

A One Ocean Fleet : the Atlantic and Canadian Naval Policy

Joel J. Sokolsky

Volume 34, numéro 93, 1990

URI : <https://id.erudit.org/iderudit/022129ar>

DOI : <https://doi.org/10.7202/022129ar>

[Aller au sommaire du numéro](#)

Éditeur(s)

Département de géographie de l'Université Laval

ISSN

0007-9766 (imprimé)

1708-8968 (numérique)

[Découvrir la revue](#)

Citer cet article

Sokolsky, J. J. (1990). A One Ocean Fleet : the Atlantic and Canadian Naval Policy. *Cahiers de géographie du Québec*, 34(93), 299–314.
<https://doi.org/10.7202/022129ar>

Résumé de l'article

Depuis le début de la guerre froide jusqu'à nos jours, la marine canadienne constitue une flotte confinée à un océan, se consacrant avant tout à la guerre anti-sous-marine au service de l'Organisation du traité de l'Atlantique Nord (OTAN) dans l'océan Atlantique. Divers plans, incluant le Livre blanc sur la défense de 1987, visant à rétablir l'équilibre au niveau des aires d'opération de la marine canadienne ainsi qu'au niveau de la puissance navale et de ses différentes missions, ont été jusqu'à date infructueux. La principale raison de cette situation est que le rôle maritime de l'OTAN a été directement relié à l'objectif de la politique étrangère canadienne, en vigueur depuis longtemps, consistant à une participation active dans cette alliance multilatérale. De plus les forces affectées au Commandement allié de l'Atlantique de l'OTAN (ACLANT) pouvaient aussi être utilisées pour des rôles maritimes nord-américains en coopération avec la marine américaine ainsi que pour des tâches non militaires reliées à la protection de la souveraineté. De récents changements dramatiques au niveau de la sécurité internationale combinés à des restrictions budgétaires domestiques vont probablement faire en sorte que l'orientation atlantique de la politique navale canadienne va se poursuivre.

A ONE OCEAN FLEET: THE ATLANTIC AND CANADIAN NAVAL POLICY

by

Joel J. SOKOLSKY

*Department of Political and Economic Science,
The Royal Military College of Canada,
Kingston (Ontario), K7K 5L0*

ABSTRACT

From the beginnings of the Cold War until the present the Canadian Navy has been a one ocean fleet, postured primarily to supply anti-submarine warfare (ASW) forces to the North Atlantic Treaty Organization (NATO) in the Atlantic. Various plans, including the 1987 White Paper on defence, to give the Navy more balance in terms of its areas of operation, mix of forces and missions, have been largely unsuccessful. The main reason for this is that the NATO maritime role has been directly related to the long-standing Canadian foreign policy objective of participating in this multilateral Alliance. In addition, forces earmarked for NATO's Atlantic Command (ACLANT) could also be used for North American maritime roles in cooperation with the United States Navy (USN) and for non-military sovereignty protection tasks. Recent dramatic changes in the international security environment combined with domestic budgetary pressures are likely to result in a continuation of this Atlantic orientation in Canadian naval policy.

KEY WORDS: Canadian Navy, NATO, collective defence.

RÉSUMÉ

Une flotte confinée à un seul océan: la politique navale canadienne dans l'Atlantique

Depuis le début de la guerre froide jusqu'à nos jours, la marine canadienne constitue une flotte confinée à un océan, se consacrant avant tout à la guerre anti-sous-marine au service de l'Organisation du traité de l'Atlantique Nord (OTAN) dans l'océan Atlantique. Divers plans, incluant le Livre blanc sur la défense de 1987, visant à rétablir l'équilibre au niveau des aires d'opération de la marine canadienne ainsi qu'au niveau de la puissance navale et de ses différentes missions, ont été jusqu'à date infructueux. La principale raison de cette situation est que le rôle maritime de l'OTAN a été directement relié à l'objectif de la politique étrangère canadienne, en vigueur depuis longtemps, consistant à une participation active dans cette alliance multilatérale. De plus les forces affectées au Commandement allié de l'Atlantique de l'OTAN (ACLANT) pouvaient aussi être utilisées pour des rôles maritimes nord-américains en coopération avec la marine américaine ainsi que pour des tâches non militaires reliées à la protection de la souveraineté. De récents changements dramatiques au niveau de la sécurité internationale combinés à des restrictions budgétaires domestiques vont probablement faire en sorte que l'orientation atlantique de la politique navale canadienne va se poursuivre.

MOTS-CLÉS: Marine canadienne, OTAN, défense collective.

*

* * *

Table 1

Relevant Acronyms

ACLANT	North Atlantic Treaty Organization's Atlantic Command
ANZUS	Australia-New Zealand-United States Treaty Alliance
ASW	Anti-Submarine Warfare
CANLANT	Canadian Atlantic Area
CICLANTFLT	Fleet Operations Control Centre of the Commander-in-Chief, United States Atlantic Fleet
DSR	Defense Structure Review
GPF	General Purpose Frigate
ICBM	Intercontinental Ballistic Missile
LRPA	Long Range Maritime Patrol Aircraft
MARCOM	Maritime Command
NAORPG	North Atlantic Ocean Regional Planning Group
NATO	North Atlantic Treaty Organization
NORAD	North American Air Defence Command
RCAF	Royal Canadian Air Force
RCN	Royal Canadian Navy
RN	Royal Navy
SAC	Strategic Air Command
SACLANT	Supreme Commander
SCEAND	House of Commons Standing Committee on External Affairs and National Defense
SLBM	Submarine Launched Ballistic Missile
SLCM	Submarine Launched Cruise Missile
SLOC	Sea Lines of Communication
SOSUS	Sound Surveillance System
SSB	Conventionally Powered Ballistic Missile Submarines
SSBN	Nuclear Powered Ballistic Missile Submarine
SSN	Nuclear Powered Attack Submarines
START	Strategic Arms Reduction Talks
USAF	United States Air Force
USN	United States' Navy

INTRODUCTION

The key element of the defence policy announced in the June 1987 Canadian White Paper (Canada, 1987) was the creation of a "modern and effective", "well balanced", "three ocean" Navy.

The Minister of National Defence told the House of Commons that the Navy was "on the verge of rust out". Its youngest ship was being built at the time of the previous White Paper in 1971, and the oldest was commissioned in the 1950s. A three ocean navy was necessary, the government argued, because Canada now had growing maritime security interests in the Pacific and the Arctic, as well as in the Atlantic where it had heretofore concentrated its naval efforts. To operate more effectively in all three oceans, the White Paper proposed to balance the fleet by adding to its traditional surface and air anti-submarine (ASW) forces ten to twelve nuclear-powered attack submarines (SSN).

