took no provocative actions, but did organize an ad hoc strike committee to ensure the delivery of essential supplies to the populace. The issue was, as noted before, the right of collective bargaining. However, the federal government perceived a threat to the authority of the government to govern. The acting Minister of Justice and later Prime Minister, Arthur Meighen, made this clear in the House when he argued that the strike committee had taken control of the necessities of life:

These pretensions are an assertion of government authority. But the strike leaders were driven to make them if they were to continue effectively anything in the nature of a general strike. Consequently I say it is proved by the example of Winnipeg, and indeed follows inevitably from the very logic of the situation, that a general strike to succeed or, indeed, to continue, must result in the usurpation of governmental authority on the part of those controlling the strike. It did so result in Winnipeg; it must ever so result.

...  

It was essential that the greater issue raised by the assumption of Soviet authority — and it

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9 For the background of militant western Canadian radicalism going back to the 1890's see Martin Robin, Radical Politics and Canadian Labour 1880-1930, (Kingston: Queen's University, 1968).
was nothing less on the part of those in control of strike in the city of Winnipeg - should be once and for all decided and be decisively beaten down . . .10

S. D. Clarke in his foreword to D. C. Masters' book on the strike, remarks:

The vigorous intervention of the federal government and the threatened use of military force were in the Canadian tradition of calling upon the authority of the state to suppress any movement which assumed too radical a character. Influences of geography which favoured the dispersion of authority were offset by a strong sense of responsibility for the maintenance of order on the part of the central government. The toleration by the Canadian population of the use of the force, and its sensitiveness to any act which threatened constituted authority, placed nonconformist political elements at a serious disadvantage. To carry out the general strike, the Winnipeg labour leaders were forced to constitute themselves as a sort of ad hoc government. Fifty years earlier in the same western community Louis Riel and his Métis followers had been forced into a similar position in seeking to negotiate better terms with the Canadian government. Both movements carried a threat which would not be tolerated by a state such as Canada, with its long lines of communication to defend, and both met with the decisive intervention of centralized authority.11

The government's perceived threat to government derived as much from the "Red Scare", then pervading Canada, as it did from the logic of a general strike. Senior military officers in the immediate post-war period were much concerned over the danger posed to law and order by bolshevism.12 Aid of the civil power was seen as a

11 D. C. Masters, The Winnipeg General Strike, p X.
significant and immediate role. Troops were called out on "strike duty" in Quebec City in 1921, twice in Sydney, Nova Scotia in 1922 and for a third time in 1923. The result was the amending of the Militia Act so that only the attorney general of a province could request troops. This stopped local officials from requesting almost at will.

Throughout the Great Depression, troops were called out or alerted to deal with strikes or threatened strikes including a threatened general strike in Vancouver. This use of troops for strike duty naturally produced much resentment, and although troops were alerted during the Ford strike in 1945, they were not used again for strike duty until the Montreal policemen's strike in 1969. However during the 1960s, they were routinely alerted for riot duty in the province of Quebec. They were alerted at least once for threatened trouble in Vancouver. The reason was, as before, the small size and decentralized organization of police forces. Montreal and Toronto police forces established riot squads in the late sixties, but they were the exceptions.

It is generally assumed that until the FLQ began operations in 1963, Canada had never had any terrorist activity. This is true except for the terrorist activity of the Sons of Freedom sect of the Doukhobors in the Kootenays in British Columbia. In a thirty-year period up to 1970, the Sons of Freedom (about 2,500 people) were

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13 The writer during part of this period was one of a number of officers of the armed forces responsible for the writing of the revised doctrine for internal security operations. Very seldom was the public aware of these near routine troop alerts and movements.
responsible for 1,200 bombings, 20 deaths and $20 million worth of damage. At the peak of activity in 1962, there were demands for the imposition of martial law. The sect was defeated by a combination of police measures and by the separation of children from parents with the children being sent to boarding schools; in fact held as hostages for good behaviour. In terms of lives lost, numbers of bombings and property damage, the FLQ were never able to come close to the Sons of Freedom. However, the Sons of Freedom were no threat to government and their resistance to compulsory schooling did not become a cause célèbre.

Initially, the FLQ bombings were not considered a threat to government and generated little support. It was not until 1968 and after, when there were serious disturbances and bitter strikes and the provincial government appeared weak in dealing with the mounting social unrest, that the FLQ began to become a political force. However, it was not until the kidnappings of James Cross, the British Trade Commissioner, and Pierre Laporte, the Quebec Minister of Labour, in October 1970 that the FLQ came to be recognized as a threat to government, or as an FLQ leader, Charles Gagnon, put it:

The actions of the FLQ since 1963 have been very positive in the revolutionary evolution of Quebec's people and the last action of the FLQ, the kidnapping of Cross, is a new

14 In contrast the FLQ record was 51 bombings, five deaths, and minimal damage. The FLQ did carry out 21 thefts of arms, dynamite and money. See Gerard Pelletier's October Crisis, Appendix 1 for a list of terrorist activities attributed to the FLQ, pp 197-205. The figures for the Sons of Freedom came from the Toronto Daily Star, October 17, 1970.
kind of action for the FLQ. This action forces the establishment to negotiate with the FLQ and at the same time to recognize it as a political power in Quebec. 15

The countering of the kidnapping challenge to government posed considerable problems for both the Quebec and federal governments. These governments considered that the normal processes of law were insufficient to meet the threat. They therefore turned to the only legislation that seemed to provide the necessary powers. This was the WMA, which had been passed in 1914. On proclamation, the WMA gives extensive powers for the imposition of censorship and for arrest and detention as well as powers to regulate the economy. It is an all-embracing act and allows the Governor-in-Council to "do and authorize such acts and things, and make from time to time such orders and regulations, as he may by reason of the existence of real or apprehended war, invasion or insurrection deem necessary or advisable for the security, defence, peace, order and welfare of Canada . . .". 16

The WMA had been invoked only for both world wars before it was invoked on 16 October 1970 at 4 a.m. "after consideration of all the facts, and particularly of letters received from the Prime Minister of Quebec and the authorities of the city of Montreal reporting a state of apprehended

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insurrection." At the same time, the
government of Quebec requisitioned troops under the aid of
the civil power legislation of Section 233 of the National
Defence Act. These two requests were certainly politically
complementary, but they were not legally complementary.
The succeeding debate has revolved around the use of these
acts, particularly the WMA.

One of the principal defences of the government's
position was made by John Turner, the Minister of Justice,
and it bears quoting at length both as a contemporary
statement of government attitude and as part of the Canadian
tradition:

We have also a series of bombings and violence,
a rising increase in thefts of dynamite now
available in some hidden caches in the province
of Quebec. More disturbing, we have a type of:
erosion of the public will in the feeling among
some sincere people that an exchange of prisoners
for the victims of the kidnappings would somehow
ease the situation.

... Governments have to exercise and fulfil
their responsibilities in meeting it [violence]
... the recent call for a public manifestation
by men like Gagnon, Vallieres and Chartrand
established and escalated the whole coming
together of an infiltration of FLQ doctrine in
certain areas of society of Quebec - in the
unions, among universities and in the media -
and the growing feeling among the people of
Quebec, particularly the citizens of Montreal,

17 Canada, House of Commons, Debates, 28th Parl.,

that they are living under a reign of terror.

... 

Also, at this stage, when we are dealing with a situation which is not completely clear, when we are dealing for the first time in Canada with a type of organization which in peacetime is dedicated to violence and the terrorist overthrow of government, there is advantage in having a certain amount of flexibility, in seeing what we need to deal with this proposition.

... the concept of absolute freedom which at times is dressed up through verbal sleight of hand such as "political prisoners" and "liberation of the people" - this sleight of hand implying that there are absolute rights and absolute liberties in any particular society - is a perversion of the rule of law ... We have been living through a charade that mocks, a charade that seeks to destroy. 19

The full reasons for the government invoking the WMA have by no means been made clear and probably will not be for a long time. However, Mr. Turner's statement seems to have been directed primarily towards a number of public figures in Quebec, who, rightly or wrongly, the federal government thought were trying to set up a provisional government that would be separatist in inclination if not overtly so. 20 There was talk of a government of national

19 Ibid., pp 212-6. As a statement of the government view, there is also Gerard Pelletier's October Crisis but it is written from the personal point of view.

