

Canada and the Nato Maritime Alliance

by
Joel J. Sokolsky

INTRODUCTION

In the last several years there has been increasing public discussion within Canada over the future of the Canadian forces. One aspect of particular concern has been the state of Maritime Command (MARCOM). The May 1983 report by the Senate's Subcommittee on National Defence of the Standing Committee on Foreign Affairs,¹ coupled with the government's decision to proceed with the construction of six new frigates and the renovation of existing destroyers, has served to highlight serious deficiencies in Canada's current maritime posture. The program announced by the government will not entirely correct those deficiencies and, as the Senate Committee report argues, much more will have to be done.

The overall view to be considered by this article is that, in terms of the military tasks facing MARCOM and likely circumstances under which Canada will have to apply force at sea, North Atlantic Treaty Organization (NATO) commitments must be regarded as the dominant determinant in decisions regarding Canada's future maritime posture. This view does not deny Canada's need to provide for its own seaward defenses. It does, however, hold that on a list of maritime defense priorities, Canada's commitment to collective security through NATO, and thus its support for the Alliance's maritime strategies, should come first.

This proposition is based upon two fundamental considerations. First, NATO is a maritime alliance and the maintenance of adequate maritime forces is an essential element in the Alliance's overall deterrent posture, especially with regard to the strategy of flexible response. Second, given the importance of maritime forces to NATO, Canada's maritime forces represent reasonable expenditures of scarce resources because they have been, and can still be, fully integrated with the collective maritime forces of its allies. Moreover, with an anti-submarine warfare (ASW) emphasis especially suited to convoy escort, Canada's maritime forces have the potential to make a specialized, yet significant and necessary, contribution to collective maritime security. A continuation and expansion of this emphasis would be as strategically sensible for Canada as it would be for NATO as a whole.

SEAPOWERS IN THE NUCLEAR AGE: NATO AS A MARITIME ALLIANCE

At present there is a debate within the foreign affairs literature in the United States over the broad course of the American strategic posture. There are those who call for at least a partial rejection of the "continental/coalition" strategy which places NATO at the fore-

front of U.S. strategic concerns and an inclination toward a more "maritime" global strategy which seeks to strengthen the ability of the United States to defend its interests outside of the area covered by the North Atlantic Treaty. The latter strategy stresses the importance of the mobile striking power afforded by the U.S. Navy, in particular its large nuclear carriers which can go anywhere American power may be needed.²

The debate is a significant one not only for the United States but, as has been recognized, for the entire NATO alliance including Canada. It is important because it raises basic questions about the ability and necessity of the United States to meet its commitments in Europe while at the same time maintaining the wherewithal to defend America's extra-European interests. However, it is not very useful to cast it in terms of "maritime strategy" vs. "coalition/continental strategy" inasmuch as NATO itself is a maritime alliance.

NATO is a maritime alliance not simply because nearly all its members have coastlines and are dependent to varying degrees upon ship-borne commerce. This situation only makes alliance members more vulnerable to threats at sea. NATO is a maritime alliance by reason of the nature of the overall strategic threat and the means taken collectively through the Alliance to counter that threat. As John Clark observed in 1967, "If merchant shipping were no longer to ply the sea lanes, a naval presence would still be essential for the free world."^{3*}

The maritime character of the NATO alliance results from the very fact that it is a coalition of states whose primary purpose is to maintain the territorial integrity and political independence of its members on the European continent. In pursuit of this objective, the allied nations have maintained and earmarked for collective use a vast array of nuclear and conventional forces. The Alliance has also developed an elaborate military and civilian infrastructure to prepare for and, if necessary, to direct the prosecution of a war against the forces of the Warsaw Pact nations. It is upon this aggregation of forces and the continuing preparations made for their wartime employment that deterrence is based.

Integral to the combined military forces of NATO are its collective maritime forces. As with other aspects of the aggregated allied forces, maritime forces include those capable of nuclear and conventional warfare.** NATO has maintained maritime forces because of the importance of the seas to its overall deterrent posture, particularly as that posture relates to the land/air defense of its continental members. At the strategic nuclear level, the Alliance has come to rely upon the sea-based nuclear strike capabilities of the American submarine-launched ballistic missiles (SLBMs) some of which are specifically dedicated to NATO. As well, since 1954 American carrier-based aircraft, capable of delivering nuclear weapons, have been named to NATO tasks and comprise part of the Alliance's available theatre/tactical nuclear capabilities. The sea-based nuclear strike capabilities of the French

and British also, although not as directly, constitute part of NATO's aggregated maritime forces.

In the nuclear age it is not surprising that NATO availed itself of the deterrent value afforded by forces capable of projecting atomic weapons ashore, although by far the greatest number of allied maritime forces are devoted to the more traditional tasks of protecting the sea lines of communication (SLOC). Included here are those forces, whether based on land or sea, capable of seeking out and destroying submarines and aircraft which could threaten the movement, by sea, of military reinforcements and economic cargo. Also included are minesweeping forces and others utilized for harbour protection, and there are ground forces, such as those of the German Army, dedicated to securing the coastal areas of the Baltic exits. Further, merchant shipping capacity constitutes part of the overall allied maritime posture because it could be essential for the movement of American reinforcements to Europe. Over the years, particularly in the last several years, NATO has sought to enhance its ability to organize collectively and control merchant shipping in the event of war.

Two of the three major NATO commands (MMCs)—Supreme Allied Command Atlantic (SACLANT) and Commander-in-Chief Channel (CINCHAN)—were established to provide peacetime preparation and wartime direction of allied maritime forces. Subordinate to Supreme Allied Commander Europe (SACEUR) are several commands whose function it is to direct allied maritime forces in the Mediterranean and Baltic Seas (see Appendix A).

Taken together, the collective maritime forces of the allies both conventional and nuclear, under the direction of allied commanders, will seek to secure and exploit the sea for conveyance and for the projection of military forces ashore. They will also attempt to deny to the Warsaw Pact the ability to secure and exploit the seas by, for example, preventing such incidents as an amphibious assault by the Pact against Denmark or Norway. The ultimate objective of both conveyance and projection, and the denial of these usages, is to influence the situation ashore. This capability applies to peacetime deterrence as well as wartime defense. To the extent that the Alliance maintains a sea-based nuclear projection capability, or the ability to sealift reinforcements in a conventional conflict, the balance of power in Europe is strengthened in the Alliance's favor. The threat posed by the large Warsaw Pact conventional forces is partially negated.

This support of the allied land/air posture has been the chief function of the combined maritime forces of NATO since 1949. The existence of these forces and the plans and command structures formulated for their use have made NATO one of the great maritime alliances in history. Given the centrality of the European balance to the entire global strategic situation, this maritime alliance constitutes one of the pre-eminent examples of seapower in the nuclear age.

MARITIME FORCES AND FLEXIBLE RESPONSE

Until the early seventies, NATO maritime forces faced no major threat to their ability to secure the sea for conveyance and projection. Except in some of the immediate coastal waters, that is, those within range of Soviet land-based aviation and short-range submarines, the Alliance was almost assured of being able quickly to make use of the seas to support forces ashore. NATO's relatively favourable maritime position, however, coincided with an overall strategy—that of massive retaliation—which did not demand an extensive ability to secure the seas, particularly for conveyance. To be sure, the Alliance had planned from the outset for some sort of sealift reinforcement and, thus, protection of the SLOC and harbours could not be ignored. Yet, the relative importance of conventional maritime forces was not considered crucial. Carriers and ballistic missile submarines needed only to secure their immediate waters in order to perform their protection function. During these years NATO by no means completely disregarded its conventional maritime forces (and even deployed nuclear ASW weapons), but it can be said that it had a level of maritime superiority over and above what was required for a strategy of massive retaliation based upon overwhelming nuclear superiority.