This new, modern, effective three ocean fleet was not to be. In April 1989, the Mulroney government cancelled the SSN program and severely cut the defence budget, all but

repudiating the White Paper. But the intense, albeit brief, debate it touched off about the roles and missions of the Navy drew attention to the overwhelmingly Atlantic orientation of Canadian naval policy. Despite the fact that Canada is a trading nation bordered by three oceans with the longest coastline in the world, it is security and political considerations in the Atlantic which have almost exclusively determined the maritime forces Canada has maintained.

This paper examines the impact of the Atlantic orientation on the Canadian Navy in the post 1945 period. It argues that it was strategic and especially political considerations relating to security in Europe as expressed in Canada's participation in NATO (North Atlantic Treaty Organization), as opposed to exclusive Canadian maritime interests, or even North American defence, which determined the Navy's posture in the Cold War and beyond. An important reason why this was acceptable was that the NATO-oriented Navy meshed well with continental and national roles in the Atlantic. In part, this explains why the ambitious naval building program of the White Paper floundered and ultimately went under. To be sure, a contributing factor was recent dramatic changes in East-West relations. Indeed the paper concludes that precisely because the Navy has known no other orientation than Atlanticism, these recent trends are so germane to the very future of Canada's maritime forces.

CANADA AND THE NATO MARITIME ALLIANCE

The government and other supporters of the White Paper's naval building, stressed Canada's many maritime interests. In addition to having the longest coastline in the world, the new Law of the Sea's 200 mile Exclusive Economic Zone will bring vast ocean areas under Canada's jurisdiction with fishing areas extending even further. Ottawa has also claimed all the internal waters of the Arctic archipelago, including the Northwest passage. As a trading nation Canada depends heavily upon transoceanic shipping in the Atlantic and increasingly in the Pacific.

As extensive as its maritime interests have been, these interests cannot account for the posture of the Navy since 1945. The purpose of the Canadian Navy has not been to protect exclusive Canadian economic or sovereignty interests at sea. Rather it has been to contribute to the maritime portion of the West's collective deterrent posture. This situation is not unique to Canada. If seapower corresponded to national economic dependence upon the oceans, then both the United States and the Soviet Union would have much smaller navies and other states more dependent on the seas would have larger ones. In reality, the navies of the superpowers are based upon military considerations ranging from the deployment of strategic nuclear weapons at sea, to the need to secure or deny use of the sea to the opposing side in the event of a war in Europe, to traditional gunboat diplomacy in the Third World. Even the modern naval building programs of such important shipping and trading nations as the Scandinavian countries and the West European NATO allies, have been driven more from apprehensions about a Soviet threat, on land as well as sea, than as a result of exploitation of the seas, even for shipping. As John J. Clark observed in 1967, the need for naval forces arises because of military considerations and "persists [...] independently of the flux of trade [...]. If merchant shipping were no longer to ply the sea lanes, naval presence would still be considered necessary for the free world" (Clark, 1967, p. 164).

At the end of the Second World War Canada had the third largest navy in the world. As early as 1943, the Naval Staff was planning for a postwar balanced fleet to encompass a wide range of capabilities. But even though Canada's transoceanic trade and fishing

industries expanded during the postwar economic boom, the Navy was drastically reduced as part of the massive demobilization that affected all the forces during these years. In January 1947, the Government cut \$50 million from the naval estimates and reduced manpower ceiling to 7 500 and by 1948 the fleet numbered forty-four vessels including one aircraft carrier, two cruisers, eighteen frigates and destroyers and nine minesweepers (Hobson, 1986, p.15).

In the past, Canada had relied upon the Royal Navy (RN) for protection. Now there was American seapower which, in the words of U.S. Admiral Chester Nimitz, was "more absolute than ever possessed by the British [...] so absolute that it is sometimes taken for granted" (Till, *et al.*, 1982, p. 56). It was taken for granted because the only immediate threat came from the Soviet Union whose naval forces were no match for United States Navy (USN) and was postured for coastal defence rather than highseas combat. In any case, the advent of nuclear weapons seemed to make navies superfluous in any future conflict with the USSR. How could there be enough time for seapower to take its affect, where war was characterized by strategic bombing by nuclear weapons? Nations, their land and air forces, as well as their economies would "disappear in the first blows" (Brodie, 1967, p. 225).

The obituaries of seapower written in the early days of the nuclear age proved spectacularly premature. Nuclear propulsion and especially the deployment of nuclear weapons at sea endowed maritime forces with a power and strategic significance unmatched even when Britannia ruled the waves. American aircraft carriers quickly acquired a role in atomic war plans. The late 1950s saw the advent of the ballistic missile submarine (SSBN) with its sea-launched ballistic missiles, the capital ship of the new age. But in addition to their nuclear strike roles, naval forces also retained their traditional tasks of securing the seas for reinforcement and resupply of conventional land and land-based air forces. This was especially the case with NATO. Although the Alliance is often viewed almost exclusively in terms of its land forces and the nuclear deterrent, it was very much a maritime alliance from the beginning.

Maritime cooperation among the United States, Britain and Canada did not cease at the end of World War II. With the establishment of NATO in 1949, this cooperation expanded to include other allied nations and became formalized within the framework of the Alliance's regional planning groups, especially the North Atlantic Ocean Regional Planning Group (NAORPG). In 1952, NATO established Atlantic Command (ACLANT) under a Supreme Commander (SACLANT) as part of its integrated military command structure.

The Alliance's maritime strategy during these early years was a broad and comprehensive one; allied navies had to be ready to support the exercise of power ashore in a war of indeterminate length and character. This meant preparations to use the full range of capabilities from nuclear strikes by U.S. carrier-based aircraft, to offensive action against Soviet forces to the escort of military and civilian convoys. While Soviet forces were weak, it was expected that their submarines and land-based naval aviation would be able to mount a serious challenge to allied control of the seas around the European mainland. Thus the allied maritime strategy was, from the beginning, one of forward defence. As then-Chairman of the U.S. Joint Chiefs of Staff General Omar Bradley described NATO maritime tasks to the Secretary of Defense in 1951: "The Northeastern Atlantic and Mediterranean are forward areas in which the level of hostile action would be relatively high and in which the active support of operations on the continent is extremely important" (United States, 1951).