20 As with all such events, speculation remains rife and the hard evidence is in inverse proportion to the amount of speculation. Yet there is some indirect evidence such as Mr. Turner's speech and Gerard Pelletier's October Crisis. For a summary of the indirect evidence see Dennis Smith, Bleeding Hearts...Bleeding Country: Canada and the Quebec Crisis, (Edmonton: M. G. Hurtig, 1971) pp 26-37, 49. Professor Smith is opposed to the invocation of the WMA. He and others concentrate on Mr. Trudeau and generally avoid discussing Mr. Turner's speech, which, I would argue, was the basic defence of the government. For them the use of the WMA was an aberration caused by deficiencies in Mr. Trudeau's political philosophy.
unity which would include René Lévesque. In essence, the federal government and certain members of the Quebec government saw a threat of a separatist government of national unity coming to power over the backs of the FLQ. The counter proposition is that the federal government used the FLQ and the murder of Laporte to stage a coup d'État against the right of the Quebec government to deal with the FLQ as a normal provincial responsibility for the administration of justice. René Lévesque, the leader of the Parti Québécois, charged that "Quebec no longer has a government . . . The stump-state we had was swept away at the first hard blow. The Bourassa government has stood aside and is no longer anything but the puppet of federal leaders."21

Whatever the truth of the matter, the federal government once again made clear that it would tolerate no apprehended or actual threat to government, and that it was prepared to dispense with civil liberties and use the armed forces to enforce its authority. The vast majority of Canadians were reassured and the elite of Quebec given a psychological shock.22 The FLQ, as a terrorist organization,  


22 There appears to be no disputing that the Canadian people, both French and English speaking, supported the government and were reassured by its actions. It is, however, speculative that the aim of the government was to administer a psychological shock, but this would seem to be the reading of Gerard Pelletier's October Crisis.
lost most of the public support it had had in Quebec. The FLQ was a nationalist movement attempting to bring about the secession of Quebec by violent means. It has been compared to violent protest movements and terrorist cells among religious, ethnic, and cultural minorities such as the Irish Republican Army in Ulster, the Black Panthers in the United States and the Utashi in Yugoslavia. The threat posed by the FLQ appears to have greatly receded. It was another challenge to government in Canada but it was unique, localized, short lived, and part of a contemporary transnational trend in violent resistance to government.

As remarked in the beginning of the chapter, there

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23 Pierre Vallières, the leading intellectual and organizer of the FLQ in the middle 1960's, defected after the October Crisis to the Parti Québécois. He argued that:

The October 1970 Crisis gave those in power a general rehearsal of this classical scenario, at a moment when the organization [FLQ], which had through its action set off a crisis, had no means of sustaining a long offensive against the power holders nor of offering the Quebec people the strategy and the arms which would have helped it resist oppression, and still less the method of revolutionary action which would have helped it reach its goals: the conquest of power and the construction of a new society.

... the intellectual conviction that an armed confrontation ... can justify recourse to armed agitation as a method of revolutionary political action in the present situation, was modified by the October crisis ... armed agitation, is today counter-revolutionary.

Vallières' statement was published in Le Devoir on 13 and 14 December 1971; the translation used here is from Henry Milner, "The Implications of Vallières' Declaration," Our Generation, Vol. 8, No. 2, April 1972, pp 27-35.

appear to be no recurring patterns in cause and aim for violent challenges to government in Canada. It is extremely difficult to forecast future challenges. Viewing the Canadian political scene today, there are residues of labour and student militancy in Quebec as an aftermath of the militancy of the 1960's and the widespread strikes of the spring of 1972 when the slogan was "Nous: contre le gouvernement." There remain individuals and small groups in Canadian society who desire the creation of a libertarian socialistic society. However, they lack a radical constituency, which they can exploit, and any propensity to violence seems largely relegated to rhetoric.

In the short term, there appears to be little evidence of any maturing threat to government, or law and order in Canada. In the long term, one can only analyse in generalities, such as the increase in transnational violence, seemingly world-wide decreasing legitimacy of governments, the adverse effects of increasing urbanization unsupported by proportional increases in facilities to

25 For a favourable but reasonably detailed view of these events see Robert Chodos and Nick Auf Der Maur, eds., Quebec: A Chronicle 1968-1972, (Toronto: James Lewis and Samuel, 1972) p 77-142.

26 English Canadian radicalism remains localized to small groups in universities and a small, but often penetrating and articulate, radical press. It is very nationalistic (anti-American) and therefore in contemporary Canada has more influence than might otherwise be expected. Paradoxically, the intellectual influences are principally American. The influences of Hubert Marcuse and the neo-Marxists remain, but this appears to be being superseded by more orthodox social democratic thinking. For a survey of the more radical fringe's writings see Dimitrios J. Rossopaulos, ed., The New Left in Canada, (Montreal: Our Generation Books, Black Rose Press, 1970).
enhance the quality of life and so on.\textsuperscript{27} However valid deductions suggesting the increasing likelihood of violence in the world may be, there is every reason to be beware of extrapolating these into a Canadian context. It should not be forgotten that during the world-wide internal unrest in many countries in the 1960s, Canada emerged largely unscathed. Furthermore, when one remembers the proximity of the United States, it was all the more remarkable.

It would be unwise to forget the FLQ threat, which did last from 1963 to 1970, but its violence was never perceived to be a threat to government until the kidnappings. It never reached anything approaching the scale of the politically motivated violence in the United States or Northern Ireland. Canada has by reason of geography, wealth, history and constitution, a considerable capacity to withstand the pressures of the post-industrial world. It has space to expand and challenging new Arctic and maritime frontiers. It has the potential to be the wealthiest state \textit{per capita} in the world, although it may use its wealth unwisely. It has a history of tolerance and political compromise. The Canadian constitution has been under considerable strain, but apparently its inherent flexibility is providing the required solutions, however disjointed the process may appear. Canadian smugness may be a vice, but it has had certain virtues in isolating Canada from

\textsuperscript{27} There is a plethora of literature on this subject. A recent interesting addition is Ian Smart, "The advanced societies: revolution or devolution?", \textit{International Journal}, Vol. XXVIII, No. 3, (Summer 1973) pp 403-17.
international trends in violence.

The above is not a plea for complacency in preparedness for internal security requirements in Canada, but rather to provide a framework, a perspective, for a consideration of any future challenges and hence of requirements. Today, there appear to be no challenges on the horizon that would require a substantial increase in internal security measures such as an increase of the armed forces or the establishment of para-military forces. There is a clear requirement to maintain a level of manpower, flexibility and mobility so that the armed forces could respond to any sudden request such as the October Crisis. The necessary flexibility and mobility are built into the present structure. However, the command and purposes of troops, when employed on internal security duties in Canada, remain important questions.

The Law and Internal Security

It appears that troops may be called out to the aid of the civil power in at least five different legal contexts. 

1. Under Section 233 of the National Defence Act:

The Canadian Forces, or any unit or other element thereof, or any officer or man, with

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material, are liable to be called out for service in the aid of the civil power, in any case in which a riot or disturbance of the peace requiring such service occurs, or is, in the opinion of an attorney general, considered as likely to occur, and that is beyond the powers of the civil authorities to suppress, prevent, or deal with.

There are two main aspects that require elaboration. First, it is mandatory by law for the federal government to respond immediately to such a request by a provincial attorney general. It is the sole responsibility of the provincial government to decide whether or not troops are required. This arises from the British North America Act which gives responsibility for the administration of justice to the provinces. However, how many and what troops are sent is at the discretion of the Chief of Defence Staff. Furthermore, the present thinking is that the troops sent come under the operational control of the provincial government. In October 1970, the Chief of the Quebec Provincial Police (QPP) had operational control of the troops deployed. This arrangement works well if there is political agreement between the federal and provincial governments; if not, serious complications could arise in which the committed troops could be placed in the most difficult of situations.

