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The Proposed Amphibious Ship Purchase – A Strategic Misstep

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ABSTRACT

Few nations have undertaken the challenge to build and train a credible amphibious force for contingency operations, particularly one that is expected to conduct opposed landings. Even fewer are used by a government to project power ashore in the littoral waters of another nation. Establishing an amphibious capability requires strong and long-term backing of the nation through clearly articulated roles that are consistent with defence and foreign policies. Canada has recently revived an interest in attaining an amphibious expeditionary capability. Initially, through the creation of a Standing Contingency Force (SCF), Canada commenced studying the viability of building an amphibious force centered on one or more amphibious capable ships. This type of warfare is not new to Canada as seen with its involvement of such operations in World War Two; however, this capability was quickly lost as Canada pursued the roles of anti-submarine warfare and commitment to continental Europe defence during the following Cold War.

Creating an amphibious capability can only be achieved with the full backing of the national government. That is, there must be a national will. National will is then articulated through defence and foreign policies. The recent abeyance of the SCF project, and by extension the amphibious ship acquisition, has shown that Canada will not continue to pursue this capability in the near future. It reveals that the Canadian government is not committed to making the drastic change of roles in the CF that would support the purchase of an amphibious ship. A change in government priorities that is articulated and supported through national defence policy will be required before this type of purchase and capability for the CF is acquired.

INTRODUCTION

An amphibious ship, or rather, an amphibious ship as part of an amphibious task force is a very versatile and powerful instrument of sea power. Its high political value resides in its ability to project, or threaten to project power ashore, whenever and wherever politically appropriate.[1] This type of a capability can act as a deterrent force whether in its home base or at sea exercising its forces. Power projection can also come in the form of being able to provide humanitarian assistance or evacuating non-combatants from a region of conflict. The fleet with an amphibious capability is a very potent fleet-in-being.

The tactics and operation of employing ships to project armed forces or forces ashore from the sea is not a new idea. The Persians attempted to win over the Athenians in battle during an amphibious landing at Marathon in 490 B.C.[2] More recent events such as those at Normandy and Inchon (an amphibious assault), Dieppe (an amphibious raid) and the Dunkirk (evacuation by sea) scenarios highlight the applicability that this type of operation has retained. It has allowed strategic and operational commanders the flexibility and maneuverability that they may not have had otherwise during operations on land to achieve decisive victory. Maneuverability combined with speed and surprise can produce great victories against a determined foe. However, if poorly planned or executed, amphibious operations can also lead to disastrous defeats such as those

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[1] R.S. Tailyour, "The Future of Amphibious Warfare" *RUSI Journal*, (Spring 1991): 33.

[2] T.B. Pochop, "The Battle of Marathon 490 B.C." Nav Sci 421 [Online Presentation]; available from http://faculty.washington.edu/tpochop/NavSci421/Class4Marathon.ppt ; Internet: accessed 21 April 2007.

experienced at Gallipoli and Dieppe.

The Canadian military has also participated in past amphibious operations. In August 1942, Canadian troops were assigned to the large amphibious raid against the German forces located in the Dieppe area under operation JUBILEE. Although it was a tactical failure, it was a valuable attempt because it demonstrated that the Allies were capable of conducting these types of operations and that German forces on the continent were vulnerable to attack. Strategic success would follow when two years later Canada participated in the massive attack on the Normandy coast at Juno beach during operation OVERLORD, incorporating many lessons from the earlier Dieppe raid. During both those operations Canada contributed significant troops to storm ashore, aircraft piloted by Canadians to provide air cover and some smaller ships conducting escort duties. A small number of landing craft were Canadian; however, many Canadian troops were also ferried by British or American craft ashore. Canada did build and operate landing ships, converting two armed merchant cruisers, HMCS PRINCE HENRY and DAVID into Landing Ship Infantry, Medium LSI(M) and built twenty six Landing Ship Tank, Mark three (LST 3) designated Transport Ferries, for the Royal Navy in support of Allied landing operations in the Indian Ocean.[3] In the end, although a valuable contribution, the Canadian amphibious experience was a limited one because operations conducted during operations JUBILEE, TORCH, OVERLORD and DRAGOON were over relatively short distances, unlike the extensive and wide ranging amphibious operations undertaken in the Pacific campaign or contemporary longer range expeditionary operations.

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[3] D.K Brown, *The Design and Construction of British Warships 1939-1945 – The Official Record: Landing Craft and Auxiliary Vessels* (Annapolis: Naval Institute Press, 1996), 77.

Canada never again participated in an amphibious assault against a hostile shore with an entrenched enemy; however, Canada supported more benign land operations from the sea utilizing available Canadian naval vessels. In 1957 HMCS MAGNIFICENT was used to deliver Canadian Army equipment to Port Said, Egypt.[4] Recent uses of Canadian auxiliary oil replenishment (AOR) ships included providing sea basing for operations DELIVERANCE (Somalia - 1993) and TOUCAN (East Timor - 1999) as well. As administrative landings which supported operations to the army ashore, they were contingencies that were handled in an ad hoc manner with the resources at hand, particularly during the operation in Somalia.[5] These were neither well planned nor well focused operations because they were not within the normal operational role assigned to the Canadian Navy at the time, namely anti-submarine warfare.

The Canadian Navy's primary focus following World War Two was anti-submarine warfare and not amphibious warfare. This role was assigned and accepted under the North Atlantic Treaty Organization (NATO) rubric because Canada had gained valuable experience in countering the German submarine threat during the Battle of the Atlantic. The Canadian Navy would embrace this role starting in 1947 and retain it throughout the course of the Cold War.[6] Canada, therefore, developed, designed, and built a fleet of ships that supported this role. In turn, The United States (US) Marines provided the necessary amphibious specialization forces for the Western Alliance. As the

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[4] Department of National Defence. *LEADMARK, The Navy's Strategy 2020* (Ottawa: Canada Communications Group, 2001), 104.

[5] Department of National Defence. *Report of the Somalia Commission of Inquiry* [Online Government Website]; available from www.forces.gc.ca/somalia/vol3/v3c25de.htm#472 ; Internet; accessed 22 March 2007.

Cold War drew to a close, Canada took possession of a new frigate fleet that was designed to conduct picket type duties in the North Atlantic against Soviet submarines, a role that virtually disappeared with the end of the Cold War. Canada had to find a means to employ these frigates meaningfully in a more general purpose role, one that revolved around the Task Group (TG) concept of protecting high value vessels within the group. The AOR ships built during the Cold War provided the support to the task groups for the ASW mission.[7] They were never designed to support operations ashore, but could provide sealift of small Army vehicles and their drivers and maintainers.[8] The Canadian military would look into the practicality and efficacy of assuming an amphibious capability during the 1960s during Paul Hellyer's tenure as Defence Minister, but the impetus for this effort was lost in the organizational confusion of unification and once Hellyer moved out of the portfolio.

Few nations have undertaken the challenge to build and train a credible amphibious force for contingency operations, one that is expected to conduct opposed landings. Even fewer are used by a government to project power ashore in the littoral waters of another nation. Establishing an amphibious capability requires strong and long-term backing of the nation through clearly articulated roles that are consistent with defence and foreign policies. It also requires serious investment in both hardware such as the amphibious ship and its accompanying escort ships, helicopters, air support and in the

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[6] Marc Milner, *Canada's Navy: The First Century*, (Toronto, University of Toronto Press, 1999), 175.

[7] Ibid, 224.

[8] Department of National Defence. *The Commissioning of HMCS PROTECTEUR,* Pamphlet dated 30 August 1969.

human resources necessary to man all that equipment. It is a capability that is difficult to produce, hard to maintain and easy to lose during combat or equally as easily lost during governmental fiscal cutbacks.[9] Currently, only a handful of countries can field a proper and well supported amphibious capability, capable of full scale amphibious assault over extended ranges outside of a state's own territorial waters.

Ongoing command transformation has occasioned many changes on the force structure and tasks being assigned to the Canadian Forces (CF). The Canadian Navy was somewhat surprised in 2005 when the Chief of Defence Staff, General Rick Hillier, announced that Canada was seriously considering the purchase of an amphibious ship.[10] The resulting Standing Contingency Task Force (SCTF) was selected as the key organization for assuming this new joint sea-based projection capability. To prove the seriousness of this undertaking, the CF, with the Canadian Navy as lead service, was tasked to conduct an evaluation of the viability of exercising this capability which resulted in the Fall 2006 exercise where the USS GUNSTON HALL was leased from the United States Navy (USN) and a small landing of Canadian troops and equipment took place in Onslow Bay, USA.[11] As time progressed, the creation of the now renamed Standing Contingency Force (SCF) seems to have centered around this amphibious

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[9] The Royal Navy let the amphibious ships slowly decay during the time leading up to the Falklands conflict. Mike Clapp, and Southby-Tailyour, *Amphibious Assault Falklands: The Battle of San Carlos Water*, (Annapolis, Naval Institute Press, 1996), XX .

[10] Richard Gimblett, *Defence Policy Statement: Implications for the Canadian Navy*, May 2005 [Online Government Website]; available from http://www.navy.forces.gc.ca/cms_strat/strat-issues_e.asp?id=306 ; Internet; accessed 22 March 2007.

[11] Sharon Hobson, "Plain Talk: Selling the SCF to Canadians" *Canadian Naval Review*, Winter 2007, 35.

capability rather than on the original concept of an organization whose strength would reside in an integrated command and control structure that would *employ* assets from all three services towards a mission assigned by the government of Canada. The question

Figure 1. USS GUNSTON HALL in Halifax Harbour November 2006.

Is this the next capital ship of the Canadian Navy?

Source: Canadian Forces Combat Camera

that should be asked now is, can the CF support this amphibious initiative?