Unlike the land and air forces which were deployed into Europe in the wake of the outbreak of the Korean War allied naval forces were not permanently part of combined

forces. Contributing nations agreed to earmark certain ships and aircraft in the event of a crisis or war. Allied naval commanders such as SACLANT had a permanent staff and conducted numerous joint exercises, but strictly speaking they were admirals without fleets. However, SACLANT and his subordinate commanders were often dual-hatted, in that they commanded national forces in addition to their combined allied responsibilities. Thus SACLANT was also commander of the powerful American 2nd Fleet in the Atlantic, while his deputy was a major commander in the RN. In the course of undertaking their national roles, the allied navies did cooperate by patrolling national seas and areas for which they had been given responsibility under ACLANT. There was also a close and continual sharing of information on Soviet naval and air movements.

Beginning with the NAORPG meetings in 1949 and with the creation of ACLANT, Canada committed itself to supplying ASW convoy-escort forces as its contribution to NATO's maritime posture. In addition to the earmarking of almost all its Atlantic forces to SACLANT, Canada was given responsibility for a large area of the North Atlantic stretching out from its eastern coastal waters reaching to almost mid-ocean (approximately 40 degrees longitude) and southward from Nova Scotia to approximately 40 degrees latitude. Initially, the RCN and the Royal Canadian Air Force (RCAF) shared command of the CANLANT area under ACLANT. Significantly, although North America was part of the overall NATO area, allied naval cooperation did not extend to the Pacific. Here, Canada also assumed responsibility for an area off its western coast, but under strictly bilateral arrangements with the United States.

The commitment to NATO saved the RCN from oblivion in the nuclear age by providing it with a sound strategic role since the defence of Europe did require maritime forces of a kind Canada could contribute. But it was political, as opposed to purely strategic considerations which were the deciding factor. The importance of the NATO multilateral framework to Canada's political leaders meant that at sea, as on land and in the air in Europe, Ottawa was prepared to maintain relatively large forces in peace time as Canada's contribution to allied security and unity and as the price that had to be paid for maintaining a seat at the table. As Brian Cuthbertson has noted: "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*" (Cuthbertson, 1977, p. 127).

To a certain extent NATO's naval contributions were more attractive than its contributions to allied land and air forces. The latter held great political significance because they put Canadian forces in Europe, where NATO wanted them. But they there were also high costs associated with foreign basing. In contrast, Canada could commit nearly its entire fleet to Alliance ASW roles, while keeping it stationed at Halifax. And these forces could also be used for North American maritime roles, which were also heavily ASW oriented (see below), while the presence of naval forces helped assert Canadian sovereignty. At this time the naval tasks of national sovereignty protection and the continental defence of North America and NATO were nearly indistinguishable. Thus that a predominately NATO-ASW fleet was superimposed upon the small balanced was "natural and logical". In the 1950s, as Cuthbertson observes, "Canadian naval policy and experience meshed into NATO strategy with an ease not present in other areas of defence activity" (Cuthbertson, 1977, p. 127).

Expenditures on naval forces rose as part of the general Canadian rearmament during these years, although the RCN remained third as compared to the Army and the RCAF. Between 1951 and 1957, naval spending increased by 167 percent and continued to rise over the following several years (Middlemiss, 1988, p. 262). By 1957, the fleet included one carrier, with fighters and ASW aircraft, one cruiser, 34 destroyers and frigates as well as 86

smaller ships. By the early 1960s, with declining defence spending, non-ASW units, such as cruisers, fighter-aircraft and minesweepers were phased out, and the Navy concentrated on its specialization in the NATO context. Without NATO, the Navy would have had difficulty justifying even its ASW assets, let alone other maritime capabilities associated with a more balanced fleet.

The political importance of trans-Atlantic ties also explains the lack of emphasis on the Pacific, despite the fact that it was here, during the Korean War, that the Navy participated in its first (and only) hot war since 1945. Shortly after the North Korean attack, Canada sent ships to support United Nations forces. But the conduct of the war, especially the disagreements that arose with the United States over war aims and the intervention of the Peoples Republic of China, persuaded Ottawa to be wary of participation in limited wars of containment. Furthermore, Canada did not choose to participate in the Asian regional alliance structures created by the United States in the 1950s, not even the ANZUS (Australia-New Zealand-United States) Treaty. In the absence of trans-oceanic political commitments in the Pacific, there was no impetus for either providing more balance to the existing naval deployments or acquiring new ships for a Pacific fleet.

THE MARITIME DEFENCE OF NORTH AMERICA

The largely Atlantic orientation of the Navy meshed well with the expanding ties with the United States in continental defence during the Cold War years. In air defence, increasing bilateral cooperation led to the establishment of NORAD (North American Air Defence Command) in 1958. Less well known were the developing links between the Canadian Navy and the USN. Canadian ships still flew the White Ensign and belonged to "Her Majesty", but the old relationship with the Royal Navy became more distant when an American Admiral served as SACLANT, and when the RCN was involved in North American defence. Although formally part of the NATO area, collective defence here, as in continental air defence, was an exclusively bilateral affair.

No formal joint arrangements comparable to NORAD were established. The measures that the RCN undertook to provide continual surveillance of Canadian waters, especially in the CANLANT area and the earmarking of forces for SACLANT, were a sufficient basis for cooperation with the USN. Both Canada and the United States had an interest in identifying and locating Soviet maritime forces, in particular submarines and intelligence ships, in North American waters. The USN deployed an ocean-floor sensor array off the eastern seaboard as part of its global Sound Surveillance System (SOSUS) and the RCN had some access to this information. In 1959, Canada took over the USN research establishment at Shelburne, Nova Scotia and shared information from air and sea patrols with the United States.

Although institutionally separate, there were links between RCN/USN maritime operations and those of the RCAF/United States Air Force (USAF) in NORAD. The USN supplied picket ships for NORAD and information on Soviet air and naval movements in the Atlantic was regularly passed from the Fleet Operations Control Center of the Commander-in-Chief, U.S. Atlantic Fleet (CICLANTFLT) to NORAD. The two commands also conducted joint exercises, such as the DESK TOP series. To this extent NORAD/CINCLANTFLT coordination was an important, if informal, nexus and link between European and North American security.