Secondly, it is generally agreed that the "riot or disturbance" must be clearly seen to be beyond the capabilities of the provincial authorities. 

29 What is

29 D/Gen H. A. McLearne, "Canadian Arrangements for Aid to the Civil Power," p 26.
beyond the capabilities of the civil authorities is open to judicial decision based on the actual circumstances and the law. The actual circumstances are crucial because there is considerable difference in capabilities between a small provincial government and a large one. Quebec and Ontario have large provincial and municipal police forces. When in 1969 there was a perceived threat by Vancouver hippies and students to take over Stanley Park as a "People's Park", troops were alerted. This was done because what was really likely to be a minor disturbance was beyond the police forces that could be quickly mobilized and deployed in Vancouver. Such a disturbance could have been handled easily by government authorities in Quebec and Ontario.

2. Other federal departments can call on the Department of National Defence for duties related to federal responsibilities such as penitentiaries, protection of federal and diplomatic property and airports. During the October Crisis, troops were used to guard federal buildings, embassies and federal personages. In April 1971 the Solicitor General requested troops to deal with a prison riot at Kingston Penitentiary. In July 1975, a one-day strike by federal prison guards resulted in the calling out of troops to guard the federal prisons. Any form of international terrorism during the 1976 Montreal Olympics could result in troops being called out under this provision if the acts took place on federal property, such as an airport.
3. Under Section 34 of the National Defence Act, Canadian Armed Forces can be used in the case of disasters declared by the Governor-in-Council to be a "national concern." So far there has been no disaster declared as a national concern, and whether one would include internal security duties remains unknown.

4. Under English common law (although this is not reflected in Canadian statute law) if all else fails, the armed forces have an obligation to maintain the fabric of society. "If the effective government of a province were to be incapacitated and in consequence there was no local civil authority to take the requisite steps to obtain immediate military support, the commander of troops would be justified in taking action under the common law to maintain authority and order." The parliamentary committee report suggests that this authority has never been used, but during the 1918 anti-conscription riots in Quebec City, the local commander acted when the mayor refused to read the Riot Act. His action was later legalized by an Order-in-Council. It seems highly unlikely with today's command and control systems, that any commander would so act again without prior political authority.

5. Finally, under the WMA and complementing regulations, troops could be used as the federal government saw fit to deal with a real or apprehended insurrection.

Section 239 of the National Defence Act provides

that when troops are called out for aid of the civil power, they have the powers and legal protection of constables. Under a recent amendment to the criminal code, troops called out for internal security duties under authority other than Section 233, will have the same powers and legal protection. Furthermore, regulations now no longer require troops to act in formed bodies under the command of an officer and to be accompanied by a magistrate. Troops can now be accompanied by a police officer and may be "employed in whatever may be reasonably necessary for the purpose of suppressing or preventing a riot or disturbance of the peace, including patrol duty ordinarily performed by members of a police force to protect persons and property or to keep the peace, and also to guide traffic." These changes are designed to allow for the more flexible use of troops for internal security duties.

Canadian Police Forces and Internal Security

Important factors in any analysis of the purposes for using the armed forces are the small size and decentralized organization of police forces in Canada, and the relatively small number of troops available for internal security duties. The disturbances in the United States in the 1960s and in Northern Ireland have demonstrated that internal security duties in urban centres require large numbers of troops and police. Although each


32 For a good survey of the military problems
of the disturbances in the United States lasted only a few days and involved ghetto riots that could be localized, divisions were deployed. Much of the manpower was used to guard and patrol rather than confront rioters. In Northern Ireland, the protracted nature of the conflict has placed unanticipated demands on manpower. The primary requirement for dealing with urban disturbances, particularly any of a protracted nature, is manpower. The number of urban guerrillas, or just plain rioters, is less significant than their ability to operate over thickly populated urban areas without ever staging an overt insurrection that could be defeated in a set-piece military operation. 33

In Canada, there are three main police organizations. 34 First, there is the RCMP with a strength of about 13,000 distributed all across Canada in small detachments. Second, there are the Quebec and Ontario provincial police forces of about 3,500 and 4,800 respectively. The RCMP acts as
during the American ghetto riots see Robin Higham, ed., Bayonet in the Streets: The Use of Troops in Civil Disturbances, (Lawrence, Kansas, University of Kansas, 1968) and for Northern Ireland see Robert Moss, Urban Guerrillas, (London: Temple Smith, 1972). See also a recent article by Charles Douglas Home, "Reaching the Limits of a Wall-chart War," The Times (London), 19 December 1973, p 14. He quotes a senior officer saying that "if Protestant violence flared badly, coinciding with more of the same from the IRA, you could lose a whole division in Belfast - 20,000 men."

33 For an analysis of urban insurrections and their defeats see Martin Openheimer, Urban Guerrillas, (London: Penguin, 1970) p 95. Even though desirous of bringing about a revolution in the United States, he reached the conclusion that ghetto insurrections were not the answer.

34 See Canada Year Book, 1972, pp 509-12 for figures on police strengths.
provincial police in the other provinces. Third, there are the municipal police forces with a total strength of about 25,000 with Montreal having the largest force of about 3,500. It is also the only city with a really well trained and practised riot squad. Other large urban police forces have a very limited disturbance control capability. Neither the RCMP nor the provincial police forces are well trained in riot control, principally because, being dispersed, they cannot easily be brought together for regular riot control training.

Many countries have special police forces for dealing with major disturbances. This has been recommended for Canada on a provincial basis but there has been no evidence that any government is interested. The primary reasons are cost and what to do with such forces when there are no riots, which in Canada has been the normal condition until very recently, and then riots have been localized in Montreal. The level of disturbances would have to rise considerably before such a force would be created and that level was not reached in the 1960s.

The result of having small and decentralized police forces is the lack of any significant capability, outside

35 See SCEAND, Evidence, testimony of Dr. Szabo, 28th Parl., 4th Sess., No. 4, March 7, 1972, p. 7. He advocated increasing the training time for Quebec Provincial Police recruits so that sufficient number would be available for riot duty. He suggested about a battalion size force. He was opposed to the French CRS concept. However, the size of force he advocated is about one-fifth of the total QPP strength; a force with a low turnover in personnel. This suggests the impracticability of the idea. There just is not the requirement for such a force, which would be expensive, and there is always the "Army".
of Montreal and Toronto, to deal with a major disturbance. Montreal and Toronto do have such a capability but this would vanish if a major disturbance became protracted; and by protracted is meant longer than 24 to 48 hours. This, as in the past, leaves only the armed forces. This reliance on the armed forces was noted in *Defence in the 70s*:

> The Canadian experience over the last two years clearly indicates the necessity of being able to cope effectively with any future resort to disruption, intimidation and violence as weapons of political action . . . While civil disorder should normally be contained by the civil authorities, and the strength of municipal, provincial and federal police forces should be maintained at levels sufficient for the purpose, we must nevertheless anticipate the possibilities that emergencies will again arise which will necessitate the Canadian Forces coming to the aid of the civil power. It is important that the latter should be able to rely upon timely assistance from the Forces. The Forces' role in such situations is important and could be crucial.

Mobile Command commands the only trained and organized forces for internal security duties. A little over 8,000 were deployed during the October Crisis and it is not likely that much more than a maximum of 12,000 could be deployed today. If one relates this figure and Canadian police figures to recent disturbances in other countries, then one can see the inherent weakness in the Canadian

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36 Exhaustion of the Montreal Police Force during the October Crisis was one of the principal reasons given by the Chief of Montreal Police for calling in the troops.

37 *Defence in the 70s*, p 11.