With the shifting nuclear balance, and the consequent emphasis upon graduated and flexible response based on a greater measure of conventional deterrence, NATO's need to exploit the strategic value of the seas increased markedly. The demands upon its collective maritime forces in terms of the number and kinds of ships and weapons dedicated to securing control of the seas expanded. If conventional war was to be fought for more than several weeks, reinforcement and resupply would have to be brought across the Atlantic. Troops could be airlifted to prepositioned equipment, but, as the 1981 British statement on defense noted: "The conventional defence of Central Europe depends crucially on transatlantic reinforcement and resupply. Despite the major improvements now planned in airlift and prestocking, the bulk of equipment and resupply would have to come by sea."⁴ Along the northern and southern flanks, maritime forces would be immediately necessary to bolster generally weaker allied forces with reinforcements and additional airpower. Most significantly, the Alliance's increased need to exploit the strategic value of the seas grew at the same time that the Soviet Union's maritime forces were dramatically increasing their capabilities.

In the view of most analysts, the Soviet Navy has not been developed primarily for sea lane interdiction. In the early post-World War II era, the Soviets were primarily concerned with countering what they perceived as an amphibious and carrier-based threat from the United States. Thus, great emphasis was placed on submarines and land-based naval aviation. With the introduction by the United States of SSBNs, the threat to Soviet territory increased while the ability of the Soviet Navy to counter it decreased given the long ranges of the American Polaris SLBMs. As the USSR itself acquired a long-

range SLBM capability, the Soviet Navy began to give more attention to the protection of its sea-based nuclear strike capability. More recently, the Soviets have also used their maritime forces for Third World presence and intervention.

In the event of rising NATO/Warsaw Pact tensions, the Soviets will most likely pull back the bulk of their fleets to more secure waters near the Eurasian land mass, adopting a defensive position. It is, however, the defensive tasks of the USSR's non-strategic maritime forces which, ironically, pose the greatest threat to NATO and its flexible response strategy. This threat includes sea lane interdiction. With their enhanced submarine and naval aviation capabilities, the Soviets will attempt to push out their defensive perimeter well into the Norwegian, Baltic and Eastern Mediterranean Seas. In the north, concern over defending the SSBN fleet located in the Barents Sea as well as the important military installations on or near the Kola Peninsula, could prompt the USSR to seize parts of northern Norway.

A forward defense strategy on the part of the Soviets would, therefore, involve challenging NATO for control of sea areas vital to the Alliance. It would also put the Soviets in a better position to strike at allied SLOC, as part of a general campaign directed towards weakening the NATO posture on the ground in Europe. Although the Soviet Navy is not "optimized" for such a campaign, "its forces have significant capabilities to pursue such a strategy." "Furthermore," notes the United States Congressional Budget Office, "deployments appropriate to SSBN protection operations are also appropriate for sea lane attacks. It therefore appears prudent for Western forces to plan to defend the sea lanes against a Soviet Navy whose ability to attack those sea lanes is growing."⁵

For NATO, defense of the sea lanes could take a number of forms depending upon the disposition of Soviet maritime and other forces and the risks the alliance is willing to run. One option, currently being debated in the United States, is an offensive strategy. Utilizing American carriers and attack submarines, NATO would move against Soviet bases, particularly naval aviation bases, in an effort to contain Soviet anti-SLOC forces as far as possible from allied lines of communication. The approach has two major drawbacks. First, given the strength of defending Soviet forces, including land-based air armed with air-to-surface missiles, carriers moving close to the USSR would be subjected to a concentrated air, surface and sub-surface attack. Considerable doubt has been cast on the ability of such a carrier force to survive in this environment.⁶ Second, NATO sea-based attacks upon Soviet territory could threaten the USSR's SSBN forces and therefore run the risk of "crossing the 'firebreak' between conventional and nuclear war."⁷

This is not to say that the Alliance has ruled out sending carriers into the Norwegian Sea. It may be compelled to do so in order to counter Soviet forces moving into Norway. Moreover, while the carriers will be vulnerable, most naval analysts agree that the more car-

riers present, the better the chances of individual ships surviving because of the added protection afforded by increased numbers of aircrafts and protecting escorts.⁸

If the Soviets do not make a determined effort to break out beyond the Greenland-Iceland-United Kingdom Gap and adopt an extremely defensive posture, NATO might adopt a more defensive approach to sea lane protection. ASW and anti-air barriers could be established at or near the gap and convoys would afford close surface, air and sub-surface protection as they moved across the Atlantic behind the barriers. Convoys could be routed further south, turning northward somewhere below Gibraltar.

NATO, therefore, could employ a number of approaches to SLOC protection and it seems fair to assume that some combination of offensive and defensive tactical approaches will be employed. For this reason, the Alliance has sought, within the constraints imposed on national military expenditures, to maintain a capability to employ as wide a range of approaches as possible. Yet, uncertainties remain. Where, if at all, will NATO begin a sealift? Will existing forces in Europe and those air-lifted in be able to hold long enough to await the outcome of a battle for control of the vital sea lanes? Even if NATO prevails at sea, will it be too little too late? Finally, the most difficult question, how long can a war remain conventional?

All these uncertainties regarding the role of maritime forces have arisen in large part because of the intractable, although seemingly unavoidable, ambiguities of the flexible response strategy itself. The improvement of the USSR's maritime capabilities only compounded the uncertainties and problems surrounding flexible response. For in a real sense NATO had adopted an overall approach to deterrence and defense which was more suited to the measure of maritime superiority it had enjoyed in the early Cold War days.

The Alliance has not, however, been standing still with regard to its maritime posture. At the time the flexible response strategy was adopted in 1967, NATO naval officers began offering warnings concerning the consequences of such a strategy for allied maritime forces. In 1968, at the request of then Secretary General Brosio, the Supreme Allied Commander Atlantic (SACLANT), conducted the first comprehensive review of relative NATO and Warsaw Pact maritime forces. The *Brosio Study* warned that by the end of the 1970s, the Alliance would be in serious trouble at sea.⁹

To varying degrees, the warning contained in the *Brosio Study* prompted efforts to improve NATO's maritime posture. Other steps, such as the development of a Standing Naval Force Atlantic (STANAVFORLANT) and Standing Naval Force Channel (STANFORCHAN), plus the creation of an on-call force in the Mediterranean, were also taken. In the last few years NATO's major military commands—SACEUR, SACLANT, and CINCHAN—developed a revised "concept of maritime operations." According to recently retired SACLANT Admiral Harry Train (USN) the concept "identifies NATO

maritime interests and assesses the threats to these interests, considers the type of confrontation that can be expected and the associated allied priorities." It establishes the principles to be used by allied forces and outlines the likely campaigns to be waged as well as the forces needed. In its operations, NATO's maritime forces will stress "containment, defense in depth and keeping the initiative."¹⁰

Throughout the 1970s, the Alliance also improved procedures for the timely acquisition of non-U.S. merchant ships to support an American reinforcement sealift. For the first time, the U.S. military has a list of vessels which were "pre-allocated" to support a major sealift operation. These measures were part of a general effort to enhance NATO's ability to mobilize and reinforce during a pre-hostilities period of tension. In December 1982, the Defense Planning Committee approved an Alliance-wide plan for the crisis reinforcement of Europe with forces from North America, Portugal and the United Kingdom. The plan calls for the movement of hundreds of combat aircraft, hundreds of thousands of men and millions of tons of equipment, ammunition and resupply to Europe "within a period of several weeks." Most of the personnel will move by air, some to prepositioned equipment, but nearly all cargo would be brought in by sea.¹¹ With this plan, NATO would hope to deter war by demonstrating its willingness and capacity to defend itself. Should war break out, however, this crisis reinforcement would offer some hope of sustained conventional resistance and a hedge against the need to resort to nuclear weapons.