The close and continual working relationship between the two navies in the Atlantic became evident during the Cuban Missile Crisis of 1962. The USN had begun to prepare for

possible action against Cuba even before President Kennedy announced the imposition of a quarantine and the RCN was aware of these movements. As then Vice-Chief of the Naval Staff, Jeffrey Brock recalls in his memoirs, "the action of the White House and the Pentagon automatically impinged upon Canadian activities and particularly on the prudent disposition" of Canadian ships (Brock, 1983, pp. 108-109). Without waiting for official Cabinet approval, the RCN commander in the Atlantic reorganized his command for war, sending as many ships as possible to sea. Canadian ships and aircraft conducted patrols out into the Atlantic as part of a submarine and air barrier and also covered areas left open as USN forces moved southward. After the crisis, the Americans thanked the RCN's Atlantic Fleet Commander for his "outstanding support" with CINCLANTFLT noting in his annual report that RCAF's "surveillance assistance and cooperation in ASW throughout the crisis contributed significantly to the ASW effort. Without this valuable assistance much of the Western Atlantic area would not have been adequately covered" (United States, 1963, CINCLANTFLT, p. 30).

For the most part, maritime surveillance of the approaches to North America was directed against Soviet attack submarines and thus meshed well with the *tactical* ASW emphasis of NATO. By the early 1960s, the Soviet Hotel and Golf class conventionally-powered ballistic missile submarines (SSB) were patrolling in the Western Atlantic. They carried SS-N-4 SARK and SS-N-5 SERB missiles with ranges of 350 and 700 nautical miles respectively. At this time, the USSR lacked a land-based Intercontinental Ballistic Missile (ICBM) capability to match the United States and these first SLBMs were the only missiles able to strike at North America. Toward the end of the decade, the Soviets deployed Yankee class SSBNs carrying the SS-N-6 SAWFLY SLBM with a range in excess of 1 300 nautical miles. By patrolling off the coasts, the Yankees gave the USSR the capability to hit important targets in North America, in particular U.S. Strategic Air Command (SAC) bases and command and control facilities from the sea. By this time, the Soviets had also acquired an ICBM force which was believed to be earmarked for urban centres and military targets deep inland, while the Yankees appeared to be allocated to *soft* coastal targets.

Although there was no defence against an SLBM once fired, there was a requirement to monitor the movement of SSBNs, in the same manner that NORAD provided surveillance of bombers and ICBMs. As the 1961 report of the RCN's ad-hoc committee on naval objectives (the *Brock Report*) noted, "any progress that can be made, and demonstrated, towards early detection, identification and tracking of launching submarine will pay dividends. This will also contribute to the protection of the deterrent in the form of the West's retaliatory strike capability" (Canada, 1961, p. 71). Given the existing close cooperation between the RCN and USN, the advent of Soviet ballistic missile submarines simply added a new dimension to bilateral naval cooperation. From the beginning, this *strategic* ASW (ASW directed against SSBs and SSBNs) was also coordinated with NORAD through CINCLANTFLT. The CANUS SLAMEX exercises tested the ability of air and naval forces from both countries to "conduct coordinated defensive operations against a submarine-launched missile threat to the east coast of North America" (United States, 1965, CINCLANTFLT, p. 24).

Even when the Soviets introduced newer submarines, with SLBM ranges capable of striking the United States from waters near the USSR, some older and newer classes of SSBNs continued to patrol off the North American coasts. Thus, the Commander of MARCOM told a Senate committee in 1982, Canada performs a surveillance role against Soviet SSBNs in both the Atlantic and Pacific "in conjunction with U.S. forces" (Byers, 1983, p. 12).

There were limits to bilateral naval cooperation. The strategic defence of North America was not a high priority for the USN. Although its forces could be found in the seaward approaches to the United States, especially SSNs hoping to trail American SSBNs as they left port, the vast majority of the Soviet Navy remained closed to the Eurasian landmass. While the USN's ties to the Canadian Navy were close, they were not extensive relative to other global links. In addition, some information, especially on the movement of American submarines, was only passed to Canada on a need to know basis. The sharing of information was very much related to how much Canada contributed. In general, the Navy maintained about twice as many ASW escorts on the East coast (in addition to its single carrier) as it did in the Pacific. Thus in the Atlantic, where the NATO command arrangement existed, there was a much broader exchange. As former Deputy MARCOM Commander Rear-Admiral F.W. Crickard told a Parliamentary Committee in 1985: "It is noteworthy that Canada is the beneficiary of much more data from the American undersea monitoring system in the Atlantic than in the Pacific, where Canada does not [...] share in the burden of underwater surveillance apart from periodic [...] air patrols. The message is clear: participation in joint operations opens doors to intelligence that would otherwise be closed to Canada" (Canada, 1985, p. 50:40).

RE-EXAMINING THE FLEET: THE BROCK REPORT, UNIFICATION AND REVIEW

The unbalanced, largely NATO-ASW, orientation of the Canadian Navy was criticized in the *Brock Report*. It was a "cardinal fact", the Report stressed, that some form of collective security is essential to Canada. Accordingly "the RCN will rarely if ever operate without the support of one or more of our allies". However, Canada needed more balanced and flexible maritime forces "to support our country's external policies". The emphasis upon NATO and cooperation with the USN and the Royal Navy was correct, but the result was that "our defence policy provides planned support for external policies only with regard to NATO: for anything else, expediency is the answer" (Canada, 1961, pp. 15, 69-70). The report suggested that the Navy in particular needed a greater capability to support Canadian military operations outside the North Atlantic region in "other than a European type of war", the most likely conflict scenario given the existence of nuclear weapons. Therefore, it recommended that Canada acquire, in addition to new general purpose frigates to fulfil NATO roles, a fleet of "Heliporter Frigates", capable of transporting troops and airlifting them to landing areas using shipborne helicopters.

The *Brock Report* also argued that Canada needed a more sophisticated and larger submarine force, even suggesting that nuclear-powered attack submarines be acquired by the early seventies. In addition, it drew attention to the need to assert Canadian sovereignty in all three of its oceans, especially in the Arctic and suggested the acquisition of research vessels to operate in the North. Many of the concerns raised by the *Brock Report*, such as the almost exclusive NATO orientation of the fleet, the need for greater mobility and flexibility and the importance of asserting sovereignty at sea, would find their way into the 1964 and 1971 White Papers on Defence. However, the fleet envisioned by the report, like that of the 1987 White Paper, was never to be.

In March of 1962, the Cabinet accepted one of the recommendations that had come out of the *Brock Report*, for eight General Purpose Frigates (GPF). For the Navy, this was part of an effort to move away from its ASW specialization towards a more balanced fleet. With the change of government in 1963, all current programs were reviewed by the new Minister Paul Hellyer. Because of rising cost estimates for the GFP and because he

supported a specialized ASW Navy, he cancelled the program. In its place, the government decided to construct four Tribal class ASW helicopter-destroyers, the DDH-280s.