38 The total strength of Mobile Command is 20,000. There are three combat groups (small brigade groups) permanently in Canada with a total approximate strength of 12,000. One of them is French-speaking.
internal security capability. For example, to control a nuclear disarmament demonstration in London, the Metropolitan police mobilized 19,000 policemen; that is, the equivalent of total Mobile Command, Toronto City Police and the Ontario Provincial Police resources. To meet the demands of a Northern Ireland situation would be well beyond present Canadian resources. $^{39}$ Canadian resources are probably sufficient to meet the requirements of a single major, but not overly protracted, urban disturbance. Mr. Benson, when Minister of National Defence, stated that:

... the troops handled the crisis of 1970 very well. It does put a strain on the forces, of course, if numbers have to be moved ... if one had to do the same kind of operation in several places in Canada at the same time, then one would have to consider using reserve forces at that particular time.$^{40}$

Canada's reserve forces are today down to a little over 15,000 and it has been stated that they would be used for duties only "... to the extent that commanders of the Commands concerned considered them qualified to fulfil."$^{41}$ This has been elaborated to mean support functions.

**Military Aid and Non-Military Aid**

The present doctrine is for the regular troops to

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39 The average number of British troops stationed in Northern Ireland over the last few years is 16,000. To meet the requirements of rotation, there is a requirement for at least double this figure.

40 SCEAND, Evidence, testimony of Mr. E. Benson, 28th Parl., 4th Sess., No. 1, February 25, 1972, p 12.

be deployed to support the police and the changes discussed above were designed to facilitate this deployment. This is a departure from previous thinking for: "It has always been considered a vital principle that the military acting in aid of the civil power remain under military command and carry out their functions in a military way, thus assuring that the aid they give is not merely supplementary police aid, but aid of a different character." 42 This difference between supplementary aid and aid of a different character was reflected in Mr. Ian Smart's testimony to SCEAND.

Military forces command today a number of skills which are of growing relevance to internal security, but only a few of those skills are uniquely or strictly military in the sense of being associated with the use or threat of potentially lethal force. In a very large number of cases, if you look at the record, military forces are only called upon for internal security duties because they constitute a reservoir of trained manpower; because they possess a highly organized command structure; because they have a high mobility on land, sea and air, at long range and at short range; and because they can deploy an efficient communication system. Only in rare cases have they recently been called upon to threaten or to use lethal force internally. I do not question that the obvious potential ability of military units to bring lethal force to bear may enhance their effectiveness in some internal security situations, but I am convinced that civil security agencies, when they call in the army, are often calling not for military force, as such, but for the non-military resources and skills - mobility, communications, and the rest - which only seem to exist within national military forces. 43


43 I. M. H. Smart, The Armed Forces and the Civil Authority: Controlling Violence, Behind the Headlines,
I believe that military forces, as such, should only be called upon for internal security when it is military force, rather than non-military support services, which is required. In most Western countries that will be on very rare occasions indeed - occasions so rare that I am far from persuaded of any general need for new types of lethal internal security forces of a para-military nature.  

The difficulty lies in separating in practice supplementary, or non-military aid, from aid of a different character, or military aid. In the October Crisis, troops were called out for both these tasks. Troops were deployed to do what were really police tasks such as house searches. Many became policemen in practice because this was perceived to be the priority requirement. Troops were also retained in formed bodies ready to threaten or use lethal force. This dual function derived from the nature of the threat. There were no large-scale riots, let alone an open threat at insurrection. There was only the potentiality of a "military" task. There were, however, requirements to search houses for arms, explosives and presumed FLQ sympathizers, to guard buildings and public personages and to patrol. If a state (for example France) has a large, centrally controlled police and para-military force, then the dual function role is unlikely to arise for troops. In Canada's case, such police forces are highly unlikely to materialize without the development of a major and seemingly protracted challenge.

Vol. XXXI, Nos. 7-8, (December, 1972) p 5. This is a transcription of his presentation to SCEAND on 16 March 1972.

44 Ibid., p 6.
to law and order.

In meeting the challenge of serious urban violence, it is the demand for disciplined and organized manpower that is the principal requirement. Most of the tasks of the October Crisis allocated to the troops could have been performed by policemen. If there had been sufficient police, then the troops could have been held in reserve. Direct command could have been retained by the federal government, and the troops committed when there was a "military" task.

The dual function role is not a satisfactory one for the armed forces, government, or the police, but is is difficult to see what the alternative is for Canada. Aid of the civil power in Canada has always been predicated on using troops to deal with riots and disturbances, and this is made clear in the past legislation. However, dealing with urban violence is no longer just a matter of riots and disturbances, but of various forms of urban guerrilla warfare. The changes in Canadian regulations have been designed to provide greater flexibility in using troops who have now become constables as well as soldiers for internal security operations. This is undesirable for many reasons, but unavoidable as long as the threat of urban guerrilla-type violence and the present small and decentralized nature of Canadian police forces remain.

There are a number of ways by which the armed forces can assist civil authorities who have to deal with outbreaks

45 See Robert Moss, Urban Guerrillas for analysis of urban guerrilla warfare.
of minor violence. For example, the armed forces have set up explosive ordnance disposal centres at 24 locations, which the civil authorities can call on when required. During the period January 1971 to January 1972, these centres dealt with 549 calls to assist police forces. However, this assistance does not really come under the category of internal security duties. There is no requirement to call out troops in aid of the civil power to render such assistance to civil authorities. Assistance can be rendered with a minimum of delay and is administered in the same manner as assistance to fight forest fires or floods. These types of assistance are presumably what Mr. Smart would also call non-military, but they are not part of internal security duties. Rather, they are normal forms of assistance to civil authorities that will continue as long as people set off bombs or highjack aircraft, whether for political reasons or not. Internal security duties for the Canadian Armed Forces are those duties performed under the five different legal contexts discussed above and in particular under Section 233 of the National Defence Act. Since the Second World War, troops have been called out under this section only twice; for the Montreal police strike in 1969 and for the October 1970 Crisis. Only in the latter case was there a perceived threat to government.

46 G. G. Bell, The Armed Forces and the Civil Authority: Aiding National Development, Behind the Headlines, Vol. XXXI, Nos. 7-8, (December, 1972), p 11. Transcript of his presentation to SCEAND on 21 March 1972. It should be noted that General Bell discusses this form of assistance as aiding national development and not as part of internal security operations.
Purposes and Force Structure

In summary, the purposes for which the armed forces may be used to assist civil authorities in dealing with violence in its various forms are:

1. maintenance of the fabric of society if government becomes incapacitated;

2. an actual or apprehended insurrection;

3. riots and disturbances that are clearly beyond the capabilities of civil authorities to control;

4. violence in areas of federal jurisdiction such as penitentiaries; and

5. supplementary or non-military assistance to civil authorities.

The structural and manpower requirements can only be very generally matched to these purposes unless particular threats can also be related to them. If one begins at the bottom, there is a requirement for specialized manpower for such tasks as bomb disposal. Normal military capabilities have and should continue to meet this requirement for non-military assistance with a minimum of adjustment. This is equally true for assistance to other federal departments. Aside from nuclear war, it is hard to foresee the incapacitation of Canadian civil government. This leaves actual or apprehended insurrection and riots and disturbances beyond the civil capability to control. Earlier, it was argued that today there appears to be no
threat that would justify a large increase in manpower to meet these requirements. Therefore, the "minimal" approach would seem to provide the best criterion for matching structure and requirements. This approach assumes that there will always be a potential threat to internal order as long as violence retains its perceived capability to bring about change. Furthermore, it is assumed that these potential threats to internal order could be beyond the capability of the police and therefore would require the use of the armed forces. If it is also accepted that, barring a readily definable threat, any such threats to internal order are likely to be localized, then the minimal capability should be one that can control a serious disturbance in one locale. Although a disturbance may be localized, it can be protracted and therefore this factor must be built into the possible manpower requirement. Also, to avoid exacerbating the French-English division, it would be advisable to have the manpower to deploy French and English speaking troops in their respective linguistic areas.