The amphibious idea in the Canadian context is hardly new. Debate over the requirement for an amphibious force and/or amphibious ship has existed since the appointment of Paul Hellyer as Defence Minister in 1963.[12] The parameter of the debate surrounding the topic of a Canadian amphibious capability has included everything from questioning the veracity of building a vessel that incorporates several roles into one platform such as the Joint Support Ship (JSS), to having two or more role specific vessels

[12] Peter Haydon, "Canadian Amphibious Capabilities: Been there, Done it, Got the T-shirt!," *Maritime Affairs*, Winter 2001, 14.

for addressing fleet sustainment, sealift and amphibious capability requirements. The debate includes discussion on whether Canada can fiscally afford to attain and maintain this capability and indeed if there is even a need for the amphibious role within a Canadian foreign and defence policy framework to begin with. Much of the literature concerning amphibious operations is produced to argue the *validity* of having the capability to conduct these operations: often outlining specific sizes of forces, capability of the forces and the strategic reach enabled by this capability. Assumptions are made that both the force will be structured around a particular ship capacity or that ship size and the number of ships will be determined by expeditionary force size allocation. Very few authors have closely examined the *impact* that acquisition of any amphibious ship would have on the CF, specifically on the Navy and how that would necessitate a change in fleet role. This impact analysis due to a role change has been done before. In 1967 Admiral O'Brien sent a report to Chief of Defence Staff, General Allard, stating that it can be done "provided the fleet was correctly structured."[13] The debate on amphibious capability, amphibious ship acquisition and naval force structure continues to be widespread, but remains unfocused because it does not address the core issue, that is, the CF maritime role must change in order for an amphibious capability to be undertaken.

The proposed acquisition of an amphibious ship, integrated and supported by a naval task force, seemed to be the result of an overly aggressive bid by the Chief of Defence Staff to increase CF expeditionary capability. The addition of an amphibious

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[13] Peter Haydon, "Canadian Amphibious Capabilities: Been there, Done it, Got the T-shirt!," *Maritime Affairs*, Winter 2001, 17.

ship is not in the strategic interest of Canada or the CF because it does not support the first two strategic imperatives for Canadian defence, protecting Canada first and defending North America. The third role of contributing to international peace and security can be achieved, but the cost associated with this capability may not warrant expenditure as this role has been and can be in future fulfilled through strategic airlift and the JSS in concert with leased commercial sealift. Assuming an amphibious capability requires the CF to change the primary maritime role to one which supports expeditionary operations by always protecting the amphibious ship in an amphibious-centered TG. The amphibious ship would well become the capital ship of the naval arm, driving fleet structure and weapon system requirements to support operations in the littoral instead of the current blue water alignment. A change in roles is resource intensive, one which is currently not supported from a political and fiscal stance. This proposal is beyond the current and proposed resources assigned to the CF because of the current requirement to replace the fleet support ships, modernizing the frigate fleet and the commencement of the acquisition process for replacing the area air defence destroyers.

Political requirements necessary to undertake the building of one or more amphibious ships are non-existent. National will in supporting the acquisition of an amphibious ship through an examination of national policy documents and historical expeditionary employment of naval assets by the CF is lacking, particularly after a series of internal reviews by the CF in the early 1960s. Institutional support by the CF, and by the Navy in particular, has been heavily caveated with a requirement for government to provide more than modest resources for a capital acquisition of this size.

In comparison to Australia, Canada is not in the same predicament of defending an island continent in a geographically distant corner of the globe due to the differences in geopolitical circumstances. Situated on the North American continent beside the world's remaining superpower and distant from any potential enemy has allowed Canada to concern itself less than Australia about defence policy and security issues, including the need for expeditionary amphibious forces.

Unless substantial expenditures are made the current fleet structure is not suitable for supporting amphibious operations in the littoral. Strategically, purchasing one amphibious ship would not be viable because if it is to become a primary tool by which to project national power because it must, by definition, be available at all times to respond to potential crises. One platform cannot always be available. In addition to forcing significant change on the CF to support this capability holistically, it may provide a capability that once attained would produce impetus for employment because of the cost and possible international pressure for it to be used. The issue regarding purchasing an amphibious ship can only be fully understood by discussing how foreign, defence and fiscal policies apply to the debate. Several strategic and operational challenges face the CF were the Canadian government to proceed with the acquisition. Based on historical use of the CF, the purchase could be questioned based on the paucity of conducting this type of operation. Canada should not to rule out amphibious operations completely. Geopolitical factors may significantly change in future, but perhaps JSS adequately addresses the need to conduct administrative landings in the interim while the debate continues. Either way, a substantive upgrade to remaining fleet units to ensure JSS or amphibious ships are properly guarded even in relatively benign circumstances, when not

working in a coalition context, is also essential and requires rethinking CF naval fleet structure.[14]

SECTION ONE - THE POLITICS OF AN AMPHIBIOUS CAPABILITY

Canadian Foreign and Defence Policy Effects

Canadian national security or defence policies are the driving mechanisms from which is derived the tasks that the CF is to undertake. Military force structure is then proposed and built on these assigned tasks and missions. Initially in Canada, defence issues stemmed from the colonial linkage to Great Britain through the apparatus of the Commonwealth. Many early expeditionary ventures of Canadian forces stemmed from this obligation to assist Britain. Canadian participation in the Boer War, the First World War and the Siberian Intervention in 1918 saw Canada slowly struggling to gain complete independent control over her foreign policy and by extension administer her own defence policy.[15] The Siberian Intervention indicated a willingness of Canada to undertake independent decision making regarding employment of Canadian forces overseas. However, Canada was still unable to articulate an independent foreign policy that would, in turn, outline a defence policy because Great Britain still controlled foreign policy of Commonwealth countries and by extension, defence policies also. Defence policies in British hands led to difficulties of employment of Canadian troops because of the inadequacy of the British to understand internal Canadian issues. In this case,

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[14] Kenneth Hansen, "Starting Over: The Canadian Navy and Expeditionary Warfare" *Canadian Naval Review*, Spring 2005.

[15] Prime Minister Borden still attended Imperial War cabinet meetings in London during the final months of World War 1. Gaddis Smith, "Canada and the Siberian Intervention, 1918-1919," *The American Historical Review*, July, 1959, 866.

General Mewburn's questions regarding how the Canadian contingent would be employed, under whose control it would fall and the very sticky question at the time of how to conscript the recruits.[16] This aspect of controlling forces was significant because conscription was a divisive political issue that local Canadian politicians had to contend with which, in turn, affected employment of Canadian expeditionary forces due to the need to find and conscript men when volunteers ran short.

Prior to the start of World War II, Canada had achieved some foreign and defence policy autonomy from Britain after the Statute of Westminster of 1931 was passed into law. The interwar war years were marked with indifference towards a meaningful foreign policy and therefore a weak defence policy that lead to only meager armed force being maintained.[17] Canada was not interested in overseas adventures for Britain or the League of Nations. The outbreak of World War II saw Canadians in action once again and, in particular, conducting amphibious operations but this time the focus was clear, defeat of the Axis forces. The shortage of material over many different fronts and of differing types of equipment meant that the Allies would pool resources and utilize whatever was available. In the case of Canada, most of the initiatives were due to British requests for support and was given in the form of providing manning for various vessels such as landing craft.[18] Therefore, Canadian forces used during amphibious

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[16] Gaddis Smith, "Canada and the Siberian Intervention, 1918-1919," *The American Historical Review*, July, 1959, 869.

[17] C.P. Stacey. "Canadian Defence Policy" *The Canadian Journal of Economics and Political Science,* November 1938, 491-492.

[18] Chris, Madsen. "Limits of Generosity and Trust: The Naval Side of the Combined Munitions Assignment Board, 1942-1945" *War & Society,* October 2003, 98.

landings were often embarked in Royal Navy or US Navy Landing ships and craft. Canadian focus was on building of a fleet of escorts, auxiliary vessels, and later landing ships and craft, to counter the German threat, which was the priority for Canada.

Prime Minister Mackenzie-King's foreign and defence polices throughout the war years were very clear but were often met with disagreement from the senior military leadership based on their interpretation.[19] It would lead to a pattern whereby Canadian defence policy would be interpreted by senior Canadian officers in a manner that allowed them to debate the veracity of force structure or deployment based on their own interpretation of the policy.[20] This pattern would continue in the years following World War II until establishment of the United Nations (UN) followed shortly thereafter by the North Atlantic Treaty Organization (NATO) and then the North American Aerospace Defense Command (NORAD) alliances. These arrangements would give focus to Canadian military planners in so far as the roles to be undertaken by the CF until the end of the Cold War.

The Cold War, from 1949 until 1989, would be the primary focus and determinant of force development and choice of Navy fleet mix. Building on the World War II experience, Canada would undertake the primary role of anti-submarine warfare defending against the growing Soviet submarine threat. The purchase of ships, however, was also influenced by the NATO and NORAD requirements. The acquisition of the

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[19] Marc Milner, *Canada's Navy: The First Century*, (Toronto, University of Toronto Press, 1999), 79-80.

[20] W.A.B. Douglas, R. Sarty, and Micheal Whitby, "No Higher Purpose – The Official Operational History of the Royal Canadian Navy in the Second World War, 1939-1943, Volume II, Part 1" (St. Catherines, Vanwell Publishing Limited, 2002), 137 and 147.

carriers HMCS MAGNIFICENT and BONAVENTURE were primarily to support the Canadian commitments to NATO and NORAD, not for unilateral Canadian expeditions abroad. To argue that HMCS MAGNIFICENT had been used for expeditionary operations during Operations RAPID STEP, RAPID STEP II for the movement of Army peacekeeping assets to Cyprus in 1964 is to imply that there was a secondary role for maritime forces when it was just using the carrier as sealift.[21] The Canadian Navy ,however, did not envision these platforms, however versatile, for use as an ad hoc amphibious or sealift ship; however, use as sealift for the Army would become a defence policy point under Paul Hellyer's March 1964 Defence White paper.

The 1964 White Paper on Defence outlined that the Canadian contribution under NATO and the UN needed to become much more mobile in order to be able to reinforce its commitments in Europe in an emergency. It was a reordering of priorities for the CF. Reinforcements fro Canada were envisioned to be able to reach anywhere from Northern Norway to the Eastern Mediterranean by using ships to effect this mission. A unique Canadian initiative indicated that perhaps Canada withdraw from basing troops within Europe and instead develop an amphibious capability whereby Canadian army contingents could be landed anywhere in the NATO sphere of influence or wherever needed. Although unique, this idea was rejected by Prime Minister Pearson as too ambitious, therefore effectively removing a strategic rationale for an expeditionary force underpinned by Hellyer's CF unification project.[22] Removal of ground forces from

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[21] J.D.F. Kealy, and E.C. Russell*, "A History of Canadian Naval Aviation 1918-1962"* (Ottawa, Queen's Printer,1965), 97.

[22] Douglas Bland and Sean Maloney, *"Campaigns for International Security – Canada's Defence Policy at the Turn of the Century"* (Montreal, McGill-Queen's University Press, 2004), 76-77.