The perpetuation of a specialized ASW Navy appeared to be at odds with the thrust of the 1964 White Paper and especially with the plans for unification. In justifying unification of the Armed Forces, Hellyer pointed to benefits that would arise from having highly mobile and flexible forces combining air, sea and ground units. Such forces, according to Hellyer, would be available to meet the needs of peacekeeping and "brush-fire wars and related missions" (Hellyer, 1967, p. 3).

But as with the *Brock Report's* justification for Helicopter frigates for limited war contingencies, this rationale for unification seemed to have no relationship to the likely tasks which the Navy, or any other branch of the Armed Forces would ever be required to undertake. The Navy did support foreign policy. Yet it was unclear what Canadian foreign policy would require these kinds of intervention forces, especially when they were suited for non-NATO contingencies? Since Korea (and until the August 1990 dispatch of three Canadian ships to the Persian Gulf), the Canadian government had indicated its great reluctance to become involved in limited wars in the Third World. Sometimes, as in the case of the Suez operation, peacekeeping required logistical support from the Navy. But this did not entail the landing of Canadian troops against hostile fire from shore. As David Burke observed of this rationale for unification: "Canada's world-wide intervention force was literally all dressed up with nowhere to go [...]. Canada had a structurally unified defence force without a mission to match" (Burke, 1986, p. 2). All the turmoil of unification notwithstanding, Ottawa was still committed to supplying discrete air, land and sea units to NATO and for North American defence. For the Navy and for the naval air forces heretofore attached to the RCAF, this meant that the Atlantic-ASW orientation remained unchanged.

This became evident during the Trudeau defence review of 1968-69 leading up to the 1971 White Paper. In April 1969, the Prime Minister complained that NATO had come to determine "all our defence policy" and our defence policy had come to determine "all our foreign policy" and thus Canada had "no foreign policy except that which flowed from NATO" (Stewart, 1982, p. 21). He set about trying to change this. Henceforth foreign policy would be the extension abroad of domestic priorities and so, it appeared, would defence policy. The most important decision was to cut in half the size of Canada's land and air forces in Europe. Consistent with this approach was the emphasis, repeated in the White Paper, placed upon sovereignty protection directed against non-traditional military threats.

For the Navy, the apparent shift in defence policy was especially important. Since the early 1950s, its posture had been NATO-driven, in particular the provision of ASW-forces for the protection of allied SLOC in the event of a war in Europe. These forces had also been employed in North American maritime defence roles, including surveillance directed against SSBNs. The 1971 White Paper maintained the earmarking for naval forces for NATO, but indicated that the "degree of emphasis" on strategic ASW would be "reduced in favour of other maritime roles" (Canada, 1971, p. 28). It was evident that these other roles would be more national and non-military in orientation. In its 1970 report on maritime forces, the House of Commons Standing Committee on External Affairs and National Defence (SCEAND) also called for reducing anti-SSBN operations with the United States. With regard to the NATO role, it concluded that "no need for convoy protection can be envisaged in any likely eventuality". Consistent with the new emphasis on sovereignty, the committee pointed to the need to augment "for commercial and other reasons" the Navy's policy functions as a "manifestation of national sovereignty". Moreover, since the countries most likely to challenge Canadian sovereignty included the United States and other NATO allies,

SCEAND argued that "Canadian maritime forces must be capable unilaterally of carrying out any increased police functions" (Canada, 1970, pp. 17, 19).

The declaratory shift in emphasis from collective defence roles to sovereignty protection did not, however, have any substantive impact upon the roles or posture of the Navy. For although the Trudeau government appeared to downgrade NATO-Atlantic and North American missions, Canada did not withdraw from any of its responsibilities. The Navy did undertake to improve its patrol of fishing areas and search and rescue capabilities. Nevertheless, it was unclear from the beginning what amount of effort MARCOM was to devote to non-military sovereignty tasks as opposed to the traditional alliance-oriented task. Nor was the "appropriate relationship between the responsibilities of the Minister of National Defence and of the Canadian Armed Forces for the protection of sovereignty, and the responsibilities vested by statute in other ministers and departments and agencies reporting to them", ever precisely specified (Arnell and Anderson, 1971, pp. 31-32).

What impacted most upon the Navy's ability to fulfil any of its roles was funding; the defence budget was frozen in the early 1970s. Apart from the four DDH-280s destroyers, then just entering the fleet, no new acquisitions were planned. The lone aircraft carrier was sold for scrap and its Tracker aircraft assigned to land bases. If the government was going to follow the logic of the 1971 White Paper, then more maritime forces would be needed in order to provide surveillance of Canada's maritime approaches. Further equipment, though, would be geared toward the non-military sovereignty protection roles, and be less sophisticated (and costly per unit) than forces needed to fulfil collective defence responsibilities. This seemed to be where the Trudeau government was moving when it initially considered replacing the 36 Argus long-range maritime patrol aircraft (LRPAs) with an aircraft lacking modernized ASW capabilities. In 1976, however, it purchased 18 Auroras, a version of the American P3 with a sophisticated ASW package. And in 1977, Cabinet accepted the Navy's proposal to operate a fleet of 24 fully capable surface ships. In June 1983, contracts were awarded for six City class frigates.

With regard to the Navy, as with other branches, collective defence and especially NATO commitments had quickly re-emerged as the driving force behind Canadian defence spending as a result of the Defence Structure Review (DSR) conducted in 1974-75. The DSR made "combat capability" and "hard operational needs" the major determinants in force structure development (Middlemiss and Sokolsky, 1989, p. 39). DND argued that "because the more military demanding roles usually subsume the capabilities for less demanding activities and commitments [...] priority must be given to the roles of defending North America in conjunction with U.S. forces, and the collective defence of the NATO area". The Navy placed particular stress on the NATO roles when it assigned the "highest priority" to obtaining approval for a second batch of six frigates in 1984. It argued that the "shortfall of surface combatants has been the most crucial deficiency of NATO's maritime forces" (Canada, 1984, pp. 8A:6, 12).

This renewed emphasis upon NATO maritime roles in the late seventies and early 1980s, was in line with the heightened importance which the Alliance itself was attaching to its collective naval forces. The adoption of the flexible response strategy in 1967 had expanded the role of conventional forces in deterrence, which in turn meant that security of the Atlantic SLOC for reinforcement and resupply, a long-standing Canadian role, had assumed a higher priority. At the same time, the expansion of Soviet naval capabilities presented a greater challenge to NATO's confidence in being able to secure use of the seas in the event of war.