The control of protracted rioting, let alone urban guerrilla warfare, in a large urban area requires large numbers of police and troops. The use of minimum force for quelling disturbances is dependent upon having available sufficient police and troops so that non-violent control means can be employed while still retaining a necessary reserve. A shortage of police and troops poses the dilemma of either handing over the streets to anarchy or insurrection or using considerable firepower. If the past is any
criterion, no Canadian government will be prepared to do the former. The above is somewhat oversimplified, but who would have foreseen the requirement for 8,000 troops in Montreal in 1970, and it should be remembered that there were no confrontations with crowds. It is unlikely that any serious urban disturbance that took on a protracted character could be controlled by anything else than 5,000 troops and the total could easily rise rapidly to over 10,000. The very minimum level then for Canada would seem to be 5,000 French speaking and 5,000 English speaking troops and as a safety margin double those figures.

Canada, whether by grace or good management, has been fortunate in having relatively minor violent unrest, although there has been more than is often assumed. In this century, government has perceived two major threats to its authority: the Winnipeg General Strike and the October 1970 Crisis. In neither case was federal intervention using troops brought on by large scale violence, rather the government moved to establish clearly its authority before it considered that the situation would deteriorate further. In fact, in both cases it can be well argued that the federal government used the situations to strike at people whom it perceived to be threat to government. In neither case, in this writer's opinion, was there an actual or apprehended insurrection. However, the federal government in both cases did not hesitate to act.

The federal government may have acted precipitately
in both cases but its motivation was to avert any further deterioration. It was the potentiality rather than the actuality that precipitated intervention. If Canada is faced in the future with other such challenges and these challenges should appear to be, or are, accompanied by some form of urban guerrilla warfare and/or communal disturbances, the pressure on government to intervene early and with maximum force will be considerable. The primary reason, aside from public opinion, will be the weakness of police and military resources to deal with any protracted and widespread violence. To a certain extent government was bluffing in October 1970, but no one apparently had either the will or the means to call that bluff. In dealing with any serious disturbance, there is no substitute for large numbers of trained and disciplined troops. This provides government with flexibility and confidence to deal with the threat, actual or perceived, to peace, order and good government. It allows government to carry out a policy of controlled escalation or to act immediately with maximum force. Canada has been fortunate so far compared to most nations, but this should not be construed as weakness or tolerance of violence because the Canadian tradition belies such views.

Internal security will remain an important task of the armed forces. The scale and type of internal security duties will vary in the future as they have in the past, but the upholding of the authority of government for the peace, order and good government of Canada will remain a
primary task regardless of the number of times troops are called out or not called out.
CHAPTER 10

RENDERING UNTO CAESAR ... AND CANADIAN DEFENCE OPTIONS

Context and Problem

To create a viable Canadian state in the face of considerable geographical, climatic and cultural obstacles has been an immense challenge, and the contiguous presence of one of the most dynamic and powerful states the world has ever known has vastly complicated the problem.¹ The implications of this continental imbalance for Canadian defence policy has been only one aspect of the total problem. It has been a continuous problem of national psychology in which the preservation and development of Canadian national confidence has been a primary concern. To avoid being faced

1 Perhaps the most articulate statement of the Canadian challenge is W.L. Morton's conclusion to his The Canadian Identity, (Toronto: University of Toronto Press, 1961), pp 113-4.

It was ... a unity of king, church, and people Canadians, both French and English, inherited from their remoter past and have elaborated in their history as a monarchical and democratic nation.

The preservation of such a national society is not the unique mission of Canada, but it is the central fact of Canadian history, that it has been preserved and elaborated by Canadians in one of the largest, harshest, and most intimidating countries on earth. Canada, that is, has preserved and confirmed the essentials of the greatest of civilizations in the grimmest of environments. It is an accomplishment worthy of a better end than absorption into another and an alien society, however friendly and however strong in its own ideals. In that accomplishment and its continuance lies the relevance of Canadian history.
with full implications of the continental imbalance, Canada has sought an overseas counterbalance, first in the British Empire, and then in European ties and a world role as middle power. The formulation of Canadian defence policy has reflected this need to offset the continental imbalance by overseas commitments as a member of the British Empire, of the Anglo-American alliance of the Second World War, of NATO and in peacekeeping. However, the influence of the continental imbalance should not be viewed as a single factor determinant but as a continuously operating factor which has varied and will continue to vary in its influence on the formulation of Canadian defence policy.

Canadian Defence Policy and United States Isolationism and Expansionism

Conventional wisdom would suggest that the influence of the continental imbalance on the formulation of Canadian defence policy would be greatest when the United States was isolationist, concerned with continental expansion, and acting as the guardian of the Western Hemisphere. However, in the last one hundred years United States overseas expansionism has had far greater influence on the formulation of Canadian defence policy than when the United States has been isolationist.

In the 1860s, Anglo-American disputes arising from the American Civil War were the main cause of United States antipathy to Canada. The extension of the Manifest Destiny to Canada was viewed more as a form of retributive justice for British misconduct than as a solution to continental disputes. The Treaty of Washington in 1871 removed what were really minor irritants in Anglo-Canadian-United States relations. Immediate Canadian interests were sacrificed,
but the gain in security far outweighed the sacrifice. Canada was able to gain its West with two minor military campaigns, a police force and a railway without overt United States interference.

This mid-century United States threat did result in the reform of the Canadian Militia and a greater responsibility for national defence, but as a member of an Anglo-Canadian alliance. The Militia reforms were designed to provide some defence until the arrival of British military power, and politically to ensure that it would arrive. As the perceived military threat declined, Canada refused to make any contributions to Imperial defence on the assumption that the British guarantee to defend Canada would continue.

It was not until the 1890s and early 1900s, when the United States entered a bellicose phase of hemispheric and overseas expansion, that the military threat to Canada surfaced again. And again, it was a non-Canadian-United States issue, the Venezuelan Incident, which caused invasion to be feared. The Alaskan Boundary dispute, however, was a Canadian-United States dispute in which the full extent of United States continental power and the limitations of the Anglo-Canadian alliance were made clear. The resulting shock, the growth of Imperial sentiment and the increasing self confidence produced a metamorphosis in Canadian attitudes to defence and to the importance of the Anglo-Canadian alliance. Canada participated in the Boer War. The essential framework for a national army was created, and the start on a navy was made. Canada moved to ensure sovereignty over the Yukon with the dispatch of the Yukon Field Force.
and over the high Arctic by sovereignty voyages and police presence. This activity resulted from fear of United States commercial and exploratory interests. The increase in military forces, as well as northern and western activity, reflected the development of Canada from colony to nation and as the Anglo-Canadian alliance grew in closeness, the continental imbalance declined in importance.

United States isolationism precluded its participation in the First World War until 1917, but Canadian participation on a scale unimagined in the pre-war years was automatic and substantial considering Canadian political demography. It was Canadian economic requirements rather than the need for military cooperation that drew Canada and the United States into a short wartime alliance. The ratio of forces overseas was nearly 1 to 2 compared to 1 to 12 in the Second World War. In this period, the continental imbalance had insignificant influence on Canadian defence policy.

The primary Canadian weakness was in naval power, and it was the naval question that was of crucial importance to Canadian defence policy in the immediate post-war years. For Canada, the naval question was a matter of Canadian-Empire-United States relations. Wisely or unwisely, Canadian pressure was instrumental in the non-renewal of the Anglo-Japanese Treaty because of United States opposition to it. The Washington Conference on Naval Disarmament left the United States dominant in the Western Atlantic.

The period 1917-1922 was a short period of active United States overseas involvement but it made clear that the United States had become a world power and unchallengeable in the Western Hemisphere. Canadian defence, notwithstanding Buster Brown, could no longer be predicated on the
Empire coming to Canada's assistance. This change in the strategic situation was counterbalanced by improved Anglo-United States and Canadian-United States relations.