Europe in the 1960s would have potential catastrophic effects on the solidarity of NATO itself, despite the promise of the Government of Canada being there in times of an emergency. The repercussions of withdrawal from the continental defence of Europe role cannot be under estimated. France's withdrawal from the integrated military command in 1966 had severe political implications for NATO.[23] In Canada, the suggestion for the total withdrawal of forces from Europe was seen as a diminishment of the collective strength of NATO and was counter to the national interest of Canada. It would have led the US to question Canada's commitment to any alliance including NORAD, although this move meant more troops available for continental defence. The effect of withdrawal from a European commitment, even in part, was aptly demonstrated when Prime Minister Trudeau unilaterally reduced the Canadian commitment by fifty percent. NATO members howled in protest with the British accusing Canada of "passing the buck."[24] The unique Canadian strategic rationale of developing a "Triphibious"[25] force for the re-enforcement of Europe was shelved in order to afford maintaining a presence in Europe. The light carriers and soon to be purchased auxiliary oil replenishment ships (AOR) would continue to provide a modest sealift capability as several studies and reports are produced during the 1960s attempting to advocate an expeditionary force capability.

Canada's chance to acquire a sealift/amphibious capability never materialized because of unreliable and inconsistent government support. The many reports and

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[23] Francis A. Beer, *"Integration and Disintegration in NATO"* (Ohio, Ohio State University Press, 1969), 86-92.

[24] Bruce Thordarson, *"Canadian Foreign policy – Selected Cases - Cutting Back on NATO"* (Scarborough, Prentice-Hall Canada, Inc, 1992), 185.

[25] Peter Haydon, "Canadian Amphibious Capabilities: Been there, Done it, Got the T-shirt!," *Maritime Affairs*, Winter 2001, 15.

studies culminated in 1967 with Admiral O'Brien's response that outlined in detail the requirements of the Navy to be able to transport and land an Army contingent whilst ensuring its safe passage. He proposed two amphibious assault ships but was concerned with the ability to provide sufficient air superiority and therefore recommended acquisition of two attack carriers.[26] Admiral O'Brien was working in a policy vacuum. The inability of the government to articulate specific policy goals meant that DND was trying to recommend a force structure against perceived government requirements. There is a big difference between sealift and assault from the sea. Admiral O'Brien's assumption that a landing would be conducted under enemy fire was logical given the ongoing Cold War. Unfortunately the advice for two attack carriers made little sense to the politicians given that Canada already had a carrier in the fleet structure and the cost was prohibitive. The fleet was to remain status quo, for the moment.

The period from the late 1960s through to the late 1990s would highlight quite well the infeasibility of creating and maintaining a significant sealift/amphibious capability. This inability to create a mobile and deployable combat force was a result of significant defence budget freezes and reductions from 1967 until the 1987 Defence White Paper. Budgetary pressures resulted in HMCS BONAVENTURE's de-commissioning to allow scarce resources to be re-allocated to the running of the remaining fleet. This reduction was accomplished despite the fact that the Cold War defined threat still remained a real concern for the Western alliance. The Trudeau government however, reflected upon détente during the 1970s and decided that the new

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[26] Peter Haydon, "Canadian Amphibious Capabilities: Been there, Done it, Got the T-shirt!," *Maritime Affairs*, Winter 2001, 17.

reference for Canadian defence policy and associated budgetary decisions for the CF would be based on requirements that stemmed from domestic policy requirements first as outlined in the 1971 defence White Paper.[27] This pattern of defining Canadian capability based on fiscal restraints would remain a major factor and theme from 1970 through to today. Only as critical requirements to maintaining Canadian viability in alliances, safety of CF personnel or only when absolutely necessary to replace obsolescent equipment, did the Canadian government support major capital projects.

Realities of Canadian Fiscal Application to Defence

One of the most visible indicators of support for an increase of military capability, and in the context of the Canadian Forces, attaining an amphibious capability is an increase in the defence budget. Allocating the requisite funding is often a matter of timing and political support. A past maritime example was the purchase of the Canadian Patrol Frigates in 1983 for several *billion* dollars. This purchase only came about as a result of the government being shamed into the purchase as the operational fleet "rusted out" from under them. It also boosted the lagging shipbuilding industry and gave industrial regional benefits to the location of the shipbuilder in New Brunswick.

Approval of a major purchase program does not always guarantee that the forces will always receive the product as in the case of when the Maritime helicopter project was cancelled shortly after Prime Minister Chrétien's arrival in office in the early 1990s, despite a hefty contract cancellation fee. In the case of an amphibious ship, attaining

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[27] Department of National Defence. *White Paper on Defence – 1971* (Ottawa, Information Canada, 1971), 1-16.

government approval for the purchase, whether it be offshore or built in Canada, will be a significant hurdle to surmount because questions raised regarding its applicability within the Canadian defence policy framework will undoubtedly uncover that this purchase signals a significant commitment of funding due to the resultant change in the strategic role for the Navy.

A broad strategic focus is required in order to have effective resource management within the Department of National defence.[28] It allows a comprehensive and complete approach to major military equipment purchases that are often under close scrutiny of the Canadian public. In the case of an amphibious ship, the nature of amphibious warfare would also require an uncommonly close cooperative effort between the three elements within the CF to obtain this capability. The operation of light to heavy lift helicopters, task or mission specific loading and unloading of equipment and land forces vehicles that would be transported and projected ashore by air, sea or landed directly unto a pier requires significant coordination to ensure that assigned mission tasks are met.

The coordination of the three service elements in support of this amphibious undertaking has not materialized in any significant form. The establishment of the Standing Contingency Task Force in 2005 was the initial step to determine whether the CF can even achieve this capability, but the group seemed to be thrown together in a hurried and ad hoc fashion from resources within. There was no true statement of requirement promulgated because development never progressed past the concept of

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[28] Douglas Bland and Sean Maloney, *"Campaigns for International Security – Canada's Defence Policy at the Turn of the Century"* (Montreal, McGill-Queen's University Press, 2004), 155.

operations stage. Therefore, a final determination of overall capability which would drive the material requirements was never reached.[29] The Chief of Defence Staff statement that he wanted a "Big Honking Ship" provided one major focus to the Navy and resulted in a preliminary analysis of the budget year costing necessary to attain an amphibious capability.[30] The results indicated that a significant investment of capital would be necessary. Furthermore, there has been analysis in regards to overall requirements pertaining towards helicopter types or modifications, landing craft specifications and capabilities and land forces specific equipment that would be necessary to transfer projected forces ashore by sea, air or land. This analysis is an important note because the projected cost of an amphibious ship is only but one part of an overall CF budgetary requirement. Even if the cost of purchasing the ship is substantiated and could be passed by Cabinet, the follow on costs of supporting equipment to achieve the overall projection capability may provide significant pause as the projected aggregate costs rise. This is not the first time that the cost of acquiring an amphibious capability has been the show stopper for the CF. In the 1960s, the Canadian Government commissioned several reports that investigated the suitability of attaining amphibious ships as the CF underwent force restructuring. The force structure proposed was to be self sustaining and expeditionary in nature. In order for Canada to be able to afford the capability, the resultant impact would be strategic in nature, that is, the Canadian NATO contingent in Europe would probably have to be withdrawn in order to

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[29] David Pugliese, "Military shelves plans for Expansion - Focus on mission in Afghanistan, Security at Vancouver Olympics behind decision, Gen. Hillier says" *The Ottawa Citizen*, 7 March 2007.

[30] Department of National Defence. *"Budget Year Costing of a Preliminary Options Analysis of Canadian Forces Amphibious, AOR, and Sealift Capability"* (Ottawa, Concept Design Group, 2005).

afford this change in role. Canada decided to not pursue this option given the priority accorded to maintaining Canada's commitment to NATO in Europe. There was more to lose from withdrawing in Europe than there was in gaining from having an expeditionary force. Since the end of the Cold War Canada has, in fact, withdrawn from basing troops in Europe, therefore why couldn't the amphibious concept be affordable now?

Acquisition of an amphibious ship is out of proportion to the ability of the CF in general, and the Navy specifically, to fund adequately. The purchase of an amphibious ship includes not only the upfront acquisition. Due to a recent change in procurement strategies, the ship(s) must be proposed, budgeted and approved under the "total package procurement" process.[31] This procurement strategy was used when National Defence Headquarters (NDHQ) staffs were assigned to conduct an option analysis to determine the cost of one to two amphibious ships. The costing analysis results were defined at a rough order of magnitude, that is, it was evaluated based on anticipated vessel size, major risks in shipbuilding and primary capabilities.[32] It utilized a parametric costing tool[33] and validated against the SAN ANTONIO and ROTTERDAM class amphibious ships.[34] The options analysis, interestingly enough, included the procurement of either Joint Support Ship (JSS), auxiliary replenishment ship or converted commercial sealift in tandem with

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[31] Alan Williams, *"Reinventing Canadian Defence Procurement – A View from the Inside"* (Kingston, Breakout Educational Network, 2006), 27-28.

[32] Department of National Defence. *"Budget Year Costing of a Preliminary Options Analysis of Canadian Forces Amphibious, AOR, and Sealift Capability"* (Ottawa, Concept Design Group, 2005), 6.

[33] Parametric costing approach uses formulas that express generalized relationships. Alan Williams, *"Reinventing Canadian Defence Procurement – A View from the Inside"* (Kingston, Breakout Educational Network, 2006), 23.

[34] Alan Williams, *"Reinventing Canadian Defence Procurement – A View from the Inside"* (Kingston, Breakout Educational Network, 2006), 9.

the amphibious ship which itself came in two variants, large and small. In the end the cost per option ranged from 3.57 to 4.82 billion dollars (Cdn) for between 4-5 ships. Each grouping of ships would be able to carry between 400-1000 troops each depending of the type and number of vessels purchased. Depending on which option would be pursued, the costing out over the life of the procurement project time equated to spending up to 675.5 million dollars per year for that capability.[35] In today's overall CF capital budget of 2.2 billion dollars, this amount would constitute 30.7% of the CF capital acquisition budget, a significant portion over a long time period. Based on these procurement numbers it would be difficult to foresee such expenditure for additional capability, especially one that is not fully developed to include specialized airlift and land forces to accompany these ships.