Allied Strategic considerations or even the requirements of the Canadian Navy would have been insufficient to persuade the Trudeau government to support a NATO-oriented maritime building program. What was crucial was that Canada wanted to continue to participate in the Alliance: consequently maritime forces, along with the land and air forces in Germany, were still required as part of the price Ottawa had to pay to secure its seat at the table. Canada had a one ocean fleet because it was the only kind of Navy the political leadership was prepared to fund. No other rationale, not even protection of sovereignty, could persuade the government to spend money on the maritime forces. As it was, at sea, as on land and in the air, the Trudeau government spent only as much as it felt it had to in order to maintain some semblance of effectiveness and to partially satisfy the requests of its allies.

By the early 1980s, the "commitment-capability gap" which a special joint committee of the House of Commons and the Senate had identified as the "fundamental issue in defence policy" (Canada, 1986, p. 48) was particularly pronounced with regard to maritime forces. Although the Auroras had improved aerial ASW, delays in the CFP program meant that by the mid-1990s the country would have only ten modern surface ships while its subsurface capabilities still consisted of three 1960s vintage conventional submarines. The gap was most notable with regard to Canada's allied commitments, but because the naval forces used to fulfil collective defence roles were also tasked with sovereignty obligations, these could not be assured either. As a Senate committee report observed in 1983: "MARCOM, which is responsible for the country's seaward defence, cannot meet its commitments to the protection of Canadian sovereignty, to the defence of North America-much less to NATO" (Canada, 1983, p. 2).

THE 1987 WHITE PAPER AND BEYOND

It was the claim of the 1987 White Paper on defence that it would close the commitment-capability gap, especially with regard to the Navy. In light of recent dramatic events in international relations and the Mulroney government's decision to reduce defence spending and abandon the SSN program, it is tempting to simply dismiss the whole document as anachronistic, strategically ill conceived and financially unsound. But the controversy and debate generated by the White Paper's naval proposals not only reveals much about Canadian maritime interests but can be useful when considering the future of Navy.

Like the *Brock Report*, the 1987 White Paper stressed the need for a more balanced fleet, one capable of meeting a variety of sea-based threats, not simply the traditional challenge to NATO's Atlantic sea lines of communication. Canada had growing economic, cultural and political interests in the Pacific while the Arctic, which had once been a buffer between the superpowers, "could, according to the White Paper, become a battleground". There was also the potential threat posed by Soviet Submarine-Launched Cruise Missiles (SLCMs). Although fundamentally still an ASW force, this new Navy would have had more balance in terms of where it operated, (in all three oceans), and in terms of the mix of weapons. There were to be ten to 12 SSNs and 16 surface ships (the 4 Tribals, the 6 frigates under construction plus 6 more). Had the government maintained the NATO orientation of the past, it would have proposed more surface ships, for as DND argued in 1984, the Alliance was most in need of these forces.

The White Paper's maritime proposals were also very reminiscent of the early Trudeau emphasis upon sovereignty protection. With a more balanced and diversified fleet, Canada

would be able to patrol and enforce its sovereignty over a much wider ocean area. Unlike the 1971 White Paper, though, the 1987 document did not view the sovereignty problem primarily in non-military terms. Unless Canada had the ability to provide better maritime surveillance against an increasing sea-based threat to North America, the U.S. Navy would be compelled to heighten its operations in Canadian waters, especially in the Arctic and in waters for which Canada was responsible. Given past practice, as in the Pacific, Ottawa could not be assured of being kept fully informed of USN activities. Thus the new Navy, notably the SSNs, would enhance Canadian sovereignty by providing the basis for greater naval cooperation. As the Minister declared when he tabled the White Paper: "Some people would suggest that we contract out the defence of Canada to others. The Government is prepared to discuss cooperation in all aspects of the defence of North America. But we will not allow Canada's sovereignty to be compromised. We will be a partner with our allies and not a dependent" (Beatty, 1987, p. 10). Ottawa hoped to convince its allies that Canada could contribute more to collective defence at sea by having forces better suited to meet new maritime strategic challenges to North America.

The argument never worked. Although President Reagan eventually agreed to recommend to Congress that it approve the transfer of certain technologies to Canada in the event Ottawa selected a British submarine, from the American and European perspective the White Paper's naval proposals, especially the SSNs, were primarily motivated by narrow Canadian national interests. Reflecting the general assessment within the U.S. government *The Washington Post* saw the SSNs as sovereignty weapons to be used for missions of Canada's own choosing, not those of its allies, while Britain's *Economist* described them as an "artic antic" directed against the United States thus appealing to the "anti-American plasma that flows through many Canadian veins" (Sokolsky, 1989b, p. 283).

In the domestic political arena, the government had difficulty persuading the press, strategic analysts and the general public of the strategic rationale for the SSNs. Were nuclear-submarines the best ASW weapons for Canada? What would the Navy do if it found a Soviet SSN under the ice? These weapons would draw Canada into the provocative and destabilizing "forward maritime strategy" of the USN. Was not arms control, especially for SLCMs, the better solution to the new sea-based threats facing North America?

Increasingly DND was compelled to rely on the sovereignty argument, as opposed to the strategic rationales, to combat faltering support for the SSN program. But it was no more successful here. What good were SSNs in the protection of the environment or enforcing Canadian fishing quotas? As for the problem of U.S. submarines using the Arctic, these were expensive flags to wave and unlikely to persuade Washington to agree to Ottawa's claim that the Northwest Passage lay within internal Canadian waters. As the Trudeau government had found, sovereignty against non-military threats was insufficient grounds for spending vast sums on naval forces. Nor did the other rationales for an expanded Navy appear convincing or persuasive enough to justify the costs. For example, while it was true that Canada's interests were and should be expanding in the Pacific rim, there were no trans-oceanic security ties that could provide a political rationale for more forces. With regard to economic links, for Canada the flag had never preceded nor followed trade. It was difficult to argue that Japan or the newly industrialized nations of the region would be more accommodating to Canada simply because it put more maritime forces on its Pacific coasts. After all, the large American naval presence and security guarantees seemed to have little impact on Japan's economic policy towards the United States.

In sum, having turned away from the traditional Atlantic-NATO orientation, the maritime plans of the 1987 White Paper lacked the crucial political underpinnings that had been the

basis for the posture and deployment of the Canadian Navy. Sophisticated ASW forces at sea, as with the land and air forces in Europe, were viewed as part of the price Canada was prepared to pay for participation in the Alliance. That these forces could also be used for North American maritime defence and sovereignty roles was an additional, but not primary, reason for maintaining them. When the worsening budgetary situation at home and the improving strategic situation abroad sunk the new balanced fleet, Canada was left with the one ocean fleet it had since the Cold War. Indeed, the NATO posture of the Navy was the only aspect to be strengthened during the short-life of the White Paper. Early on, in December 1987, the Mulroney government awarded the contract for six additional CPFs.