It is somewhat ironic, therefore, that as NATO has become more and more of a maritime alliance, increasingly dependent upon its maritime forces to support its position on land and in the air in Europe, some analysts in the United States should characterize a turning away from NATO as a "maritime strategy." The fact is, an American global maritime posture which "presumes a prolonged conventional war in the Atlantic/Mediterranean region, generates requirements for large forces."¹²

At this time, there is no official indication that the United States intends to weaken its commitments to NATO and to the strategy of flexible response. Yet, in the coming years, the U.S. Navy will be hard pressed to meet its Alliance obligations as well as demands likely to be placed upon it outside the NATO arena. In the past, the U.S. has looked to its allies to provide conventional maritime forces to supplement those of the U.S. Such contributions are likely to become even more important in the future.

CANADA AND NATO'S MARITIME STRATEGY

Space does not allow for the provision of a detailed history of the Royal Canadian Navy (RCN) and MARCOM. It is, however, important to point out the extent to which perceptions of a military threat in Europe (rather than specific Canadian maritime needs such as sovereignty protection and protection of Canadian seaborne trade)

were responsible for the development of the postwar maritime posture—a posture which came to stress ASW capabilities almost exclusively.

Planning for the postwar RCN had begun during the war itself. During that conflict, the Navy had built a largely escort fleet to meet the needs of the trans-Atlantic convoys. For the postwar era the RCN looked to the creation of a more balanced conventional fleet including two carriers, four cruisers and two destroyer flotillas as well as various coastal patrol vessels.¹³ Throughout the fifties and early sixties the RCN had attempted to maintain a balanced fleet which included the aircraft carrier *Bonaventure*, which carried *Banshee* fighter aircraft.

Within NATO, Canada had early on pledged itself to making a specialized commitment to the Alliance's ASW forces in the Atlantic. At the first meeting of the North Atlantic Regional Planning Group in October 1949, Canada was made a member of the planning subgroup for the Atlantic lines of communication. This group was to deal specifically with the "organization, control and protection of convoys."¹⁴ With the creation of SACLANT in 1952, Canada also assumed responsibility for the Canadian Atlantic Sub-area (CANLANT). Subordinate to the Commander, Western Atlantic (usually SACLANT himself), CANLANT encompassed the waters of Canada's eastern shore roughly east to Greenland and south to the Gulf of Maine. Until unification in 1968, it was jointly under the command of an RCN Admiral and a senior Royal Canadian Air Force officer, the latter having responsibility for land-based maritime air.***

Canada's commitment to the NATO maritime Alliance, in particular its pledge to provide ASW ships for convoy escort, made sense not only in regard to NATO but in terms of Canada's overall commitment to the defense of Europe. Even during the days of "massive retaliation," Canada along with its allies, especially the United States, had sought to maintain a conventional capability in Europe and to reinforce it if necessary through sealift. As Brian Cuthbertson has put it, "Once the Canadian government committed forces to Europe and made Europe a strategic frontier of Canadian defence, then maintenance of secure sea communications across the Atlantic was a *sine qua non*."¹⁵

The commitment to NATO and especially the emphasis upon ASW and convoy escort were to shape the RCN. While the maritime building program of the early 1950s rearmament contained general purpose forces, as cutbacks were made in the RCN over the years, the NATO ASW role came to dominate remaining vessels. Even the lone carrier replaced its fighter aircraft with the anti-submarine *Tracker*. As one 1968 official RCN history put it: "... in the ensuing years, non-anti-submarine units such as cruisers, fighter aircraft and minesweepers have been phased out so that the R.C.N. could concentrate on becoming highly specialized in the techniques of its chosen field."¹⁶ Eventually, even the carrier was scrapped and the RCN (now Maritime Command) concentrated on surface and land-based air ASW.

While the late 1960s saw Canada left with a small, almost exclusively ASW force still suited for the NATO role, that role itself was coming into question as MARCOM entered a period of general decline from which it has yet to fully emerge.

There are many reasons for the decline of Canada's maritime forces beginning in the late 1960s: Prime Minister Trudeau's views on the need to maintain standing forces, a desire to reorient all the armed forces toward more national tasks, such as non-military sovereignty protection, and budgetary restrictions arising from the ever-high costs of maintaining modern maritime forces. Underlying, and perhaps rationalizing these other reasons, appears to have been a growing perception that the tasks to which Canada's maritime forces were dedicated—ASW in support of securing allied SLOC—had become anachronistic in the missile age, in particular given the link between ASW and conventional defense. In 1970, the Maritime Subcommittee of the House of Commons Standing Committee on External Affairs and National Defence concluded that “. . . no need for convoy protection can be envisioned in any likely military eventuality.”¹⁷

This was a surprising statement in view of the fact that Canada had three years earlier endorsed the flexible response strategy with its wide-ranging implications for allied maritime strategy. As noted, by the early seventies, NATO had begun to look closely at its maritime posture and the problems posed by the new overall allied strategy and the growing capability of Soviet maritime forces which threatened to undermine it. It seems reasonable, therefore, that Canada, having decided to remain a contributor to the NATO maritime alliance was, by the mid-seventies, planning to improve its maritime forces, in particular to enhance and modernize its ASW capabilities through the purchase of new LPRAs and surface vessels.

Canada did acquire the CP-140 Aurora and has now decided to go forward with the new frigate program of six ships and perhaps a follow-up of six more. As the Senate Subcommittee so convincingly argues, this may be too little too late, “MARCOM, which is responsible for the country's seaward defences, cannot meet its commitments to the protection of Canadian sovereignty, to the defence of North America—much less to NATO.”¹⁸

In response to this gap between commitments and capabilities, the Subcommittee has proposed a dramatic program for the creation of “balanced fleet” by 1996, summarized in Table A taken from the report.

As the Subcommittee rightly maintains, its proposed program would greatly expand Canada's ability to contribute to the NATO maritime alliance. The continuing relevance of these NATO contributions will be discussed below. At this juncture, it is necessary to consider the justification of these numbers and kinds of forces in terms of Canada's own specific maritime requirements as well as the Subcommittee view that Canada should have a significant capability to

respond alone to all maritime threats save a nuclear missile attack.

When discussing the tasks and needs of MARCOM in responding to maritime threats, the Subcommittee makes it clear that it is referring to military threats against which the real or apprehended use of force will be directed. Thus, its proposals for the balanced fleet are based upon specific wartime tasks. Support for civilian authority or other "ancillary missions" can be performed by MARCOM, but these are non-military, secondary tasks. When considering military missions to protect Canadian sovereignty, the Subcommittee makes it evident that the Soviet Union and its Warsaw Pact allies are the only group of states which constitute a military threat to Canada. It is only against the maritime forces of these countries that Canada would be at all likely to apply military force at sea. There is no possibility that such a force would be used against allies, even if their ships violated Canadian sovereignty.¹⁹

What are the maritime threats posed by the Warsaw Pact against Canada? According to the Subcommittee they include: attacks from ballistic missile nuclear submarines, attack from missiles and aircraft launched from ships (including cruise missiles), large and small amphibious landings against coastal areas of outlying installations, interruptions of shipping, and the mining of harbours and choke points. A weakened Canadian maritime force would well tempt Warsaw Pact forces into believing that they could, under varying circumstances, obtain a "free ride" in Canadian sovereign waters.²⁰

The balanced fleet proposed by the Senate Subcommittee would dramatically improve Canada's current capability to contribute to North American and allied collective security at sea. It would afford Canada the means not only to secure its own waters, but to provide surveillance and, if necessary, to apply directly military force within the CAN-LANT area of SACLANT. The addition of heretofore non-existent modern minesweepers and fast patrol boats could ensure a significant capability to counter Soviet attempts to threaten harbour facilities and other coastal sea areas from which reinforcement shipping would depart. Arming the CF-18 with anti-shipping missiles could likewise improve Canada's coastal defense. The overall numerical increases proposed by the Subcommittee would further allow Canada to provide more forces for the Pacific while increasing its ability to contribute to the NATO maritime alliance.