The process to achieve government approval to purchase JSS took many years and is indicative of the difficulty of committing government to major capital projects. The JSS purchase strictly replaces an existing strategic capability of sustainment, providing fuel and giving Canadian naval task groups the ability to conduct deployments at range. Given that the JSS project is now in the final phase of bidding evaluation, to inject a new project to include an amphibious ship in addition to JSS as a whole may set back the acquisition process by years. The setback would be disastrous for the CF in terms of strategic reach and expeditionary capability. A recent media announcement that Canada may retire the current AORs, HMCS PRESERVER and PROTECTEUR, two

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[35] Department of National Defence. *"Budget Year Costing of a Preliminary Options Analysis of Canadian Forces Amphibious, AOR, and Sealift Capability"* (Ottawa, Concept Design Group, 2005), 19-35.

years prior to acceptance of the JSS is already seriously impinging on that capability.[36] Strategic expeditionary deployments would be reduced to single ship deployments in concert with coalition forces and a severe inability to send Canadian Task Groups abroad and operate autonomously. A failure in fulfilling the strategic direction to have this expeditionary capability may set a precedent of "doing without" and undermines the ability of the CF to attain additional capital procurement monies.

The overall dollar amounts required and the percentage of the naval budget impacted over several years with the purchase of an amphibious ship will leave a large footprint for an extended period. The question is whether the CF can afford it. The acquisition of three JSS ships is already one less than the four recommended by the Navy[37] in order to fulfill CF roles and is indicative of a design to cost approach by government. It signals an overall lack of wherewithal by government to address major equipment shortfalls even though strategically it makes sense.[38] The continuing submarine and JSS introductions will, in the short to medium term, make it highly unlikely that the Canadian government will proceed with purchasing the amphibious ship because of the fiscal costs already committed.

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[36] David Pugliese, "Forces to get rid of navy's supply ships Esquimalt-based vessels unable to refuel at sea for 2 years; Patrol planes also ditched in cost-cutting," CanWest News Service, 31 January, 2007.

[37] Department of National Defence, Fleet Mix Study: Determining the Required Capacity and Capability of the Future Surface Naval Force Structure (Ottawa: Defence R&D Canada, 2005), 45.

[38] Peter Haydon and Dan Middlemiss, "A Conversation with Vice-Admiral Drew Robertson," *Canadian Naval Review*, Winter 2007, 8.

Canadian Expeditionary Operations

One method of determining the efficacy for Canada to acquire and maintain an amphibious ship is to examine past historical examples of Canadian involvement in amphibious type operations. A select number of operations will be examined to portray whether or not Canada has traditionally sought to conduct or indeed, had a true requirement to conduct amphibious operations of the type requiring an amphibious ship. These operations include Canada's employment of the PRINCE class ships during the Second World War, Operation RAPID STEP in the 1950s, Operation DELIVERANCE, and Operation TOUCAN and the recent non-combatant evacuation operation from Lebanon. Note that the trend overall from the Second World War started with an actual amphibious assault on a defended beach and quickly shifted to non-combat operations or administrative type landings using either an aircraft carrier or auxiliary replenishment ship to finally not using any naval vessels but employing vessel taken up from trade to handle the Lebanon situation.

Canada has been involved in only one conflict whereby Canadian forces were truly outfitted, trained and conducted amphibious operations in the truest sense, and that was during the Second World War with the ships HMCS PRINCE DAVID and HMCS PRINCE HENRY. These ships were originally brought into service in the Pacific as Canadian Pacific ship ferries, were converted to armed merchant cruisers (AMC) and as such were, by tonnage, to be one of the largest warships operated by the Royal Canadian Navy (RCN) during that conflict.[39] They operated in the Pacific theatre of operations

[39] Marc Milner, *Canada's Navy: The First Century*, (Toronto, University of Toronto Press, 1999), 83.

from the coast of Alaska to the mid-Pacific theatre but became really involved in the war when they were converted to landing ships infantry (medium), LSI (M) in 1943.[40]

The decision to convert the PRINCE DAVID and PRINCE HENRY into LSI (M)s was probably the result of the one and only time that Canada, as a country, actively pursued a policy of building a capability that would utilize landing craft and required an amphibious capability. Prior to mid-1942 Canada still deemed that the Japanese posed a threat to the West coast of Canada and that there may be a requirement "for the recapture of any isolated footholds that the Japanese might secure along the coast".[41] This fear of invasion is not unrealistic given the Japanese had captured and occupied the Aleutian islands of Attu and Kiska and it looked as though extended operations by the Japanese into the North Pacific was progressing. The battle of Midway resolved this threat to North America whereby the Japanese were stopped in progressing further East. The danger had passed in the Pacific and the importance of amphibious warfare grew from the European theatre, from an RN perspective.[42] Thus had passed, very briefly, the one time when an amphibious capability was deemed necessary and that was linked directly to a threat to Canadian territory.

The ongoing operations in North Africa, Italy, the Pacific and the pending operation for the invasion of mainland Europe demonstrated that there was a world-wide demand for landing craft and ships of all configurations. Therefore, in 1943 it was

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[40] Gilbert Tucker, *The Naval Service of Canada – Its Official History, Volume II Activities on Shore during the Second World War* (Ottawa, Kings Printer, 1952), 87.

[41] Ibid, 86.

[42] Ibid, 87.

decided to complete the conversion of the two PRINCE class ships into LSI(M)s in support of the Allies in Europe. In addition to these two ships the Canadian Navy would acquire and man three flotillas of landing craft infantry large LCI(L) under Lend –Lease at the request of the British.[43] The difference was that these vessels would for the duration of their wartime employment be under the control of the Admiralty in support of Allied aims. The Canadian Naval Headquarters would not directly employ these ships in the European theatre and therefore were only supporting expeditionary Canadian military objectives and not home defence.

The CF pursued amphibious warfare (or as then called Combined Operations) in Europe. In fact, as a result of the perceived threat from the Japanese and at the request of the Royal Navy, a Combined Operations school was established in British Columbia at William Head and Courtenay.[44] After the HMCS PRINCE HENRY and DAVID were converted to LSI(M) ships they were sent directly to England whereupon they linked up with their landing craft, personnel and conducted training with the flotillas in preparation for operation OVERLORD, the landing at Normandy. The training took several months and was in addition to the Combined Operations training that the landing craft personnel had received already. The ships were under the operational control of the Royal Navy and would be used not only in Normandy, but throughout "the Mediterranean with no

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[43] Gilbert Tucker, *The Naval Service of Canada – Its Official History, Volume II Activities on Shore during the Second World War* (Ottawa, Kings Printer, 1952), 88.

[44] M.K. MacLeod, *The PRINCE Ships 1940-1945 - CFHQ Report Number 5* (Ottawa, 1965) Journal online; available from http://www.forces.gc.ca/dhh/downloads/cfhq/cfhq005.PDF ; Internet; accessed 20 March 07, Part III Annex L, and, W.A.B. Douglas, R. Sarty, and Micheal Whitby, "No Higher Purpose – The Official Operational History of the Royal Canadian Navy in the Second World War, 1939-1943, Volume II, Part 1" (St. Catherines, Vanwell Publishing Limited, 2002), 363-367.

restrictions as to their employment" for the remainder of the war.[45] They would also be involved in operation DRAGOON, the invasion of southern France as well as many other smaller landings and operations in Italy and Greece. The crews of the landing ships and craft would gain much experience over this period and maintain their proficiency until the end of the war.

The Canadian ships in the European theatre did not undertake any operation as a stand alone national task group. During all operations, the PRINCE ships were operating in an area whereby local sea and air spaces were controlled and defended by allied forces. Although Canada had 104 ships involved in the Normandy invasion, they did not operate as a homogenous and separate group. They were employed by allied forces as necessary to meet operational requirements and therefore, the Canadian landing ships were always protected by vessels flagged under another nation. This multinational approach was readily demonstrated when on 14 September 1944 during operation APLOMB, HMCS PRINCE DAVID became the centre of a respectably large force of British and Polish ships exclusively devoted to its protection, no less than eleven vessels, plus aircraft, all from other nations.[46] Canadian warships operated with other nations forces under a multinational setting. Amphibiously speaking, Canada has never operated alone as a nation during such operations, with

[45] M.K. MacLeod, *The PRINCE Ships 1940-1945 - CFHQ Report Number 5* (Ottawa, 1965) Journal online; available from http://www.forces.gc.ca/dhh/downloads/cfhq/cfhq005.PDF ; Internet; accessed 20 March 07, 191.

[46] Ibid, 185-186.

Figure 2. HMCS PRINCE HENRY and landing craft during operation OVERLORD.

Source: Canadian War Archives

perhaps the exception of HMCS PRESERVER off the Horn of Africa in support of operation DELIVERANCE. Indeed the actual number of troops landed at Normandy at Juno beach only amounted to approximately a partial division, a mere fraction of the overall total numbers of combat troops inserted on 6th June 1944. Since this event was the largest amphibious operation ever undertaken by Canada, the purchase of one to two modern amphibious type ships hinges on the question whether Canada is willing to assume this role for the CF today.

The ensuing period after the Second World War saw the quick de-commissioning of the PRINCE ships as well as much of the Canadian fleet. Gone with it was the only amphibious capability Canada had acquired. The Cold War period saw two types of major strategic thrusts made by Canada, under the umbrellas of the two major alliances

the country belonged to, NATO and NORAD. The first strategic context Canada would operate under would be the "ECTD": Enemy-specific, Theatre-specific, and Continental-&-Deep Water"; the Cold War battlefield.[47] This strategic approach saw the Canadian Navy assume the role of anti-submarine warfare that was assigned the important mission of ensuring that the sea lanes of communication (SLOC) were kept open against the Soviet submarine threat while the US and Canada would support land operations in continental Europe. Amphibious operations would play only a minor role through insertion of special operations forces or by conducting small scale raids along coastal regions. The second strategic concept to emerge would be the response of the Canadian Navy to contingency operations usually along the lines of a non-combatant evacuation operation of Canadians overseas, or UN peacekeeping operations "because most of these operations were not executed or were conducted in very favourable conditions, the view that minor amphibious operations could be conducted in *ad hoc* fashion became the norm."[48] The Canadian chance to become involved once again in amphibious operations was during the Korean conflict. Aspects of support ashore such as naval gunfire support were routinely exercised; however, during the one major true amphibious operation, the landings at Inchon, Canadian destroyers were part of the covering force, "but played no significant part in the landings."[49] A Canadian lead, multinational task group of destroyers conducted a brilliant evacuation at Chinnampo after navigating the treacherous Teadong River at night. Again, an *ad hoc* force put together to provide naval fire support

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[47] Robert Bradford, "Sea-Based Expeditionary Joint Operations Study – Main Report" Report Prepared for the Canadian Forces Maritime Warfare Centre, (Halifax, CFMWC, 2004), 3.