The problem is that doubts are being raised concerning the necessity of even this fleet. A Navy whose primary justification continues to be its relevance to Canadian strategic and political interests in European security cannot but be subjected to questions given the rapid dismantling of the Soviet threat to NATO. What need can there be to maintain forces for the protection of allied Atlantic SLOCs for the reinforcement and resupply of a conventional land war in Europe? And, in view of the increasing Europeanization of NATO, what can Canada hope to gain politically from continuing to concentrate its maritime forces in the Atlantic?

However, such doubts are not unique to the Navy. The ground and air forces in Germany face a somewhat more uncertain future. In fact, depending on how NATO will evolve in the coming years, Canada's one ocean fleet may well be in better position to ride-out current changes in the international security environment. The now projected core force of 16 surface ships plus the 18 Auroras represents in numbers about what Canada has been contributing to collective defence at sea for the last twenty years. The ships being replaced were seen as being insufficient to meet maritime defence roles. This modern fleet, although not larger in numbers, may now be more suited to the international strategic environment. In addition, the August 1990 decision to send three ships into the Persian Gulf brought the current fleet's poor condition and lack of modern capabilities to the public's attention.

If the Alliance maintains its basic structure, including an Atlantic Command and the Soviets do not entirely disband their navy, the security of the seas between North America and Europe will remain an allied concern. At present, given trends in conventional arms control, it is likely that American forces will remain in Europe, although in significantly reduced numbers. This will place greater emphasis on reinforcement capabilities. With the withdrawal of Soviet forces from Eastern Europe, the United States now estimates that it will have more warning time in the event of a Soviet mobilization which in turn places greater reliance upon sealift for reinforcement as opposed to airlift. Thus the relative importance of the Atlantic SLOC may actually increase in NATO strategy. To this extent, NATO may still be looking to Canada to continue to supply ASW convoy escort forces.

Whatever the future structure of NATO, it is likely that Ottawa will want to remain involved in European security matters if only to continue to avoid having only bilateral defence ties with the United States. At the same time budgetary and/or public opinion pressure may make it necessary to significantly reduce or entirely withdraw Canada's land and air forces from Germany. From a political standpoint, Ottawa might find it advantageous to maintain the maritime commitment to the Alliance as a means of sustaining its links with Europe. And, as demonstrated by the deployment to the Persian Gulf, naval forces, although geared for NATO roles, have a flexibility that makes them suitable for other diplomatic and conflict contingencies.

Concentrating the Canadian contribution to NATO in the maritime sphere would also have the advantage of continuing to provide Canada with forces useful in North American

defence roles and maritime sovereignty protection. The Strategic Arms Reduction Talks (START) are moving towards cutting superpower offensive nuclear arsenals by 50 per cent. This will still leave SSBN and SLCM threats to North America. The Soviets have also been pressing for limitations on naval forces, including attack submarines. Even if limits are placed on naval forces, though, both superpowers will retain substantial fleets of SSNs and thus the United States will continue to monitor the seaward approaches to the continent. To be sure, improvements in the international political climate coupled with arms control will moderate the sea-based threat to North America. But since strategic maritime defence has never been a priority for the USN, the future may not be that much different from the past. The United States will look to Canada to contribute to surveillance activities in the Atlantic but will make no new demands.

From the standpoint of sovereignty protection against non-military threats and of reducing the need for U.S. forces to operate in waters for which Canada is responsible, it will be up to the Canadian government to decide if more forces are needed. This will depend upon what level of presence Ottawa wishes to maintain at sea and in the Arctic. Some forces have been shifted to the Pacific. In the summer of 1989, the Mulroney government announced the acquisition of three LRPA's primarily for sovereignty purposes (the kinds of aircraft the Trudeau government rejected) but in the February 1990 budget it cancelled plans for an icebreaker. As regards to under-ice submarine capabilities, the Minister of Defence stated that, "We have been a country for 127 years and haven't been able to go under the ice yet" (Chepesiuk, 1990, p. 23). Research continues on ocean-floor sensors for certain Arctic straits. A decision will also have to be made about a replacement for the Trackers whose mission may be privatized. With expectations of major cuts in the defence budget, new equipment of this kind may not be forthcoming and Canada will continue to task forces geared for allied roles for non-military sovereignty protection. However, some savings from a reduced land and air role in Europe might be directed to maritime forces.

Whatever the specific composition of the naval posture, the Canadian Navy will remain an unbalanced, one ocean Atlantic fleet. This will be so because Canada's maritime interests in the Pacific and the Arctic are not important enough in a foreign or domestic policy context as to require modern naval forces. Geography has made Canada a three ocean nation, strategy and politics however dictate that its naval activities will continue to be concentrated in only one of them.

BIBLIOGRAPHY

- ARNELL, J.C., and Anderson J.F. (1971) Program Management in the Department of National Defense. *CDQ*, 1 (2).
- ARSENEAULT, J.W.(1988) The DDH 280 Program: A Case Study of Governmental Decision-Making. In David G. Haglund (Ed.) *Canada's Defence Industrial Base*, Kingston, Frye.
- BEATTY, Perrin (1987) *Tabling of the Defence White Paper in House of Commons*. Ottawa, Queen's Printer.
- BERMAN Robert, P. and BAKER, John, C. (1982) *Soviet Strategic Forces: Requirement and Responses*. Washington, Brookings Institute.
- BRACKEN, Paul (1983) *The Command and Control of Nuclear Forces*. New Haven, Yale University Press.
- BROCK, Jeffrey (1983) *The Thunder and the Sunshine*. Toronto, McClelland and Stewart.
- BRODIE, Bernard (1967) *A Guide to Naval Strategy*. New York, Praeger.
- BURKE, David, P. (1986) *Canada Armed Forces Unification Revisited*. Presented at the International Studies Association, Anaheim California.