The total cost of the Subcommittee's program, over and above existing proposals (which presumes a follow-on of an additional six new frigates with helicopters to the six already decided upon) would be \$5.9 billion (1983 constant dollars) by 1996. Of this, \$3.315 billion would be spent on the acquisition of seventeen submarines.²¹ While the Subcommittee believes this amount can be managed, the current government in Ottawa has indicated that the country could not afford it. In addition to the \$3.85 billion to be spent on the new frigates (for only the first six), Canada has begun a nearly \$400 million Destroyer Life Extension Programme (DELEX) to keep older ships operational

until the new frigates are ready. There are also plans for the expenditure of \$650 million to modernize and update the four triba-class destroyers, as well as the funding of new icebreakers.²²

Facing a federal deficit approaching \$30 billion, it does not seem likely that the present government or a new Conservative government, will implement the program outlined by the Senate Subcommittee, worthy as it might be. Thus, consideration should be given to a more modest program—one that will allow Canada to meet its own specific maritime needs, yet one that more importantly will also allow MARCOM to make an effective contribution to the NATO maritime posture.

NATO considerations should be decisive in selection of forces for MARCOM because it is in the NATO context that Canada's maritime forces would be most likely to perform their military tasks. Furthermore, it is only in the NATO context that Canada could make an effective and significant contribution to collective maritime security.

The gravest sea-based threat to Canada would come from nuclear attacks by either SLBMs or cruise missiles. Against such attacks, there

TABLE A
Comparison of current maritime force with possible 1996 forces

TYPE	CURRENT MARITIME FORCE	1996 SPENDING UNCHANGED	1996 SUB-COMMITTEE MARITIME FORCE
Surface ASW	20	15 + 2 building*	15 + 2 building*
Submarines	3	3	20
Operational Support Ships	3	3	3
Diving Support Ship	1	1	1
Minehunters	0	0	4
Minesweepers	0	0	9
Fast Patrol boats	0	0	12
LRPAs	18	18	36
Coastal Patrol Aircraft	18	18	18
ASW helicopters	35	35	45
Attack aircraft	0	0	84**
Escort Merchant ships	0	0	3

* In both models this number would stabilize at 16 in 1997/98

** Harpoon-equipped CF-18s to be drawn from Tactical Air Group and Air Defence Group

(Source: Canada, Senate, Standing Committee on Foreign Affairs Subcommittee on National Defence, Report, *Canada's Maritime Defence* (Ottawa, Minister of Supply and Services, 1983), p. 57.)

would be little that Canada's maritime forces could do. A situation in which Canada found itself the object of nuclear attack would be one in which the U.S. and USSR were already engaged in a strategic nuclear war—a war in which most allied maritime forces would be of little use.

Maritime forces would be most relevant in a conventional or severely limited nuclear war which emerged out of a period of rising East/West tensions. Although the bulk of the Soviet fleet, as argued above, may pull back to defend the Eurasian land mass, offensively the Soviets may well send small maritime forces out on the high seas and some, especially submarines, may enter Canadian waters. Commercial vessels are unlikely to remain in Canadian waters, and amphibious attacks (which would require the movement of surface ships into Canadian waters) seem well beyond the range of possibilities. Non-military Soviet vessels, such as merchant ships and fishing trawlers, might attempt to place mines at certain Canadian ports; to combat this, Canada should have some minesweeping capability. However, it would seem that American ports would be more likely to be the targets of such actions. Canadian ships at sea, destined for Canada, could be vulnerable to random attacks, although the Soviet's main concern would be reinforcement shipping going to Europe.

In a period of rising tensions, NATO's main concern will be the reinforcement of its land/air position in Europe. This will entail the commencement of an airlift of U.S. forces to existing prepositioned equipment. It will also entail the early commencement of a sealift which in turn will require the deployment of allied maritime forces to protect the sea lanes. While Canada's ability to secure its own waters and those of the CANLANT region in the Western Atlantic will be an important initial priority, the Eastern Atlantic SLOC will quickly become the focus of allied concerns. The closer the situation moves towards hostilities and in the opening phases of a NATO/Warsaw Pact war, the greater demand there will be for Canadian maritime forces capable of operating in forward areas. This contribution will be particularly important for the protection of convoys.

CANADA AND CONVOY ESCORT: A CONTINUING COMMITMENT

It is expected that NATO will employ convoys to move reinforcements and resupply to Europe, especially after the outbreak of hostilities.²³ While the growing reach of Soviet naval aviation will pose a threat to convoys, submarines will continue to constitute the primary danger. A recent report by the North Atlantic Assembly's Subcommittee on Defence Cooperation (ASW), warned that existing stocks of equipment in Europe could be drawn down "within as little as 2-3 days" of the beginning of a conventional war, and therefore, ASW operations "would be critical almost from the beginning. Accordingly, continued priority must be given to ASW within the Alliance."²⁴

The protection of convoys from submarines can take three forms: ASW barriers, area search and destroy, and close convoy escort. Barriers will be established at 'choke' points such as the Baltic exits, Gibraltar and Dardenelles and along the Giuk gap. Barriers will utilize the existing ocean floor Sound Surveillance System (SOSUS), surface ships, aircraft and submarines. Wide area search and destroy missions will be conducted within the gaps in the barrier and other sea areas. The combination of barrier and area ASW operations involves large ocean areas and a dispersion of forces attempting to reduce the area of the search until the submarine is located and can be destroyed. Convoy protection, in contrast, necessarily reduces the sea area of concern since its immediate goal is to control only that particular sea area from which submarines might launch torpedo or missile attacks. Close convoy protection also increases the number of ASW forces (surface escorts with helicopters, long-range patrol aircraft, carrier-based aircraft and nuclear attack submarines) directly dedicated to shipping protection. This in turn increases the likelihood of identifying and destroying Soviet anti-SLOC forces.

The advantages of close convoy protection were outlined in a 1974 U.S. Navy analysis, *Accelerated Sealift Study*. The study considered several force allocations and shipping alternatives, including independent sailings of fast merchant ships protected by one or two SSNs able to travel at the same speed. It concluded that, in a high-threat maritime environment, "in terms of aggregate weapon system effectiveness, area search forces are less effective than convoy screening and that merchant ship loss rate using a convoy system is significantly lower than the rate using independent transit with indirect support from area ASW forces."²⁵

While long-range aviation and submarines can provide close convoy escort, surface forces with their command, control and communications advantages and concentration of assets, will remain essential for this task.²⁶ The Falklands war highlighted the vulnerability of all surface combatants. However, the U.S. Navy and other allied navies anticipate that new technologies of maritime warfare will increase the usefulness and survivability of escort vessels.**** These technologies include: cruise missiles for surface-to-surface strikes and strikes against land targets, 'towed' array sonars, which allow for long-range detection of submarines, helicopters and vertical take-off and landing aircraft that allow for long-range submarine contacts and targeting of cruise missiles, and advanced anti-air capability for protection against aircraft and missiles.

The U.S. Navy uses surface combatants in five capacities: (1) as escorts for carrier battle groups; (2) as "surface action groups" centered around modern cruisers; (3) as escorts for amphibious operations; (4) as escorts for replenishment ships; and (5) as escorts for merchant marine shipping. Generally, frigate escorts will remain high into the 1990s—at about ninety vessels—while destroyer escorts will decline from the present level of over one hundred ten to about forty-

five.²⁷ Even with increases over current building plans, the U.S. will still be looking to its allies to provide much of NATO's convoy escort requirements.