In the inter-war years, both Canada and the United States did have very vague war plans for a North American war but this was not reflected at the political level. The United States war plans assumed war in North America could result from overseas disputes and not from continental ones. The Canadian Defence Scheme No 1 was the result of ingrained anti-Americanism. Both the Canadian and United States military forces shared the common problem of having isolationist governments and until the 1930s, there were no immediate threats to the homeland. During the inter-war years, the continental imbalance had little influence on Canadian defence policy until the war clouds began to gather. Isolationism certainly restrained any move toward military cooperation, but the differing perceptions of the developing threat by Canadians and Americans, and in particular by the military staffs of the two countries, reinforced the lack of interest in military cooperation.

Neutrality was never more than a legalistic option for Canada, whereas it was the option pursued by the United States until Pearl Harbor. This derived from differing historical experiences, interests and sentiments, and the military staffs in each country very much reflected these differences. The Canadian Chiefs of Staff were politically precluded from actively preparing for an overseas expeditionary force or even providing credible defence of Canada forces. However, they never deviated from their appreciation that the defence of Canada began in Europe. The United States was concerned with the direct defence of
the Western Hemisphere and its Pacific interests. In the period from Ogdensburg to the United States entrance into the war, Canadian-United States joint planning for continental defence was never able to reconcile these differing perceptions. Canada, which was at war in Europe, was not prepared to allow United States control over its armed forces to counter an invasion threat that Canada considered was unlikely to materialize. For the United States, it was the only threat and it set itself up as guardian of the Western Hemisphere.

In this period of continued United States isolationism, continental defence consisted of very general planning. There was no United States military presence in Canada, no United States control over Canadian forces and minimal cooperation below the planning level. In fact, there developed a clear conflict of interest over Newfoundland, and Canadian-United States cooperation was a source of friction there for most of the war. However, Ogdensburg did herald a fundamental change in the workings of the continental imbalance. The inclusion of the word "permanent" in the Permanent Joint Board on Defence at Roosevelt's request, and without any Canadian resistance, demonstrated that the United States regarded continental defence as a permanent military fact.

The expansion of United States military activity in Canada began after it had entered the war and the direct threat to North America had ended. The Northwest Staging Route, the Alaska Highway and the CRIMSON project were
related to United States overseas operations and not to continental defence. Canada consented to these programmes because the United States believed, mainly mistakenly, that they were necessary for the overall war effort. Similarly, Canada accepted United States strategic direction in the Northwest Atlantic to avoid damaging the war effort.

With the end of the war and overseas operations, United States military activity in Canada declined rapidly. However, the United States had developed a strategic interest in the Canadian Arctic, gained access to Goose Bay as a military base and obtained virtually permanent bases in Newfoundland. It had in the PJBD a well tried instrument for military cooperation of a purely bilateral character, and it had hopes of drawing Canada into the military family of American nations. This was to be achieved by a formal or an informal alliance and organizational and weapon standardization, a replication of the Anglo-Canadian defence relationship of the preceding 100 years.

However, in the interlude between peace and the Cold War, Canadian-United States military cooperation was restricted to mutual cooperation arrangements primarily related to the Arctic. Canada accepted that United States defence requirements would have to be an important factor in Canadian defence policy but was not prepared to enter into a formal bilateral defence alliance. It was, however, clearly understood that mutual cooperation arrangements would not be satisfactory if air defence became a major strategic requirement. Air defence was the "sleeper" and
the requirement for it would be decided by the prevailing strategic situation over which Canada had little influence.

Although, as a direct result of the war, Canada had become a maritime power, it chose, for economic reasons, not to maintain a sustained maritime effort. However, the right to trade freely across the seas remained the primary Canadian maritime and overseas interest. The United States Navy had become the dominant navy in the world and the RCN became a de facto sub component of it, as it had been of the Royal Navy in the past. This derived from the strategic reality of the indivisibility of command of the seas and the clear Canadian interest that command should remain with a friendly state. The new and dependent relationship with the United States Navy was not the result of an alliance or of a voluntary or an involuntary Canadian decision, but a consequence of strategic reality. The degree of Canadian dependence, as in the past, would be the extent of the Canadian contribution to continued United States command of the seas in areas of vital interest to Canada.

As the international situation deteriorated in the late 1940s, Canada was in the forefront of the activity for the formation of the NATO alliance, with a primary reason being the desire to offset bilateral defence with multi-lateral defence arrangements. Canadian political and military leaders were united in their perception that Europe was Canada's strategic frontier and the allocation of military resources to Europe and the defence of the North Atlantic were greater than those allocated for continental
defence. In the early 1950s, a small amount of Canadian-United States military activity in the North, the construction of the Pinetree line and the establishment of a joint air defence capability were the only continental defence activities. The United States military presence was for manning a small number of Pinetree line stations and the Newfoundland bases.

This changed when air defence became an essential component of the United States deterrent system and the United States accepted the responsibility for the ultimate defence of the Western World. The strategic requirements for early warning and protection of bomber bases and the limits of available air defence technology placed a premium on Canadian geography for the period 1954-1964. The Canadian contributions in geography and military resources for the protection of the United States nuclear deterrent were contributions to the Western Alliance. Canada, the United States and Europe all benefited from increased security.

The arrangements for the increase in air defence capability took place in a purely continental context for three main reasons. The first was the obvious one of geography. The second was the United States insistence that continental defence arrangements be limited to a bilateral relationship. The third was the absolute refusal of the United States to agree to any form of alliance control over its deterrent. Canadian attempts to relate organizationally NORAD and NATO were doomed to failure...
once air defence became a component of the deterrent. It was this strategic fact, and not the NORAD Agreement, that caused the continental imbalance to assume the proportions it did in the 1950s and 1960s.

Canadian naval policy in the same period became directly involved in the protection of the United States deterrent. The shift from the former primary role of protection of shipping required no new organizational arrangements or equipment. It was the same navy, with the same equipment doing basically the same task in the same area but for a different strategic requirement. The multinational NATO alliance served as a sufficient command and control framework because naval operations against SSBNs, although indivisible in an oceanic context, were divided into separate Canadian and United States areas. The NORAD type arrangement was simply unnecessary.

The period of very active United States overseas expansionism appears to be coming to an end. The Vietnam experience, domestic problems and detente have been the major reasons. At the same time, there have been significant changes in the strategic environment which have allowed the United States to reduce its overseas commitments without seriously affecting its basic security. Soviet and United States deterrents have been in part replaced by a joint system of deterrence that seeks to reinsure rather than purely to threaten. This allows greater freedom of action and choice for smaller states, and its operations have certain similarities to that of Pax Britannica in the
The most significant development in this deterrence system has been the apparent decision of both superpowers not to pursue active strategic nuclear defence systems, but instead to rely on changes in offensive systems which can be home and sea based. This has reduced the requirement for foreign bases, but even with advances in satellite early warning systems and the increased range of SLBMs, the requirement has by no means completely disappeared. For Canada, this has meant the end of the United States strategic requirement for anti-bomber defences and an apparent lessening of activity for counter-SSBN operations.

The Separation of National, Continental and NATO Defence Requirements

Since 1945, there have been four white papers on defence (1949, 1959, 1964 and 1971), and each has listed the priorities for defence. The priorities have been basically the same. They have been the defence of Canada/North America, NATO contributions, and peacekeeping/non-NATO overseas operations. The difficulty has not been in the listing of what were obvious priorities, but their practical separation for the allocation of resources. The allocation of resources for peacekeeping has always been simple because, as the 1964 White Paper on Defence stated:

"The combined land, sea and air forces normally stationed in Canada and at Canadian ports will be sufficiently flexible to satisfy almost any conceivable requirement for UN or other operations."² Although Mr. Hollyer has been

accused of giving too much emphasis to peacekeeping, he ranked it second to last, the last being reserve forces. The practical separation of the other priorities has proved the most difficult problem in Canadian defence policy. Canadian policy has assumed a near complete coincidence of security interests within the Western Alliance. This assumption has made it extremely difficult to provide a clear separation between national and continental defence requirements and between continental and NATO defence requirements.

The separation of national and continental defence has been difficult since 1939 because of the indivisible character of any direct attack on North America. Any direct attack meant the requirement for common defensive measures. The neatness of this equation has been dependent upon a common perception of the threat.