- BYERS, R.B. (1983) Canadian Maritime Policy and Forces Structure Requirements. *CDQ*, 12 (2).
- CANADA, Department of National Defence (1987) *Challenge and Commitment: A Defense Policy for Canada*. Ottawa, Minister of Supply and Services.
- _____ (1971) *Defence in the 70's*. Ottawa, Queen's Printer.
- _____ (1964) *White Paper on Defence*. Ottawa, Queen's Printer.
- _____ (1961) *The Report of the Ad Hoc Committee on Naval Objectives. (The Brock Report)*
- _____ (undated) *Directorate of History "Operations Cuba"*. Document 80/381.
- CANADA, House of Commons Standing Committee on External Affairs and National Defence (1985) *Proceedings*. N° 50.
- _____ (1979) *Tenth Report Respecting Maritime Forces*. Ottawa, Queen's Printer.
- CANADA, House of Commons Standing Committee on National Defence (1988) *The Canadian Submarine Acquisition Project*. Ottawa, Queen's Printer.
- CANADA, Special Committee on National Defence (1984) *Proceedings*. Ottawa, Queen's Printer.
- CANADA, Senate, Subcommittee on National Defence of the Standing Committee on Foreign Affairs (1983) *Canada's Maritime Defence*. Ottawa, Minister of Supply and Service.
- CANADA, Special Joint Committee of the Senate and the House of Commons on Canada's International Relations (1986) *Independence and Internationalism*. Ottawa, Minister of Supply and Services.
- CANADA (undated) *The Claxton Papers*. National Archives, Vol. 94.
- CHEPESIUK, Ron, (1990) Interview: The Honourable Bill McKnight, Canada's Minister of National Defence. *Defense & Diplomacy*, February.
- CLARK, John, J. (1967) Merchant Marine and the Navy: A Note on the Mahanian Hypothesis. *Journal of the Royal United Services Institute*, 112, May.
- CUTHBERTSON, Brian (1977) *Canadian Military Independence in the Age of the Superpowers*. Toronto, Fitzhenry and Whiteside.
- DOUGLAS, W.A.B. (1988) *The RCN In Transition*. Vancouver, UBC Press.
- EPSTEIN, William (1989) New Stance Tarnishes Canada's Reputation. *Bulletin of the Atomic Scientists*, October.
- GROVE, Eric and TILL, Geoffrey (1989) Anglo-American Maritime Strategy in the Era of Massive Retaliation, 1945-60. In John B. Hatterdorf and Robert S. Jordan (Eds.) *Maritime Strategy and the Balance of Power*. London, MacMillan.
- HELLYER, Paul T. (1967) Canadian Defense Policy. *Air University Review*, 18 (6), November-December.
- HOBSON, Sharon (1986) *The Composition of Canada's Fleet*. Halifax, Centre for Foreign policy Studies, Dalhousie University.
- JOCKEL, Joseph (1989) The U.S. Navy. *CDQ*, 13 (3), October.
- _____ (1989) The U.S. Navy, Maritime Command and the Artic. *Canadian Nuclear Powered Attack Submarines Program: Issues for Congress*. Washington, United States Congress, Library of Congress, Congressional Research Service.
- KEALY, J.D.F. (undated) *The Development of the Canadian Navy, 1945-1967*. Directorate of History, Department of National Defence, SGR II 223.
- KITFIELD, James (1990) Rethinking Defense. *Government Executive*, February.
- McGRUTHER, Kenneth, R. (1987) *The Evolving Soviet Navy*. Rhode Island, Naval War College Press.
- McRAE Donald, M. and MUNROE, Gordon, Eds. (1989) *Canadian Oceans Policy: National Strategies and the New Law of the Sea*. Vancouver, U.B.C. Press.
- MIDDLEMISS, Dan, W. (1988) Economic Considerations in the Development of the Canadian Navy Since 1945. In W.A.B. Douglas, *RCN in Transition*.
- MIDDLEMISS, Dan, W. and SOKOLSKY, J.J. (1989) *Canadian Defence: Decisions and Determinants*. Toronto, Harcourt, Brace, Jovanovich.
- MUNTON, Don (1988-1989) Canadians and Their Defence. *Peace and Security*, 3 (4), Winter.

- PURVER, Ron (1989) The Naval Arms Control Challenge to Nato. In Robert N. Huebert (Ed.) *NATO: A Maritime Alliance Proceedings*, Halifax, Occasional Publications N° 2.
- RANFT, Bryan and TILL, Geoffrey (1983) *The Sea In Soviet Strategy*. Maryland, Naval Institute Press.
- RAUF, Tariq and HAYWARD, Dan (1987) Nuclear Powered Attack Submarines: Does Canada Really Need Them? *Communiqué*, N° 15. Ottawa, Canadian Centre for Arms Control and Disarmament.
- ROSENBERG, David, A. (1979) American Postwar Air Doctrine and Organization: The Navy Experience. In A.F. Hurley and R.C. Ehrhart (Eds.) *Air Power and Air Warfare*, Washington, U.S. Government Printing Office.
- SHEPPARD, Robert (1988) Beatty Lonely Sub Salesman as Tories Submerge Issue. *Globe and Mail*, Nov. 14.
- SOKOLSKY, J.J. (1989a) Anglo-American Maritime Strategy in the Era of Flexible Response, 1969-80. In Jordan Hatterdorf (Ed.) *Maritime Strategy and the Balance of Power*.
- _____ (1989b) Parting of the Waves: the Strategy and Politics of the SSN Decision. In David G. Haglund and J.J. Sokolsky (Eds) *The U.S.- Canada Security Relationship: The Politics, Strategy and Technology of Defense*, Boulder, Westview.
- _____ (1986) *Seapower in the Nuclear Age: NATO As A Maritime Power*. Unpublished Ph.D Thesis, Cambridge, Harvard University.
- STEWART, Larry, Ed.(1982) *Canadian Defence Policy 1965-1981: Selected Documents*. Kingston, Queen's Centre for International Relations.
- TAGGART, P.J. (1987) Canada's Blind Spot. *United States Naval Institute Proceedings*, 113 (3), March.
- TILL, Geoffrey (1982) *Maritime Strategy and the Nuclear Age*. New York, St. Martin's.
- TUCKER, Michael (1980) *Canadian Foreign Policy: Contemporary Issues and Themes*. Toronto, McGraw Hill Ryerson.
- UNITED STATES (1949) Navy, Immediate Files of Chief of Naval Operations, Box 8.
- _____ (1951) Records of the Joints Chiefs of Staff, JCS 092 Western Europe, 3-12-48, JCS Document 1868/258.
- _____ *Annual Reports of the Commander-in-Chief, Atlantic Fleet [CINCLANTFLT]*.
- VEGO, Milo (1983) Soviet Anti-Submarine Doctrine. *Journal of the Royal United Services Institute*, 128.

(Acceptation définitive en septembre 1990)