Estimates for the number of surface escorts vary with assumptions concerning the number of convoys and attrition rates, as well as with the length and scope of the ground/air war. A long war will, of course, increase the need for convoys and for escorts. Even a short war, for example less than a month, which involves conflict along the entire NATO frontier (North, Center and South) will generate a large demand for convoys. One optimistic 'low' estimate for escorts is based on the assumption of two convoys per week, seven escorts is based on the assumption of two convoys per week, seven escorts per convoy, rapid attrition of Soviet submarines, low attrition of escorts and a short war. This estimate places the lower bound for surface escorts at a minimum of fifty-nine.²⁸ It is likely, though, that the need will

TABLE B
NATO ESCORT REQUIREMENTS
AND ALLIED ESCORT
CAPABILITIES IN THE NORTH ATLANTIC

Requirements and Available Forces	Number of Ships
Estimated North Atlantic Escorts Required	59-273
Estimated Allied Escorts Available	
Maximum force available	172
Less:	
Aviation ship escorts	- 18
Baltic, North Sea, and Norwegian coastal escorts	- 12
French, Spanish and Mediterranean escorts	- 76
Forces most likely to be available	66
Less 15 percent overhaul/maintenance allowance	- 10
Operational forces available	56
Range of Estimated Surplus (+) or Shortfall (-) in Available Escorts	
Maximum force available	+ 113/- 101
Most likely operational force available	- 3/- 217

Source: United States Congress, Congressional Budget Office, *Shaping The General Purpose Navy of the Eighties: Issues for Fiscal Years 1981-1985* (Washington D.C.: Congressional Budget Office, January 1980), p. 57.

approach the upper bound, which is based on the assumption of 3,000 to 6,000 merchant ships each making one transatlantic crossing a month. With slightly more than one escort for every twenty-five merchant ships, this estimate calls for just above two hundred seventy escort ships.²⁹

At present, the Alliance can only count upon roughly one hundred seventy non-U.S. escort ships with sufficiently modern ASW capabilities, including missiles and helicopters, able to provide convoy protection. Yet, as Table B indicates, many of these forces will be dedicated to other tasks. For example, the German and Danish forces will have to watch the Baltic exits and may be required in the North Sea. Norwegian forces will have as an immediate task the operations along the far Northern Flank, while the British forces will be deployed along the Giuk gap. Projected building and retirement rates for non-U.S. surface escorts indicate a less than one-for-one replacement in the 1980s. Thus, as the U.S. Congressional Budget Office has concluded: ". . . U.S. defensive forces—already required for protection of U.S. carrier task forces, underway replenish groups, amphibious groups and perhaps convoys to Asia—could also be required for transatlantic convoy escort."³⁰

The shortfall in surface escorts could further undermine the credibility of NATO's sealift posture. Recent predictions foresee major losses at sea given existing allied maritime forces. Former SACLANC, Admiral Isaac Kidd, (USN Ret.) predicted that "well over a third and probably more of the merchant ships at sea would be destroyed or prevented from delivering their cargoes on the day the shooting starts."³¹ A study by the United States Atlantic Council, under the direction of former Secretary of the Navy Paul Nitze, estimated that even under favourable conditions, that is, a pre-hostilities deployment of allied ASW forces, between three hundred and six hundred allied merchant ships would be lost within the first four to twelve weeks of a major war at sea. Non-military economic shipping could probably not be protected at all.³²

There is no certainty that the U.S. Navy will be able to compensate for the lack of allied surface escorts. The opportunity exists, therefore, for Canada to make a significant contribution to collective security by greatly expanding its surface forces. At present, only the four Tribal Class destroyers are capable of meeting NATO requirements. Their capability will be improved under the mid-life modernization program announced by the Canadian government. The six new City-class patrol frigates will be equal in ASW and defensive capabilities to any ships in the allied fleet. However, even if the Canadian government goes forth with an additional six vessels, it will leave Canada with only sixteen modern escort ships for both Atlantic and Pacific duties. With the British reducing their surface fleet in favour of aerial and submarine ASW forces,³³ and with the modern escort forces of Denmark and Germany likely to be dedicated to barrier and convoy roles in the North Sea, Canada should seriously consider building at least

eighteen of the new City-class frigates. Unlike the surface forces of the European allies, Canada's new escorts would be immediately available to provide for early movements of military shipping from the U.S. to Europe. As noted above, this movement ideally will begin in advance of hostilities and increase markedly in the event of war.

Also moving in advance of hostilities would be Canada's Air-Sea Transportable group now earmarked for the reinforcement of Norway. Some of this group are now slated for airlift while others, including the bulk of equipment, are to travel to five Norwegian ships currently pre-allocated for that purpose by the Norwegian government. In the absence of hostilities, these ships could move without escort, yet during a period of rising tensions, additional frigates would allow Canada to provide its own escorts if necessary and still meet other allied tasks. However, given the number of troops involved, and the necessity of early arrival in Norway, the Canadian government would do well to consider airlifting the entire CAST force. This would entail prepositioning and additional airlift capacity.

Building a revitalized MARCOM about eighteen City-class frigates will not be cheap. However, since some of the ships are already being built in Canada, this expenditure will have some significant beneficial effects on the job market. According to government estimates, the current six-ship project will create 30,000 person-years of work across Canada including many in high technology fields.³⁴

Another element of a NATO-oriented future MARCOM would be the doubling of the existing Aurora long-range patrol aircraft force. Bringing the total to thirty-six would greatly enhance Canada's ability not only to provide further convoy escort, but also to provide planes for barrier and search ASW in the Eastern Atlantic and Norwegian sea. In a crisis some of these planes could be forward-based in Iceland or Scotland. Doubling the Aurora force will not be cheap either, but the potential exists for negotiating further industrial off-setting agreements.

The proposal set forth here falls short of the balanced fleet proposed by the Senate Subcommittee. It is, however, one that seems more realistic in terms of the costs any Canadian government is likely to assume in revitalizing MARCOM. It is also one that has Canada building maritime forces with which it can make a much-needed contribution to allied security at sea. The submarine force proposed by the Senate Subcommittee would be useful for ASW, but other NATO members are already deploying and building major submarine forces. Fast patrol boats, armed with surface-to-surface missiles and underwater weapons are effective for coastal ASW but, here again, the need for such small ships will be more pronounced in the European coastal waters. Arming Canada's CF-18s with air-to-surface missiles would increase their versatility, enabling them to perform a maritime role. Nevertheless, NATO's needs for tactical maritime air is better supplied by existing European forces such as the F-16s of the Danish Air Force and the German Tornados already committed to the defense

of the Baltic exits. Unless Canada were to expand its tactical air capability, thus making additional forces available to Europe in an emergency, arming the CF-18s (which will barely be able to meet their North American and European commitments) does not seem worthwhile. A purchase of some minesweeping capacity could be considered because of the danger to Canadian and U.S. harbours posed by Soviet forces, although this would not be a high priority.

CONCLUSION

NATO is a maritime alliance because its members must have the capability to secure and exploit the seas as part of their collective deterrent posture. The strategy of flexible response and the growth of Soviet maritime capabilities has only heightened the Alliance's need to strengthen its maritime forces. In particular, NATO must maintain the capability to protect the movement of military equipment destined for the ground/air forces. This movement is not only essential for conventional resistance but may well be a crucial determinant in allowing the Alliance to avoid first use of nuclear weapons. There is no certainty that such a strategy will work. Nonetheless the very uncertainty and ambiguity of the flexible response approach demands that NATO prepare to meet an as wide as possible spectrum of threats and conflict scenarios, in the hope that such preparations narrow the range of Soviet options. Included in these preparations is the maintenance of adequate surface escort forces. Even if the United States continues to place NATO in the forefront of its global strategic priorities, it will still rely heavily upon its allies to provide surface escorts. Yet, projections of the need and availability of such forces indicate a serious shortfall in the coming years.