Until the Cuban Missile Crisis, differing perceptions had been over the likelihood of attack and therefore how close should be the defence relationship, particularly for command arrangements. In the Cuban Missile Crisis, Canada found that continental defence, because of its relationship to United States offensive power, could be used for purposes not only with which Canada disagreed, but which were also probably inimical to Canadian interests. Yet as long as NORAD was considered to be an essential component of the United States deterrent, Canada had little option but to acquiesce. It has been impossible to separate national and continental air defence requirements as long as anti-bomber defences remained a strategic requirement. This is no longer the situation and therefore it is possible
to have separate national air defence forces in North America, while at the same time fulfilling the remaining United States strategic requirements for early warning and overflights.

Although at certain periods the United States has been marginally more concerned than Canadians over Arctic territorial defence, there has been a common perception of a minimal threat. Territorial defence has never been a high Canadian military requirement because home based forces committed to overseas requirements have been always available. The implementation of the 1964 White Paper on Defence for structural and equipment changes have improved Canadian territorial defence capability as a by-product of greater mobility and firepower created for overseas operations. Because of this increased capability, Canada, today, is less dependent on the United States for territorial defence than it has been since 1939. National and continental territorial defence requirements have been the easiest to separate and never more so than today. This separation and improved territorial defence capability have allowed protection of sovereignty tasks to be carried out as required with no increase in capability being necessary.

The indivisibility of national and continental air defence requirements was formalized by the NORAD Agreement, but no such agreement was necessary for maritime defence. Until the late 1960s, there was sufficient coincidence of maritime interests between Canada and the United States and European NATO, that there was no need to separate maritime defence into separate categories. Canadian naval policy was
really a question of how large a contribution to make to the common interest. There was no loss of sovereignty, no United States presence and largely unnoticeable and informal United States strategic control. The end of the indivisibility of command of the seas in war as a naval objective; the end of the indivisibility of the seas for economic use in peace; and the end of the indivisibility of the coincidence of maritime interests between Canada and the major maritime states are forcing Canada into a review of its naval and maritime policies which is as fundamental as the original decision to create a navy.

The redundancy of the United States requirement for anti-bomber defence allows air defence to become a national requirement for which the equipment decisions are relatively simple. Such simplification is not possible for maritime defence. It is likely to prove the most difficult defence problem Canada will face in the next decades. It will be primarily a problem of separating collective and national maritime defence tasks in the context of the continental imbalance. How complicated the problem will be will depend largely on international and strategic factors over which Canada has little influence. Favourable international law of the sea outcomes and minimal requirement for counter-SSBN operations in contiguous waters will greatly simplify the problem. However, present evidence would suggest that less favourable developments are more likely.

Complete separation of national and continental maritime defence requirements will be impossible because of Canadian dependence on overseas trading and hence on United
States seapower. In a directly continental context, the degree of separation will be dependent on Canadian naval capability to carry out, independently, maritime defence tasks related to both collective defence and national maritime interests.

Continental defence and NATO were, in the Canadian mind, parts of a whole in which the whole was greater than the parts. That they were to prove in practice more as separate entities than as parts of a whole has been at the root of the dissatisfaction with Canadian defence policy in recent years. NATO's dependence on the United States deterrent and the United States policy of maintaining independent control over it, precluded NATO from offsetting the continental imbalance to the expected degree. For some Canadians, United States dominance over NATO, inevitable as it was, caused them to seek, in other international activity, a means to offset the continental imbalance.

Canadian interests in Europe have never been purely strategic, on the contrary, they have been primarily political, economic and cultural. These interests, reinforced by sentiment, have been far stronger for Canada than for the United States with its tradition of self-sufficiency and anti-European feeling. In Canada, anti-European feeling would have meant isolation and fear of United States absorption. In the United States, it meant independence and hemispheric dominance. Paradoxically, Canadian anti-NATO and anti-American feeling developed as Europe recovered in power and hence could act as a better counterbalance. The argument that Canada should reduce its military commitment
because of European recovery was fallacious if the Canadian policy objective was to use Europe as a counterbalance. That the present government has reversed its policy toward Europe/NATO is a reaffirmation of a consistent Canadian policy since 1867. This reversal has been in part the government's response to rising anti-Americanism, and a realization that many of the presumed advantages of continental integration can prove to be disadvantageous in very material terms.

The military aspect of the Canadian-European relationship was solved by increasing compatibility with home based forces, finding non-nuclear roles and home basing part of the NATO commitment while retaining a central front presence. The military forces for territorial defence, peacekeeping and non-NATO overseas operations, the northern flank commitment and central front presence are structurally the same, and can be rotated from task to task. On what task they are employed becomes largely immaterial. This rotational capability, however, does not solve force strength requirements. Forces allocated for the central front role and on peacekeeping in the Middle East, for example, cannot at the same time be available for territorial defence/protection of sovereignty and northern flank operations.

The present government by reversing its 1969 priorities in practice has reverted to the previous policies of emphasizing overseas commitments. Peacekeeping provides a separate and morally satisfying role for Canada as a Middle Power, and the European commitment is one of the costs Canada must apparently bear for the Canadian-European
relationship it wants. These two commitments are of as much benefit to the national psychology as they are to Canadian political, economic and security interests.

The Continental Imbalance and Canadian Defence Options

The Canadian nationalist charge is that Canada, in this century, has moved from British colony to nation to United States satellite, and that continental defence relationships have been one of the main culprits. In addition, Canadian adherence to a United States dominated NATO, long after it has outlived its security function, has compounded the satellite status of Canada. The nationalist solution is to withdraw from NATO and NORAD and to seek a morally uplifting role in the third world.

Interestingly, the maritime aspects of Canadian defence relationships are seldom criticized. This derives from the lack of any formalized bilateral arrangement from which to withdraw, and a general unawareness of Canadian naval operations. In their search for independent Canadian foreign and defence policies, the nationalist critics fail to recognize that Canadian relations with the industrial world, principally the United States, Europe and Japan, are paramount. They assume erroneously that foreign and defence issues can be separated from these relations as though all that was lacking was the Canadian will to do so. As those in the Canadian government who favoured withdrawal from NORAD and NATO in the late 1960s belatedly discovered, impeccable Canadian logic that NORAD and NATO were redundant security institutions fell on somewhat stony ground when overall Canadian-United States-European relations had to be
Nevertheless, Canada today has more options available to it for defence than it has had since the late 1940s. This derives mainly from changes in the strategic environment that allow for a redefinition of continental defence requirements which favour a greater separation of Canadian national and continental defence requirements. This is particularly true for air defence, but less so for maritime defence. It allows for a re-examination of institutions such as NORAD and the PJBD that favours a return to mutual cooperation command arrangements and that emphasizes less the permanent and more the temporary character of the Canadian-United States defence relationship. However, as long as the United States remains a superpower with worldwide interests, there can be no return to the complete lack of military cooperation of the inter-war years.

To what extent Canada takes up the wider set of options now available, will depend upon the Canadian willingness to accept responsibility for its own air and maritime defence to meet both national and the remaining United States strategic requirements. It is not a matter of these defence responsibilities disappearing, but rather that strategic changes make it possible to carry them out as national defence responsibilities. If Canada accepts them as national defence responsibilities, it will require an increased Canadian defence effort which is likely to be marginal for air defence but perhaps substantial in maritime defence. However, in terms of national interest, whether air defence becomes a national, or remains a continental,
defence responsibility is of far less importance than is maritime defence.