[48] Ibid.

[49] Marc Milner, *Canada's Navy: The First Century*, (Toronto, University of Toronto Press, 1999), 202.

but was not planned as an amphibious operation per se. Finally, some would argue that the use of HMCS MAGNIFICENT in transporting Army elements to Port Said in 1957 in support of a United Nations mission demonstrated an amphibious capability, but in reality it was an exercise in using a naval asset to conduct an expeditious administrative sealift.

The Navy planned at least three non-combatant evacuation operations for Haiti between 1988 and 1994, but none were executed and some were eventually changed to a presence mission.[50] The Canadian Navy stuck with the anti-submarine warfare role tenaciously throughout the Cold War becoming very proficient and expending resources to improve systems and tactics to counter the submarine threat. It was not until the demise of the Soviet Union in 1989-1990 that saw Canada starting to drift away from that specific role to assuming a more general purpose role. The non-combatant evacuation planning and operation DELIVERANCE did raise CF awareness that even rudimentary sealift and support ashore capacity was lacking.

The first real indication of change and application of conducting an amphibious type of operation would be the execution of operation DELIVERANCE, the mission to provide the conditions by which the UN and US could provide humanitarian relief in Somalia. This shift was indicative of a UN that had shed its Cold War encumbrances within the Security Council and had become more engaged with world wide issues, that is, it evolved into "the new post-Cold War situation: Global, Littoral, and General

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[50] Department of National Defence, *LEADMARK, The Navy's Strategy 2020* (Ottawa: Canada Communications Group, 2001), Appendix C, C4-C5.

Purpose"[51] vice the previous bipolar era which was threat and location specific within the overall strategic concept. It was indicative of a change occurring in military operations globally, one that Canada had to address using its fleet at the time, and one which was still operating under defunct Cold War doctrine. Canadian ships, including the AORs, now spent a large portion of their sea time in close proximity to land rather than in deep waters. One such mission was just off Somalia in 1993. Operation DELIVERANCE can be classified as an administrative landing of a small number of personnel (approximately fifty) and specific supplies that could not be airlifted from Canada by the AOR, HMCS PRESERVER. It would be, as far as administrative landings go, an unmitigated disaster due to poor planning, a change in mission and position of the land force elements.[52] HMCS PRESERVER would be tasked with this mission without escorts even though the change in mission which required her to anchor off Mogadishu (due to inadequate berthing arrangements) in a potentially hostile, albeit asymmetric environment. It was not an auspicious reinsertion into the world of administrative amphibious landings and continuing ad hoc operations, but one where good lessons could be learnt. Operation DELIVERANCE undoubtedly led to the Canadian navy rejecting "the low end by ad hoc deployments of modified single replenishment ships" and deemed it "neither appropriate to Canadian security needs or the capabilities that reasonably should be developed: the low end is inadequate to make a meaningful contribution."[53] This rejection undoubtedly

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[51] Robert Bradford, "Sea-Based Expeditionary Joint Operations Study – Main Report" Report Prepared for the Canadian Forces Maritime Warfare Centre, (Halifax, CFMWC, 2004), 11.

[52] Department of National Defence. *Report of the Somalia Commission of Inquiry* [Online Government Website]; available from www.forces.gc.ca/somalia/vol3/v3c25de.htm#472 ; Internet; accessed 22 March 2007.

[53] Department of National Defence, *LEADMARK, The Navy's Strategy 2020* (Ottawa: Canada Communications Group, 2001), 105.

set the stage for the statement of requirement being written for the replacement of the AOR ships and can be seen reflected in the ongoing Joint Support Ship project documentation, that is, the next generation support ship had to have the capability to conduct support to land operations ashore in some meaningful form. Sea basing in that an ability to host a joint headquarters, provide medical support and conduct helicopter operations with both maritime and medium lift helicopters and have a capacity to conduct some sealift and transfer of equipment and personnel ashore was the envisioned role for JSS.

Follow on deployments of the AORs since the 1993 Somalia operation will see that the AOR is never without an escort during similar littoral operations regardless of the threat level.[54] Although HMCS PROTECTEUR was deployed independently to East Timor in support of a UN mission (Operation TOUCAN), it was integrated into an Australian/US task group which ensured that it was properly escorted in the area of operations. Therefore, the *ad hoc* approach to expeditionary operations seems to have been continued despite being disqualified as a meaningful methodology in LEADMARK. In order to change direction and become proactive in conducting these types of land support operations in the littoral will require the CF to examine closely the role that maritime forces are to fulfill. Clarification of roles will provide the necessary focus that the CF can use to revise force structure in order to complete assigned missions.

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[54] The one exception being deployments which were in aid of the United States in the aftermath of natural and hurricane disasters like Katrina. Obviously it was assumed that US waters are secure from any threat.

There may be times when government may decide that a particular operation may be conducted where the CF plays a minor role. The lead agency may be another government department such as the department of foreign affairs and international trade and the CF must be ready to support them with personnel or material assets. The latest maritime operation, the evacuation of Canadians from Lebanon during the Israeli imposed blockade, seemed to indicate that perhaps Canadian warships may not be first choice for a non-combatant evacuation role; however, the CF must be ready to provide assets at short notice regardless.[55] There is no doubt then that a vessel capable of conducting a non-combatant evacuation is necessary; however, does an amphibious ship meet this requirement or is it simply overkill given that the JSS can carry at least five hundred people or more for short durations.[56] The recent announcement of the JSS acquisition seems to have answered this question; however, how the JSS will be incorporated into the fleet and supported during operations remains to be seen.

Since conducting extensive amphibious operations during the Second World War, Canada has withdrawn from the amphibious role within the overall naval warfare framework. The onset of the Cold War and the assumption of a specific task (anti-submarine warfare) within a specific theatre (the North Atlantic) by Canada have not supported a requirement to build a naval force with a capability to conduct amphibious operations. Operations in the littoral and those bordering on amphibious type operations

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[55] Only 150 personnel were involved in the operation, of which several were naval liaison officers. Department of National Defence, CF *Assistance to DFAIT in the Evacuation of Canadians from Lebanon* CEFCOM BG-06.004 – July 24, 2006, [CF website online]; available from www.forces.gc.ca/site/newsroom/view_news_e.asp?id=2000 ; Internet accessed 25 March 07.

[56] Department of National Defence. *Joint Support Ship Statement of Operational Requirement* (Ottawa, Project 00002673 document, 2006), 5.

have been handled in, what has become in typical Canadian fashion, *ad hoc* operations, reacting to contingencies as they arise. If history is any indicator, the likelihood of Canada constructing or purchasing a ship to provide a robust amphibious capability seems fairly slim indeed. The lack of a clearly defined role that both the CF and Navy are to adopt, one that will see the CF make the amphibious ship the capital ship of the fleet and structure the remaining forces to support this initiative, is a severe impediment to this acquisition. That is the strategic challenge facing the CF today.

SECTION TWO – STRATEGIC AND OPERATIONAL CHALLENGES

The Strategic Challenge

A tenable and strong link between national values and interests provides the underpinning policy direction on issues of foreign policy. C.E. Callwell, a military theorist during the early 20th century observed: "The higher strategy of a campaign will always be, to a certain extent, prejudiced, if indeed it be not absolutely governed, by the impulse of national sentiment and by the force of the national will."[57] Defence policy, as derived from national values through foreign policy must then reflect strategic direction. Defence policy, therefore, also determines the military force structure to be built, maintained and subsequently employed by a nation's armed forces. As strategic circumstances or national interests and values change, subsequent amendments to defence policy are also made. The two should remain linked and in step. This theoretical description of how force structure should be derived is idealistic and unfortunately does

[57] C.E Callwell, *Military Operations and Maritime Preponderance: Their Relations and Interdependence* (Annapolis, Naval Institute Press, 1905), 180.

not reflect reality of the Canadian defence policy realm.

Strategic guidance is not only based on national values and will, but also should reflect the reality on the ground. That is, national strategic guidance must take into account geographic limitations and conditions, the threats posed against the country and its interests, and fiscal reality or the national ability to raise and maintain the necessary forces. Since militaries are reflective on a nation's stature, deploying them becomes also a matter of national pride and impacts highly on a nation's international standing.[58] This concern for stature is important because it has resulted in some of the ad hoc missions Canada has conducted in past. Once given a mission the CF leadership wants to be seen meeting the government's direction even though the ability to complete the mission with the forces at hand is at times minimal. With no direct threat to Canada evident and because the CF is a discretionary armed force, the need to prove the CF's value to government becomes itself a driving factor behind assuming roles that the CF may not be truly capable of completing.

Force commanders want to be seen to put their collective best effort put forward when called upon to complete a national tasking. National pride of a state's military forces percolates downward and is at times embraced too strongly by senior military leadership. This cultural trait is often complementary. In other words, the government assigns an important task overseas and the military is expected to put its most capable assets towards the problem/mission. This expectation assumes, however, that the military has the necessary tools to support foreseen missions because it is based on the national

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[58] Joseph R. Nunez, "Canada's Global Role: A Strategic Assessment of its Military Power," *Parameters*, Issue 34, 3, (Autumn 2004): 84.

defence policy which, theoretically, outlines the spectrum of missions that may be expected. When guidance and policies are aligned and clearly articulated, a clear linkage of capability to missions assigned emerges.

New missions sometimes mean new capabilities, or conversely, as priorities are dropped then a capability is either dropped or equipment re-rolled to fulfill a capability gap. This assumption of new missions without a full capability is where commanders, over time, quietly add on new roles for their forces, often to highlight to government the value of the military in general or to introduce specific new roles they feel should be taken on. It can also be used to highlight certain equipment that requires replacement or to prove that certain capabilities need to be kept instead of dropped. Some argue that the employment of the ageing Leopard tanks in Afghanistan may be seen as such an example of the military proving the worth and need to maintain an armoured force in the CF. The CF has not been given an assignment that has necessitated identification that an amphibious ship is essential to any mission.