Canada should respond positively to NATO's need for more surface escorts by building at least eighteen new frigates this will give Maritime Command a good deal of the wherewithal with which to make a significant military contribution in the event of a NATO/Warsaw Pact war. Such a response will be no means inconsistent with Canada's overall strategic interests or its own maritime requirements. Canada remains committed to collective security through NATO, to the allied strategy of flexible response, and to steps that will reduce the Alliance's dependence upon nuclear weapons. A substantial increase in Canada's surface forces will further all these objectives. An expanded surface fleet, coupled with a doubling of long-range patrol aircraft, should also provide Canada with more than it needs to militarily secure its own waters. Thus even though Canada will have structured its maritime forces primarily to meet alliance obligations, it will still remain true that no other aspect of its contributions to collective defense can mesh as easily with national requirements as its contributions to the NATO maritime alliance.³⁵

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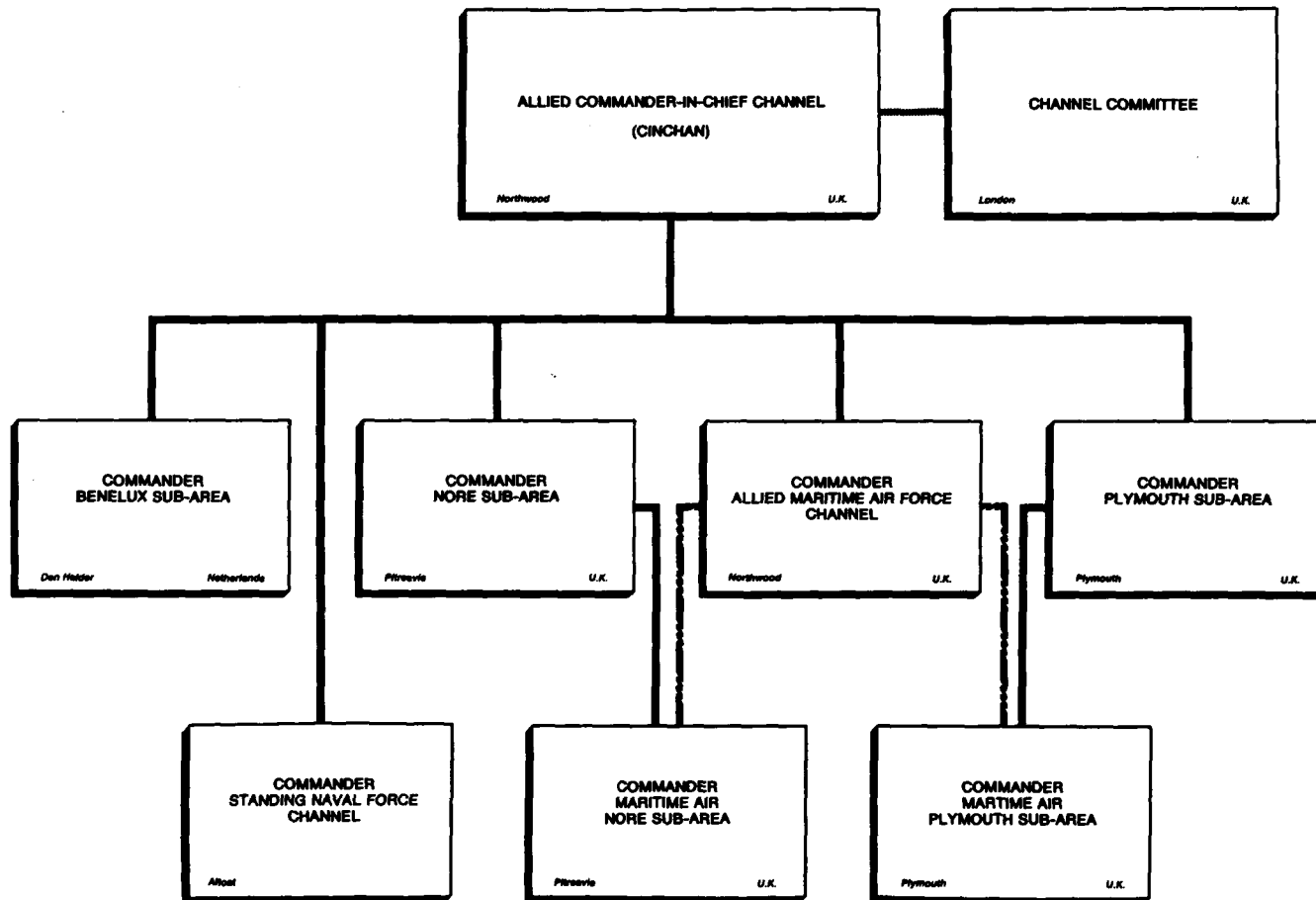
APPENDIX A

NATO Maritime Command Structure

The following charts, taken from NATO sources, set forth the allied maritime command structure. While Atlantic Command and Channel Command are the MNCs (major NATO commands) most directly concerned with maritime strategy, Allied Command Europe has several important subordinate commands which deal with maritime matters. These include: Commander Allied Forces Baltic Approaches (under Commander-in-Chief Northern Europe), and Commander Allied Naval Forces Southern Europe (under Commander-in-Chief, Allied Forces Southern Europe). Also under CIN-SOUTH is the U.S. Sixth Fleet in the Mediterranean. Upon declaration of a reinforced alert by NATO, the fleet becomes NATO's Striking Force South (STIKFORSOUTH).

Source: NATO Information Service, *The North Atlantic Treaty Organisation: Facts and Figures* (Brussels, NATO, 1981).