If the potential of Canada's emerging maritime interests develops, the development and protection costs of exploiting Canada's maritime frontier may be high. The requirement for Canada for the unhindered use of its contiguous waters and continental margin may well become Canada's principal defence requirement. The creation of a substantial naval capability in peace, will require a revolution in Canadian political and defence thought, but it may prove to be the most beneficial form of Canadian defence activity for the remainder of the century. The reason lies in the inherent flexibility of naval power in a world where flexibility in military power is becoming increasingly important. An increased naval capability would allow for United States deterrent protection requirements to be met with minimal United States involvement in Canadian waters, and for the protection of national maritime interests. At the same time, it would also be an additional Canadian contribution to NATO which would assist in offsetting the reduced Canadian presence in Europe and in maintaining the essential link between Europe and North America.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABC</td>
<td>America-British Commonwealth</td>
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<tr>
<td>ABM</td>
<td>anti-ballistic missile</td>
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<td>ACE</td>
<td>Allied Command, Europe</td>
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<td>AICBM</td>
<td>anti-inter-continental ballistic missile</td>
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<tr>
<td>ALCANUS</td>
<td>Alaska, Western Canada, Western United States</td>
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<tr>
<td>ASM</td>
<td>air to surface missile</td>
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<tr>
<td>AWACS</td>
<td>airborne warning and control system</td>
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<tr>
<td>BAOR</td>
<td>British Army of the Rhine</td>
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<tr>
<td>B. bbls</td>
<td>billion barrels</td>
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<tr>
<td>BMD</td>
<td>ballistic missile defence</td>
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<td>BMWES</td>
<td>ballistic missile early warning system</td>
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<td>BNA</td>
<td>British North America (Act)</td>
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<tr>
<td>BUIC</td>
<td>back-up interceptor control</td>
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<tr>
<td>CADIN</td>
<td>Continental Air Defence Integration North</td>
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<tr>
<td>CANLANT</td>
<td>Canadian Atlantic (zone)</td>
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<tr>
<td>CASS</td>
<td>Canadian Air Surveillance System</td>
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<tr>
<td>C.B.C.</td>
<td>Canadian Broadcasting Corporation</td>
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<td>CCF</td>
<td>Cooporative Commonwealth Federation</td>
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<tr>
<td>CIBG</td>
<td>Canadian Infantry Brigade Group</td>
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<tr>
<td>CINCNORAD</td>
<td>Commander-in-Chief, North American Air Defence</td>
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<tr>
<td>CINCLANT</td>
<td>Commander-in-Chief, Atlantic</td>
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<tr>
<td>CINCWESTLANT</td>
<td>Commander-in-Chief, Western Atlantic</td>
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<tr>
<td>CMDBG</td>
<td>Canadian Mechanized Brigade Group</td>
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<tr>
<td>COMCANDLANT</td>
<td>Commander Canadian Atlantic (sub-area)</td>
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<tr>
<td>CONAD</td>
<td>Continental Air Defense (Command)</td>
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<tr>
<td>CONUS</td>
<td>Continental United States</td>
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<tr>
<td>CRS</td>
<td>Compagnies Républicaines de Sécurité</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>CUSRPG</td>
<td>Canada-United States Regional Planning Group</td>
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<tr>
<td>DDII</td>
<td>destroyer escort equipped with helicopters</td>
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<tr>
<td>DEFCON</td>
<td>Defence Condition</td>
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<tr>
<td>DEW</td>
<td>distant early warning</td>
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<tr>
<td>DND</td>
<td>Department of National Defence</td>
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<tr>
<td>DWT</td>
<td>deadweight tons</td>
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<tr>
<td>ECM</td>
<td>electronic counter measures</td>
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<tr>
<td>EEC</td>
<td>European Economic Community</td>
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<tr>
<td>ENDC</td>
<td>Eighteen Nation Disarmament Committee</td>
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<tr>
<td>FLQ</td>
<td>Front de libération du Québec</td>
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<tr>
<td>FOBS</td>
<td>fractional orbital bombardment system</td>
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<tr>
<td>GIUK</td>
<td>Greenland, Iceland, United Kingdom (gap)</td>
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<tr>
<td>GNP</td>
<td>gross national product</td>
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<tr>
<td>GOCs</td>
<td>General Officers Commanding</td>
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<tr>
<td>IIQ</td>
<td>Her Majesty's Canadian Ship</td>
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<tr>
<td>ICBM</td>
<td>intercontinental ballistic missile</td>
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<tr>
<td>ICNAF</td>
<td>International Convention for the North West Atlantic Fisheries</td>
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<tr>
<td>IMI</td>
<td>improved manned interceptor</td>
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<tr>
<td>LORAN</td>
<td>long range aids to navigation</td>
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<tr>
<td>LOS III</td>
<td>Law of the Sea Conference, Number Three</td>
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<tr>
<td>MARCOM</td>
<td>Maritime Command</td>
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<tr>
<td>MIRV</td>
<td>multiple independently targetable re-entry vehicle</td>
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<tr>
<td>MOT</td>
<td>Ministry of Transport</td>
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<tr>
<td>M.P.</td>
<td>Member of Parliament</td>
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<tr>
<td>MTE</td>
<td>megatons equivalent</td>
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<tr>
<td>NADGE</td>
<td>NATO air defence ground environment (system)</td>
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<tr>
<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
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<tr>
<td>N.B.</td>
<td>New Brunswick</td>
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<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>nm</td>
<td>nautical mile</td>
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<tr>
<td>NORAD</td>
<td>North American Air Defence (Command)</td>
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<tr>
<td>NSC</td>
<td>National Security Council</td>
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<tr>
<td>OTH-B</td>
<td>over the horizon - backscatter (radar)</td>
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<tr>
<td>PC</td>
<td>Privy Council</td>
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<tr>
<td>PJBD</td>
<td>Permanent Joint Board on Defence</td>
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<tr>
<td>OPP</td>
<td>Quebec Provincial Police</td>
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<tr>
<td>RCAF</td>
<td>Royal Canadian Airforce</td>
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<tr>
<td>RCC-S</td>
<td>Regional Control Center- SAGE</td>
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<tr>
<td>RCMP</td>
<td>Royal Canadian Mounted Police</td>
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<tr>
<td>RCN</td>
<td>Royal Canadian Navy</td>
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<tr>
<td>RN</td>
<td>Royal Navy</td>
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<tr>
<td>RSC</td>
<td>Revised Statutes of Canada</td>
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<tr>
<td>SAC</td>
<td>Strategic Air Command</td>
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<tr>
<td>SACEUR</td>
<td>Supreme Allied Commander, Europe</td>
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<tr>
<td>SACLANT</td>
<td>Supreme Allied Commander, Atlantic</td>
</tr>
<tr>
<td>SAGE</td>
<td>semi-automatic ground environment (system)</td>
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<tr>
<td>SALT</td>
<td>Strategic Arms Limitation Talks</td>
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<tr>
<td>SAM</td>
<td>surface to air missile</td>
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<tr>
<td>SAM-D</td>
<td>surface to air missile-development</td>
</tr>
<tr>
<td>SCEAND</td>
<td>Standing Committee on External Affairs and National Defence</td>
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<tr>
<td>SCMFF</td>
<td>Subcommittee on Maritime Forces</td>
</tr>
<tr>
<td>shp</td>
<td>shaft horse power</td>
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<tr>
<td>SLBM</td>
<td>submarine launched ballistic missile</td>
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<tr>
<td>SPADATS</td>
<td>Space Detection and Tracking System</td>
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<tr>
<td>SS</td>
<td>steamship</td>
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<tr>
<td>SSBN</td>
<td>ballistic missile nuclear powered submarine</td>
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<tr>
<td>STANAVFORLANT</td>
<td>Standing Naval Force Atlantic</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNEF</td>
<td>United Nations Emergency Force</td>
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<tr>
<td>U.S.</td>
<td>United States</td>
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<tr>
<td>USN</td>
<td>United States Navy</td>
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<tr>
<td>WMA</td>
<td>War Measures Act</td>
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</table>
The bibliography is divided into four sections. The first contains the official publications of the governments of Canada and the United States, the Canadian House of Commons and the United States Congress. The second section is sub-divided into books and articles for the pre-1945 period. The third section, for the post-1945 period, is divided into three subdivisions containing books, articles, and pamphlets and reports. Non-official government publications are included in the pamphlets and reports subdivision. The last section contains unpublished manuscripts covering both periods.

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