Canada's strategic guidance on matters of national defence are fairly clear; first, protecting Canada and Canadians, second, protecting North America in cooperation with the United States and thirdly, contributing to international peace and a more secure world.[59] Where the policy becomes ambiguous is in its description of the force structure needed to fulfill these three broad goals. When examining the requirement for an amphibious ship capability, it is difficult to reconcile this requirement against the first two policy directives. Canada does not need an amphibious ship to defend home

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[59] Privy Council Office, *Canada's International Policy Statement -A Role of Pride and Influence in the World – Defence* (Ottawa, Her Majesty the Queen in Right of Canada, 2005), 2.

territory. Canada also does not have overseas territories or far distant possessions to provide security and assert sovereignty over. Some might argue that the three oceans access with a multitude of widely spread and remote reaches of land should be reason enough. First, Canada has not had, nor is it foreseeable to envision, an enemy that would take and hold sovereign Canadian territory in a conventional attack. Such an endeavour would be difficult because the problems in attacking and taking Canadian soil are the same as for the defence, that is, Canada is far too large to take over directly. Some would use the protection of Canada's North to be sufficient reason for an amphibious ship. It is a fallacious argument because operating vessels in the North can only occur during the summer months when the ice pack has receded, thus reducing CF presence and its impact on the region. In order to operate year round any amphibious ship would require having an ice strengthened hull, a very expensive add-on capability to any vessel. If security of the North was a true concern for Canada, the establishment of a winter training base, building naval outposts and having a larger permanent presence would be a better approach to the Arctic issue. The Hans island debacle in Canada's North between Canada and Denmark is highly unlikely to balloon into a conventional threat because they have demonstrated an intent to resolve this border dispute with diplomacy.[60] Furthermore, although the northern area of Canada is rich in mineral wealth, there are few countries or commercial interests which even have the capability to conduct recovery operations in Arctic conditions. That leaves an attack on major urban centres and industrial areas, again highly unlikely given the security umbrella under which Canada resides with the United States. Canadian sovereignty over home waters and lands is

[60] Denmark's ambassador to Canada re-iterated the need for dialogue and rule of law - not military action. Poul Kristenson, *Hans Island* (Denmark, Ministry of Foreign Affairs, 2005).

assured through the fortuitous situation that Canada finds itself in, being within the defence perimeter of the world's remaining hegemonic state and by being so geographically large that an attack to hold territory can be considered extremely remote.

The attack on the United States on September 11, 2001 reinforced the need for continental security, but, this security cannot be achieved through the acquisition of an amphibious capability. The nature of the threat towards North America is primarily from the air or by sea, conventionally or through asymmetric means as seen employed by terrorists. If an enemy did manage to land in substantive force on the continent, Canada may send combat troops to the aid of US forces, but realistically, would an amphibious vessel be essential to do this? If the United States marine expeditionary and the continental armies of the US hegemon cannot handle a situation on their own territory, there is very little that a Canadian expeditionary force could do to ameliorate the situation with a single amphibious ship. The reverse is more likely, that if Canada were to be invaded or attacked, and the US considered that it is a threat to their nation, there is little doubt that a US intervention force would arrive promptly, perhaps even without the government's request. Therefore in order to demonstrate that there is no need for the US to intervene directly in the defence of Canada it must be clear that this country can defend itself sufficiently that the US would not consider itself in any danger. The requirement for sufficient self-defence in of itself does not translate into attaining an amphibious capability. It is difficult to conjure up a scenario whereby substantial forces could now arrive anywhere on the North American continent unnoticed.[61] A recent amendment in

[61] One exception maybe the drug and immigrant smugglers on the coasts of Canada, but that is a law enforcement mandate, not a defence issue, although defence assets are often called upon to assist in the apprehension of criminals as support to other government departments.

May 2006 to the NORAD agreement included a maritime warning mission, thereby extending the protective umbrella of North America even further outwards.[62] To fulfill this strategic mission of continental surveillance more aircraft, long range patrol ships and remote sensing assets are needed; not amphibious ships.

Canada's third defence policy aim of contributing to international peace and security does not immediately stand out as a policy that requires an amphibious capability. It is in this task to the Canadian Forces that much is written on standing up a contingency force that is either land or sea-based and capable of multinational leadership.[63] Specifics regarding new airframes, new units and capabilities are mentioned for the air force and land force components in the International Policy Statement (Defence), but the naval portion is much vaguer. It discusses the requirement for the Navy to produce task groups capable of sustained operations at sea, providing precision fire and support to forces ashore. This statement is wide open to interpretation and may be the cause of the current Chief of Defence Staff (CDS), General Hillier, in announcing that Canada requires an amphibious ship to fulfill expeditionary roles abroad. Other than the effort during World War Two, and the one made by Defence Minister Hellyer in the 1960s in forming Mobile Command based on a expeditionary capability, there is little other precedence in Canada for having this type of capability. Even the United States Marines have only used this amphibious landing capability in its truest sense sporadically during the last 25 years during operations in Grenada (1983), as a

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[62] North American Aerospace Defence (NORAD) Command Agreement, [NORAD website} available from http://www.norad.mil/about_us/NORAD_agreement.htm ; Internet; accessed 15 April 2007.

deception force during the 1991 Gulf War and in entering Somalia in 1993.

There are countries that do pursue and maintain a strategic amphibious type of capability for good and well articulated strategic reasons. In comparing the countries of Spain and Australia, whom nationally are relatively on par with in many aspects with Canada in terms of fiscal ability, military force size and population, the question of why one country has an amphibious ability and another not, may be answered. Table 1 outlines some of the key national information for comparison purposes.

Spain is a country, like Canada, that is part of a greater continental system that has an extensive coast, but more importantly, has several offshore sovereign territories such as the Canary Islands, the islands of Penon de Velez de la Gomera and the coastal enclaves of Ceuta and Melilla. It is these latter two enclaves that set the strategic scene

Country	Population	GDP & Percentage Military Expenditure of GDP	Coastline Length	Comment
Spain	**40,448,191**	**1.081 trillion dollars (1.2%)** Has 2 Landing Dock Platform ships and 2 Landing Ship Tank ships and 1 Carrier.	**4,964 (km)**	There are two autonomous cities - Ceuta and Melilla - and 17 autonomous communities including Balearic Islands and Canary Islands, and three small Spanish possessions off the coast of Morocco - Islas Chafarinas, Penon de Alhucemas, and Penon de Velez de la Gomera
Australia	**20,434,176**	**645.3 billion dollars (2.5%)** Has 2 amphibious transports and 1 heavy lift ship.	**25,760 (km)**	Ashmore and Cartier Islands, Christmas Island, Cocos (Keeling) Islands, Coral Sea Islands, Heard Island and McDonald Islands, Norfolk Island, Macquarie Island.
Canada	**33,390,141**	**1.089 trillion dollars (1.1%)** Acquiring 3 multi-role sealift ships of moderate capacity.	**202,080(km)**	Arctic Archipelago. No overseas possessions.

Table 1. Comparison by Country Capability for Amphibious Ship Acquisition

Source: CIA Worldfact Book 2007 & Jane's Warships 2006-07.

[63] Privy Council Office, *Canada's International Policy Statement -A Role of Pride and Influence in the World – Defence* (Ottawa, Her Majesty the Queen in Right of Canada, 2005).

for Spain. Morocco protests Spanish control over these cities as well as several island groups in the Mediterranean. Spain considers these holdings to be vulnerable to incursion and therefore has outlined in their defence and foreign policies that retaining Ceuta and Melilla are in the national interest.[64] Although Spain is a North American Treaty Organization (NATO) member, those cities, if attacked and occupied, would be Spain's responsibility alone to defend as NATO has absolved any responsibility in assisting Spain in these areas. The ongoing turmoil in North Africa concerns Spain, specifically, regarding what is perceived as vulnerable sea lines of communication between those various Spanish territories.[65] Not surprisingly Spain has built a significant naval force including a small carrier and two landing ships to provide the power projection force necessary to ensure its sovereignty in those territories. The recent build order for a unique ship that is modified small carrier, amphibious and sealift capable ship in one (Ship of Strategic Projection), highlights Spanish determination to ensure its sovereignty. The Spanish government recognizes its responsibilities towards its protectorate holdings and has ensured that the long term support both politically and militarily is in place to ensure its national interests.

Australia also requires a strategic projection capability because it is an island continent, well displaced from its allies, in particular the United States. Australia has realized this and has captured it well within its maritime doctrine specifically relating the points that geography and territorial sovereignty is in the national interest to protect. It

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[64] Angel Utrilla, "Spanish Security and Defense Policy" (Carlisle Barracks, US Army War College Paper, 1998), 4.

[65] Ibid, 8.

further links the point that physical security of Australia is directly related to the security and stability of maritime Southeast Asia and the South west Pacific in general.[66] Finally, much like Spain, Australia specifically identifies threats to itself; they are a "defining element" within their security interests.[67] Therefore, in order to counter possible threats and protect sovereign territory in a maritime environment, an ability to project substantial forces over extended distances and time is vital. The two current Australian amphibious ships are due for replacement and interestingly enough the Spanish consortium is proposing the Strategic Projection Ship as an answer to their needs.[68] Again, Canada does not fit within this particular mold; it is not an isolated island continent with spread out territorial responsibilities, located in a remote region of the world.

There is no strategic requirement for Canada to obtain an amphibious capability in order to meet the commitments outlined in Canadian defence policy. The three broad roles directed by the defence policy lays out that Canada and North American defence are the priority with international security coming in a distant third. The loose interpretation undertaken in application of building expeditionary forces seems to disregard historical usage and a realistic application of what is achievable within given and finite national resources. Resources will be the main defining factor in determining if amphibious capability is even a viable option for Canada.

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[66] Department of Defense. *Australian Maritime Doctrine – RAN Doctrine 1, 2000* (Canberra, Commonwealth of Australia, 2000), 29-30.

[67] Ibid, 32.

[68] Author Unknown, "Australia Issues Official Tender for A$2.0B Large Amphibious Ships Program" *Defense Industry Daily*, [journal online]: available from www.defenseindustrydaily.com/2006/05/australia-issues-official-tender-for-a-20b-large-amphibious-ships-program/index.php ; Internet; accessed 03 March 2007.