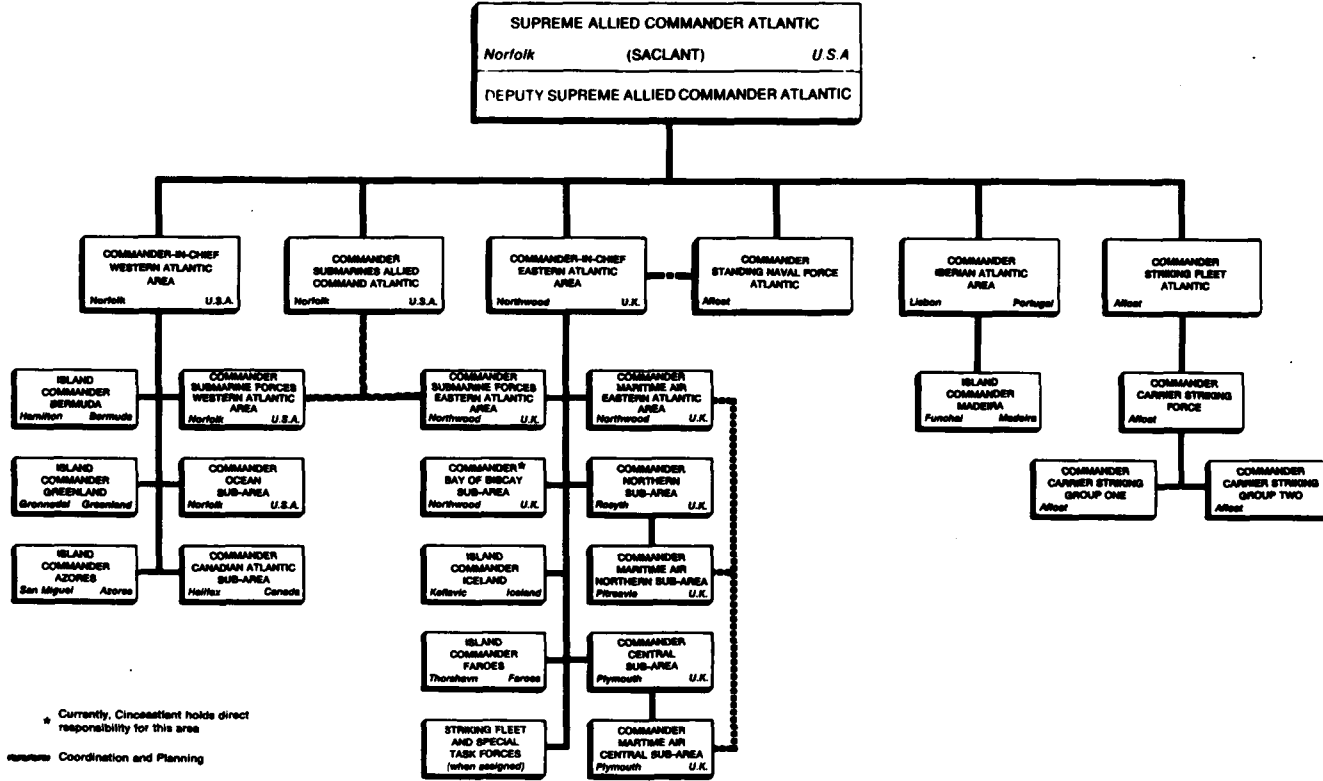
Allied Command Channel



--- Maritime air chain of command

--- Advice and Consultation

Allied Command Atlantic



* Currently, Cincsoffant holds direct responsibility for this area

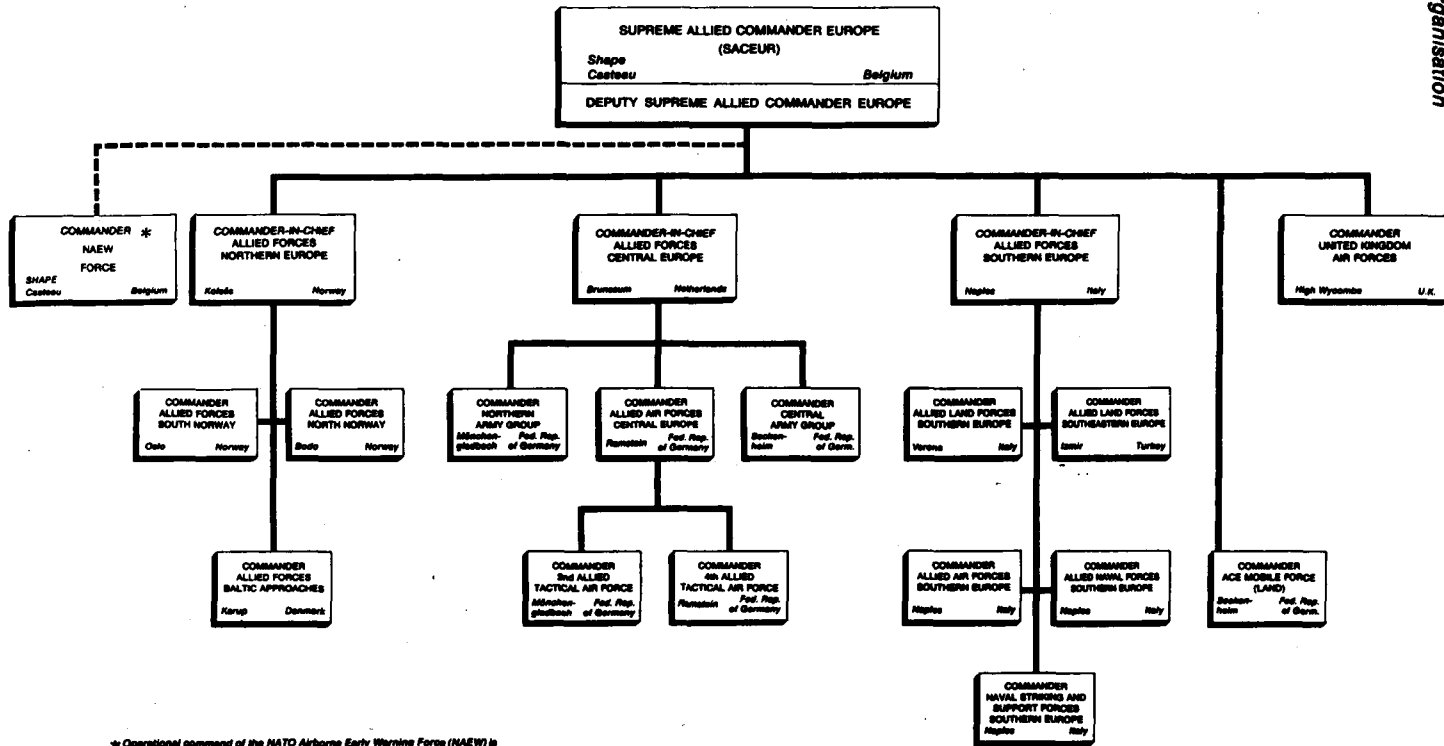
----- Coordination and Planning

----- Maritime air chain of command

----- Operational Control

Allied Command Europe

Military Organisation



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*: Operational command of the NATO Airborne Early Warning Force (NAEW) is shared by SACLANF, CINCHAN and SACEUR. SACEUR acts as Executive Agent in promulgating operational command directives and is designated as Executive Agent in the day-to-day exercise of administrative control.

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Footnotes

- * Although Clark uses "naval," this paper employs the broader term "maritime forces" to stress that military forces able to secure, exploit and deny use of the sea need not necessarily be found in the navies of various nations.
 - ** In maritime forces, the distinction between those solely capable of nuclear warfare and those whose purpose is to conduct conventional warfare is not clear. For example, a surface vessel could deliver either a conventional or nuclear depth weapon. Even in a nuclear exchange, forces that did not fire nuclear weapons could be important for surveillance. Aircraft carriers could play a vital role in either a nuclear or conventional conflict. Finally, this distinction does not relate to methods of propulsion, as nuclear power submarines constitute an important element of both NATO and Warsaw Pact conventional maritime forces.
 - *** At present CANLANT is under the command of Commander Maritime Command. Throughout the NATO maritime command structure there is double- and triple-hatting, for example, the NATO commander is also a major commander of the national navy. SACLANT is simultaneously the U.S. Commander Atlantic Fleet and Commander-in-Chief Atlantic. The commander of the Eastern Atlantic Area (under SACLANT), is the British Commander-in-Chief Fleet who is also Commander-in-Chief Channel Command.
 - **** Generally, major ocean-going surface combatants include aircraft carriers, cruisers, destroyers and frigates, with the latter two classified as escorts, although heavily armed cruisers do serve as escorts for carrier battle groups. In size, and generally in armament, cruisers are the largest and most powerful, with destroyers next and frigates, usually under 5,000 ton displacement, the smallest. Advances in weaponry have given frigates significant fire power, and the new Canadian patrol frigate, comparable to the U.S. Navy's FFG-7 (missile firing frigate) will be a powerful warship. It should also be noted that with the advent of surface-to-surface cruise missiles, even small patrol boats can inflict serious damage on major surface combatants.
1. Canada, Senate, Standing Committee on Foreign Affairs, Subcommittee on National Defence, Report, *Canada's Maritime Defence* (Ottawa: Minister of Supply and Services, May 1983).
 2. On this debate see, for example: Robert Komer, "Maritime Strategy vs. Coalition Defence," *Foreign Affairs*, 60 (Summer 1982); Eliot Cohen, "The Long Term Crisis of the Alliance," *Foreign Affairs*, 61 (Winter 1982/83); Michael Vlahos, "Maritime Strategy vs. Continental Commitment," *Orbis*, 26 (Fall 1982).
 3. John J. Clark, "Merchant Marine and the Navy: A Note on the Mahan Hypothesis," *Journal of the Royal United Services Institute*, 112 (May 1967), p. 164. Hereinafter RUSI Journal.
 4. United Kingdom, Secretary of State For Defence, *Statement on the Defence Estimates, 1981* (London: Her Majesty's Stationery Office, April 1981), p. 25.
 5. United States, Congress, Congressional Budget Office (CBO), *Shaping the General Purpose Navy of the Eighties: Issues for Fiscal Years 1981-1985* (Washington, D.C.: CBO, January 1980), p. 38. Hereinafter, CBO 1980.
 6. On this point see United States, Congress, CBO, *Planning U.S. General Purposes Forces: The Navy*, Budget Issue Paper. (Washington, D.C.: CBO, December 1976); United States, Congress, Senate Committee on Armed Services, Committee Print, *U.S. Naval Forces in Europe*, report by Senator Gary Hart, 95th Congress, 1st sess. (Washington, D.C.: GPO, 1977). The vulnerability of the U.S. strike carrier forces was also emphasized to the author in correspondence with Admiral Horacio Rivero USN (Ret.).
 7. CBO 1980, p. 22; see also Barry R. Rosen, "Inadvertent Nuclear War? Escalation and NATO's Northern Flank," *International Security*, 7 (Fall 1982).
 8. This point was emphasized to the author in several interviews including: Admiral Harry Train II, USN (Ret.), interviewed October 14, 1983, Norfolk, Virginia; Admiral Gerald Miller, USN (Ret.), interviewed April 22, 1983, Arlington, Virginia.