The Operational Challenge

The logic that an amphibious capability is not in Canada's interest is not easily understood by proponents such as General Hillier because they fail to understand and foresee the significant change this additional capability will impose on the CF. Where such capability is employed, a distinct and clear focus of government to maintain such a structured amphibious force is defined by its primary role, as in the case of the Australian Defence Force. The decision to undertake in building this capability must take into account the types and numbers of ships, which in turn is predicated upon the size and composition of the land force envisioned to be transported and landed across a beachhead. Force composition and structure must also relate back to the types of missions foreseen by the government. The ability to conduct a landing against a force that has the ability to conduct multidimensional attacks will be differently configured than a force required to land only on an unimpeded access area on a coast. The perceived conditions of a Canadian expeditionary force landing mission is one that supports multilateral operations in low threat to benign environments. Force composition definition includes air, land and maritime force components because they are an inherently intertwined and interdependent entity within a battle or task group. It is within these parameters that a Canadian amphibious task grouped must be defined for operational manoeuvre missions; a definition which is currently lacking.

Expeditionary warfare, in the Canadian context, has not been defined well enough so that a realistic framework can be used to outline fleet structure and requirements. In the US context, the definitional spectrum is bracketed by expeditionary warfare on one

end and amphibious operations on the other.[69] Of course US goals are substantially different than Canadian; and better articulated in their respective security policy that emphasizes forward defense as part of nation defence. The forward defence concept in American security policy is provided by the US naval expeditionary forces, which includes amphibious warfare forces.[70] It implies that it is unilateral in nature, that is, the US will not rely on an alliance in order to conduct amphibious warfare landings of any type in order to achieve national objectives. They have subsequently built and supported a fleet structure that answers to this requirement.

In contrast, Canada has not adopted the forward defence stance, at least not as far forward leaning as the US. Canadian policy looks at the defence of Canada from the stance that the CF will defend starting at the territorial limits of the country. CF units are then only deployed when the balance of an international security concern outweighs a domestic one.[71] That means that Canadian expeditionary forces will almost always be deployed in a reactionary fashion under a multilateral umbrella in response to UN resolutions or an alliance request. The only foreseeable deployment on a unilateral basis would be if Canadian nationals are in need of evacuation. Not to dismiss the point that Canada may one day act unilaterally with military force; however, there is currently no national will to maintain an amphibious capability to address this remote possibility when other options are available..

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[69] George Galdorisi, "Expeditionary and Amphibious Warfare." Chp. 21 in *Globalization and Maritime Power*. (Washington, National Defense University Press, 2005), 408.

[70] Ibid, 406.

[71] Privy Council, *Securing and Open Society: Canada's National Security* (Ottawa, Canada Communications Group, 2004), 49-50.

The US Navy and Marine force is arguably one of the select few institutions that have significant experience in amphibious operations. As a hegemonic state the US can and has brought its significant naval power to bear on regions throughout the world. It thus has articulated its definition of maritime access or landings in terms of the level of response from a potential threat. The US has described littoral maritime access by one of four general conditions:

> "*Unimpeded access* – in which the enemy has no credible naval forces or land based defenses that threaten the advance of naval forces into littoral waters. Under these conditions, the Navy can immediately establish it self adjacent to the coast and provide appropriate support to joint expeditionary forces operating ashore. Forces may be subject to irregular surprise attacks;
>
> *Guarded access* – referring to conditions in which the enemy has a coast guard or an irregular navy whose primary function is to guard maritime approaches and warn of an impending attack from the sea. Although naval forces may be subject to minor attacks and threatened by mines, it will not deny freedom of action;
>
> *Defended access* – where the enemy can mount multidimensional attacks against naval forces, has maritime defensive capabilities credible enough to deter intervention or prevent freedom of action in regional waters; and
>
> *Contested access* – the most severe condition is a situation in which the enemy has a robust, redundant, and survivable naval anti-access/area-denial capability."[72]

Canada does not have its own definition for maritime access; therefore it defaults to the NATO ATP 8(B) doctrine that outlines amphibious operations as demonstrations, raids, assault and withdrawal.[73] As described earlier, it is not Canada's intention to become involved in any area where the waters of the littoral will be contested by the nation being

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[72] Robert Work, On *Sea Basing* (Newport, Naval War College Press, 2006), 102-103.

[73] North Atlantic Treaty Organization. *Allied Tactical Publication 8(B), Volume 1, Doctrine for Amphibious Operations* (2004), 1-2 and 1-3.

entered. Therefore, littoral maritime access sought will either be at the invitation of the host country, during an unimpeded access intervention or as part of a larger multinational littoral maritime access effort. This aversion to opposed landings has led to the adoption of a different variant by Canada which takes into account that "the essence of amphibious warfare is not a particular type of landing or the degree of opposition expected. The essence is that it is a joint operation launched from the sea by a joint force."[74] What it really means is that Canada has no official national definition for maritime access. This explanation of an amphibious operation in essence incorporates the entire spectrum of envisioned operations, from heavily opposed landings to humanitarian and non-combatant evacuation operations. Lacking specific definition on maritime access in Canada therefore hinders specific guidance and focus to allow a robust examination and construction of the role the CF should play in the amphibious arena.

From strategic guidance fall out the range of operations that may be undertaken by CF amphibious elements. It is clear from the National Security Policy, ISP (Defence) and the naval policy "Leadmark", that national evacuation operations and support to humanitarian operations will be expected to be assigned. The Navy has unilaterally placed the limiter on the table in that "Leadmark" states "there is no intention to provide a capability for amphibious assault."[75] An acceptance of humanitarian and non-combatant evacuation type of operations but a rejection of amphibious assault seems to be indicative of a Navy that does not require amphibious ships, but a vessel that can

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[74] Robert Bradford, "Reconsidering Amphibiosity: A Canadian Construct," *Army Doctrine an Training*, 2, No.1 (February 1999), 41.

[75] Department of National Defence, *LEADMARK, The Navy's Strategy 2020* (Ottawa: Canada Communications Group, 2001), 158.

provide a rudimentary amphibious capability, to project small contingents of personnel and material ashore to assist with these types of missions. Although there is a clear willingness on the part of the Canadian government to conduct non-combatant evacuation operations such as the 2006 Lebanon evacuation of Canadians, the operation was conducted with minimal help of the CF, but in particular, without using naval vessels and instead government opted to lease cruise ships from within the Mediterranean area to undertake the evacuation. It was in contrast to some nations who did send military vessels to effect evacuations, nonetheless, Canada accomplished the mission without naval vessels but does not preclude the CF from being ready to assume this task.

The follow on Canadian Navy policy document "Charting the Course from Leadmark" indicates that the "future Canadian Forces expeditionary operations [including humanitarian] demands a basic level of amphibious capability."[76] It is based on a capability requirement to move forces ashore in instances where ports/airports are unavailable. Given that humanitarian and evacuation operations are the likely missions to be allocated to the CF, the unimpeded access condition is the expected level of ingress difficulty to be encountered. However, that does not mean that a threat cannot develop nor an irregular or asymmetric surprise attack develop, therefore requiring that amphibious forces be able to defend themselves at all times. The ability to defend an amphibious ship stems from the Task Group (TG) collective and is necessary in the multidimensional feature of combat in the littoral. Protection from the air, the sea and a projection of combat power ashore, if necessary, must be available, regardless of the apparently benign nature of any joint operation. CF sea, air and ground forces structure

[76] Department of National Defence, *LEADMARK, The Navy's Strategy 2020* (Ottawa: Canada Communications Group, 2001), 26.

must be capable of providing the support and necessary defensive capabilities for an expeditionary landing in order to be a viable force. It requires a fleet structure that is built around the amphibious and expeditionary roles of these types of operations.

The Supporting Forces

An amphibious and forces landed ashore must be protected at all times. Staying out of the amphibious assault role or conducting purely unimpeded landings does not, however, absolve the Joint Force Commander (JFC) from the responsibility of providing the ability of the TG to protect high value units at sea or landed forces ashore, even during an unimpeded access scenario. To protect forces at sea the JFC requires the ability to provide security from the air, from surface forces as well as underwater threats. Furthermore, the JFC must be able to provide protection from shore based threats as well as project power ashore through naval support fire. Threats can range from small arms fire to land-based and ship-borne missile attacks.[77] Canadian warships are not configured to counter this type of threat from the littorals because of their inherent design stemming from their original envisioned Cold War role.

Canada has never been prepared to conduct amphibious warfare in the littoral since the inception of the forces. That is not to say that Canada has not been involved in landing troops, but rather, that Canada has never fielded joint forces that would be employed solely and fully to protect forces as they are being landed. The main emphasis on the CF and the Canadian Navy specifically after World War II, was on the Cold War

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[77] Alon Ben-David, "Hizbullah hits Israel's INS Hanit with anti-ship missile," *Janes Defence Weekly* (18 July 2006) [journal online]; available from http://www.janes.com/defence/news/jdw/jdw060718_1_n.shtml ; Internet; accessed 20 April 2007.

mission; namely anti-submarine warfare and to some extent anti-bomber missions under the NORAD alliance when Canada employed light carriers and ground based interceptors. Weapons platforms, procedures and tactics of the forces revolved around these Cold War roles, the main concern with troop carrying capacity being with the re-enforcement of ground forces on continental Europe, a sealift role versus expeditionary operations. Canadian warships did excel at shore bombardment during the Korean War, but not in direct support of ground forces. Much like Canada's involvement during the Normandy invasion, Canadian joint forces over the years have conducted the wide range of tasks associated with amphibious operations like shore bombardment, close air support or special operations, but always as one of the participants in an overall operation, not as a wholly constituted and complete group such as a Marine Expeditionary Brigade.

The post Cold War era of the 1990s saw the decline of combat power in general, and within the Canadian Navy, the adoption of a general purpose fleet that was called upon to do missions and deploy outside its Cold War capabilities. The new Canadian Patrol Frigate was designed as a general purpose combat platform that could *defend itself* relatively well in combat conditions. The 280 Tribal class destroyers were updated to include an SM2 area air defence weapon system but, in general, it had weapons primarily for self defence purposes as well. The guns on both ships are designed for AA defence, weapons not suitable for amphibious operations. The current fleet structure and weapon system employed are not aligned with the roles required to be carried out by the fleet to support an amphibious operation.

The purchase of an amphibious ship will have a significant effect on the roles to be assumed by the remainder of a fleet. This impact would be even more profound on a

small fleet like Canada's, and will be a distinct departure from previous Canadian roles and missions. Changes in fleet structure would include shifting capital ship status from the current 280 Tribal class command and control ship, the centre of the current Canadian TG, to the amphibious ship. The fleet focus on the amphibious ship and operations in the littoral would mean that the roles of the remaining ships are shifted to one of protecting the amphibious ship and troops as they are being landed ashore.