9. The *Brosio Study* can be found at the headquarters of the Supreme Allied Commander, Atlantic (SACLANT), at Norfolk, Virginia. Much of it remains classified. This author was allowed to read the study in its entirety on the understanding that only general, summary references (such as appear here) would be used. The best primary declassified sources concerning the efforts of NATO naval officers to warn the Alliance's political leadership of the danger of increased Soviet capabilities can be found in the papers of Admiral Richard Colbert, USN. Admiral Colbert, who died in 1973, served in various NATO naval commands. The papers are located at the Naval Historical Collection, U.S. Naval War College, Newport, Rhode Island.
10. Admiral Harry Train II, USN, "Challenge at Sea: Naval Strategy for the 1980s," *NATO's Fifteen Nations*, 27 (Special Edition 2/1982), p. 24.
11. Cliff White, "Reinforcing Reassurance and Deterrence," *RUSI Journal*, 123 (September 1983) p. 32. On reinforcement sealift see also: United States, Congress, Senate Committee on Armed Services, Subcommittee on Manpower and Personnel, Hearings, *NATO Posture and Initiatives*, 95th Congress, 1st sess. (Washington, D.C.: GPO, 1977); United States, Congress, House Committee on Merchant Marine and Fisheries, Hearings, *Defence Sealift Capability* (Washington, D.C.: GPO, 1981); United States, Department of Commerce, *Memorandum of Agreement Between the Department of Defense and the Department of Commerce on Procedures for Shipping Support of Military Operations* (Washington, D.C., June 1981); United States, Congress, Senate Committee on Armed Services, Hearings, *Department of Defense Authorization for Fiscal Year 1979*, Part 2, 95th Congress, 2nd sess. (Washington, D.C.: GPO, 1978), especially testimony by Ambassador Robert Komer, p. 1616.
12. Dov Z. Zakheim, *U.S. Naval Force Alternatives*, Staff Working Paper, CBO (Washington, D.C.: CBO, March 26, 1976) p. 29.
13. Brian Cuthbertson, *Canadian Military Independence in the Age of the Superpowers* (Toronto: Fitzhenry & Whiteside, 1977), pp. 123-124; James Eayrs, *In Defence of Canada: Peacemaking and Deterrence* (Toronto: University of Toronto Press, 1972), p. 82; see also G.M. Dillon, *Canadian Naval Policy Since World War II: A Decision Making Analysis*, occasional paper (Halifax, N.S.: Dalhousie University, Center for Foreign Policy Studies, October, 1972).
14. Operational Archives of the U.S. Navy, Washington, D.C., Strategic Plans, Chief of Naval Operations Files, Box 1, "North Atlantic Ocean Regional Planning Group Papers, minutes of the first meeting October 31, 1949;" "Report of the Chiefs of Staff Committee of the North Atlantic Regional Planning Group to the Standing Group of the Military Committee," November 9, 1949.
15. Cuthbertson, p. 127.
16. Canada, Directorate of History, National Defence Headquarters, Ottawa, SGR II, 223, J.D.F. Kealy, "The Development of the Canadian Navy, 1945-1967," (July 1968), p. 4.
17. Canada, House of Commons, Standing Committee on External Affairs and National Defence, 28th Parliament, 2nd sess., Report, *Tenth Report Respecting Maritime Forces* (Ottawa: Queen's Printer for Canada, 1970), p. 19.
18. Canada, Senate, *Canada's Maritime Defence*, p. 2.
19. *Ibid.*, pp. xii, 7.
20. *Ibid.*, pp. 4, 41.
21. *Ibid.*, p. 56.
22. Canada, Department of National Defence, Statement by the Honourable J. Gilles Lamontagne, Minister of Defence, "The Canadian Patrol Frigate Project," Ottawa, June 29, 1983; "Background Information: Canadian Patrol Frigate Project."
23. While the strategic literature is not unanimous with regard to either the feasibility or necessity for convoys, most military officials believe that some form of convoying will take place. This was the view expressed to the author at a number of interviews, including those at NATO headquarters, Brussels, SACLANT headquarters, Norfolk, Virginia, Channel Command Headquarters, Northwood, England, The U.S.

- Maritime Administration and U.S. Military Sealift Command. See also, Admiral Sir Peter Whitely, "The Reinforcement of Europe," *NATO's Fifteen Nations*, 24 (August/September 1979).
24. North Atlantic Assembly Papers, *NATO Anti-Submarine Warfare: Strategy, Requirements and the Need for Co-operation* (Brussels: North Atlantic Assembly, 1982), p. 15. The threat of Soviet long range naval aviation, especially with the deployment of the Backfire bomber will also be significant. See Joel J. Sokolsky, "Soviet Naval Aviation and the Northern Flank: Its Military and Political Implications," *U.S. Navy War College Review*, 34 (January/February 1981).
 25. *The Accelerated Sealift Study* remains classified. This account of its conclusions was taken from Commander William F. Mellon, USN, "To Convoy or not to Convoy," *Proceedings of the United States Naval Institute* (USNIP), 106 (March 1980), pp. 50-53.
 26. North Atlantic Assembly Papers, p. 35.
 27. United States, Congress, CBO, *Naval Surface Combatants in the 1980's: Prospects and Possibilities* (Washington, D.C.: CBO, April 1981), pp. xiv-xvii.
 28. Paul H. Nitze, Leonard Sullivan, Jr., and the Atlantic Council Working Group on Securing the Seas, *Securing the Seas: The Soviet Naval Challenge and Western Alliance Options* (Boulder, Colorado: Westview Press, 1979), p. 37.
 29. *Ibid.*; Rear Admiral Sayre A. Swarztrauber (USN), "The Potential Battle of the Atlantic," *USNIP*, 105 (May 1979), p. 116; Interview with Rear Admiral Swarztrauber; CBO 1980, pp. 55-56.
 30. CBO 1980, p. xvii.
 31. Admiral Isaac Kidd (USN), "For Want of a Nail: The Logistics of the Alliance," in Kenneth Myers, ed., *NATO: The Next Thirty Years* (Boulder, Colorado: Westview Press, 1980), p. 199.
 32. Nitze *et al.*, p. 374.
 33. In its 1981 Defence White Paper, the British government indicated that it would be reducing its surface forces in favour of submarines and land-based air. This could leave gaps in barrier defenses and reduce the number of allied ships available for convoy escort. See North Atlantic Assembly Papers, p. 35; Michael Chicester and John Wilkinson, *The Uncertain Ally: British Defence Policy, 1960-1980* (London: Gower, 1982), p. 36; Sir James Cable "Surprise and the Single Scenario," *RUSI Journal*, 128 (March 1983).
 34. Canada, Department of National Defence, Statement by Gilles Lamontagne.
 35. In his discussion of Canada's early Cold War maritime posture, Cuthbertson noted that: "In the 1950's Canadian Naval Policy and experience meshed into NATO strategy with an ease not present in other areas of defence activity." This was so since there was no real sovereignty issue "over the commitment of the RCN to NATO," in a predominantly ASW role. The threat was Soviet submarines (pp. 127-128). While Canada's need for non-military sovereignty protection has grown, MARCOM's posture should concentrate on military tasks. Here the Soviet maritime threat has also increased, but an enhanced Canadian contribution to allied maritime security will enable Canada to meet military threats in its own waters given the likely war scenarios in which conventional maritime forces would be relevant.