Changes to roles of ships means that missions assigned to those vessels are by necessity to be revised also. New fleet missions means that new and different capabilities become essential or necessary to achieve mission success. In the case of inshore or littoral operations, supporting functions include area air defence, naval gunfire support ashore, conducting unmanned aerial vehicle operations and a strike role. It would also entail significant changes to sensor and combat suites to address the new combat environment.[78] These roles would be in addition to more traditional missions such as anti-surface, anti-submarine and anti-air warfare which are still requirements for both fleet and self defence purposes. Some of these capabilities are already resident within the fleet such as the area air defence capability in the 280 tribal class. However, should the amphibious ship purchase become a drawn out procurement process, then this capability will be also lost as the Tribals are de-commissioned in the near future, requiring that follow-on platforms retain this functionality. Capability such as naval gunfire support ashore cannot be currently conducted and needs to be acquired for the fleet through an upgrade to weapon systems or purchase of new fleet units. A thorough review of current fleet capabilities must be completed in order to identify the shortcomings in fleet

[78] Wayne Hughes, *Fleet Tactics and Coastal Combat* (Annapolis, Naval Institute Press, 2000), 2.

capabilities and to then be able estimate the cost that a change in the role of the fleet would incur. A significant change in the fleet role, one that not all of the CF senior leadership has realized, will create greater funding requirements for attaining this capability. Increasing costs are not confined to the maritime component alone. Impact on the other services would include such items as the requirement to marinise medium lift helicopters, purchase suitable landing craft and new communications suites for all three services to ensure command and control interoperability.

Even for relatively small expeditionary operations there is a requirement for force defence and force protection. The overriding concern in any operation regardless if it is inshore or offshore, is that all the vessels in a naval TG require protection from possible threats that from the sea aspect include submarine attack, mine threats, surface attacks by opposing conventional forces or the asymmetric threat such as fast inshore attack craft. A threat not only emerges from the seaward side but also from the landward side when working inshore. The point that a state or for that matter, a non-state actor not having a Navy does not, de facto, constitute a lack of a credible threat. The recent blockade of Lebanon by the Israeli Navy, in which a Sa'ar 5 class corvette sixteen kilometres offshore was struck by a C-802 anti-ship missile fired from shore, seemed to underpin the ongoing requirement of naval forces to consider shore based threats.[79] The employment of an amphibious ship in support of even an administrative type of landing will require significant resources to protect this high value unit. Most amphibious ships will only have such weapons as to conduct only the most rudimentary of self-defence measures of

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[79] Wayne Hughes, *Fleet Tactics and Coastal Combat* (Annapolis, Naval Institute Press, 2000), 165-167.

last resort. It includes such weapons and self defence measures such as close-in weapons systems for incoming missiles, .50 calibre or smaller machine gun posts, electronic jammers, infrared flares and chaff launchers. These systems, however, are predicated on the tactical fact that they are systems of last resort if all the escorts in the TG fail to stop an inbound attack and are not meant as the primary means of protection. Current Canadian naval vessels can conduct this type of high value unit protection role as an escort on open ocean transits, however, capability degrades the further inshore ships proceed therefore necessitating upgrades to sensor and weapon suites.

Since the demise of HMCS BONAVENTURE there is no combat air power available to provide any sort of local air control. Canada does practice utilizing combat air patrol over littoral areas; however, unless there is land based airport from which the Canadian CF188 Hornet can deploy, local air control will have to be provided via another nation or coalition arrangement. This aspect of securing an area, both in the air and on the surface, cannot be overstated regardless of the threat. It was a lesson relearned during the 1982 Falklands campaign: "Amphibious operations fix naval forces to one specific area, which by itself imbues these types of operation with high levels of risk to ships that must defend the landing zone. Ships are unable to use the vastness of the ocean to conceal their presence and are starkly vulnerable to air threats."[80] Assumption of the amphibious role within the CF would affect the air force in that CF188 and follow-on aircraft need to be highly proficient in conducting a maritime strike and close air support role to the amphibious TG while also trying to maintain local air control.

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[80] Finlan Alastair,. *The Royal Navy in the Falklands Conflict and the Gulf War: Culture and Strategy*, (London, Frank Cass Publishers, 2004), 92-93.

Naval fire support ashore includes both the use of naval guns embarked in naval vessels; tactical missile strike systems as well as close air support provided through aircraft in direct support roles to land forces. Assuming an amphibious role may require attainment of some missile strike capability. Canadian frigates are due to receive an upgrade to Harpoon missiles, although the latest upgrade to the Harpoon missile itself (Block 2) features a GPS-aided Inertial Navigation System, which is meant to allow much higher precision in attacks on shore-based targets. Precision, in of itself, does not constitute a sustainable fire support system against an asymmetrical threat ashore. Furthermore, tactical land attack missiles tend to be kept under the direct control of the operational theatre commander to ensure they are available to strike at high value targets ashore; usually targets attained through time sensitive intelligence that have narrow windows of opportunity for striking when acting in a coalition. Naval fire support must be available immediately and must be able to service targets ashore repeatedly at short notice, conditions HARPOON cannot meet. Notices often are requested at the tactical level, therefore, only a gun system can achieve that type of quick response to forces ashore. Presently, Canadian frigates and destroyers have gun systems, but they were specifically designed to counter an air or missile threat. By comparison, the PRINCE HENRY and DAVID LSI(M)s had 4-inch guns (albeit with less capability due to fire control system technology of the time) fitted in order to provide close support to troops landing ashore.[81] As the raid on Dieppe in 1942 had aptly demonstrated, against hardened defences even a 4-inch gun is inadequate to the task.

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[81] M.K. MacLeod, *The PRINCE Ships 1940-1945 - CFHQ Report Number 5* (Ottawa, 1965) Journal online; available from http://www.forces.gc.ca/dhh/downloads/cfhq/cfhq005.PDF ; Internet; accessed 20 March 07.

Naval gunfire support cannot be undertaken by current Canadian ships. The 57mm and 76mm guns carried on Canadian frigates and destroyers are inadequate in providing the fire support necessary from any significant distance at sea. As a minimum a 5 inch gun is required to provide the requisite naval fire support to land forces ashore to a distance that can assist in providing those forces ashore with accurate and sustained firepower with reach (several miles inshore). Maintaining the capability to coordinate naval fire support from ashore with forward observers on the ground is a skill set that can perish rapidly. Although the Canadian Army has, through their forward observers, practiced naval shore bombardment, they have done so separately and with American warships.[82] More recently, Canadian warships have begun to explore the applicability of conducting shore bombardment with both 76mm and the smaller 57mm guns embarked. However, issues with ammunition types, shore targeting and being able to work with forward observers ashore, that typically work on differing map coordinate methodologies, is bringing to the fore the difficulty of executing this type of coordinated fire. Furthermore, the Army's experience with working with American warships highlighted that a single ship with a 5 inch gun and only 600 rounds may not be adequate support, especially if that ship is required for duties other than naval gunfire support.[83] Based on a requirement to provide robust fire support, a Canadian Patrol frigate with a 57mm gun and a small ammunition magazine will certainly be found lacking in being able to provide the land forces the naval fire support they require.

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[82] Lee Hammond, "Joint Amphibious Capabilities-Past Lessons, Future Options" *The Canadian Army Journal*, 8.3, (Fall 2005), 29.

[83] Ibid.

Figure 3. ANZAC frigate gun firing in support of ground forces in Iraq.

Source: San Francisco Chronicle [84]

Recent operations by the Australian Navy in the Iraq theatre of war have demonstrated that the modern 5-inch gun can more than easily accommodate the Army's requirements ashore.[85] It is the reason that the Australian Navy adopted this gun on their new ANZAC class destroyers and is in concert with their defence policy of being able to project land forces abroad in support of national objectives. A requirement to provide fire support was not anything new to the Australians because they had learned from Operation STABILIZE in East Timor that "the naval gunfire support capabilities of the frigates of the RAN…provided the reassurance that effective firepower was immediately

[84] Edward Epstein, "Technology gives U.S. flexible, lethal edge," *San Francisco Chronicle*, [journal online]; available from http://www.sfgate.com/cgi-bin/object/article?f=/c/a/2003/03/22/MN287891.DTL&o=0; Internet; accessed 21 February 07.

[85] Stu Wheeler, "FIVE INCH FRIDAY Defining moment for Anzac," [journal online]; available from http://www.defence.gov.au/news/navynews/editions/4605/topstories/story06.htm; Internet; accessed 25 Mar 07.

available if the situation demanded it."[86] Assumption of the amphibious role by Australia ensured that supporting forces were properly equipped for the mission.

Current Canadian warships have no capability to conduct proper naval gunfire support due to their original Cold War envisaged role. This capability requirement is not a new revelation as Canadian naval officers have identified this shortfall in past.[87] Replacing the current gun systems with a larger calibre gun is not a viable solution. A 5-inch gun is almost 3 times heavier than current gun systems, requires a larger magazine to hold the same number of rounds and must be compatible with the ship's fire control systems (see gun matrix). A 4700 tonne frigate, like the Canadian patrol frigate, cannot accept the larger gun because of the significant increase in weight is not feasible within the current hull form. It therefore will require a new platform to be built or purchased in order to accommodate this larger gun system.

Gun Type	Range	Weight	Comment
US 5" MK45 Mod 4	**20 – 63 nm**	**22.9 tons**	**Carried in Australian/US frigates**
UK 4.5" MK8	**11.9 – 14.6 nm**	**22.3 tons**	**Carried in British frigates**
Oto Melara 76mm (3 inch)	**10.75 nm**	**7.5 tons**	**Carried in Canadian destroyers**
Bofors SAK 57mm L/70 MK2	**9 nm**	**6.3 tons**	**Carried in Canadian frigates**

Table 2. Comparison of Naval Guns

Source: Jane's Weapons Systems

Current Canadian fleet weapon system configurations are not suitable nor can they adequately support an amphibious operation during the vital period of when land

[86] Richard Scott, "Learning the Maritime Lessons of East Timor," *Janes Defence Weekly*, (August 2000).

[87] Kenneth Hansen, "Starting Over: The Canadian Navy and Expeditionary Warfare" *Canadian Naval Review*, (Spring 2005).

forces are being projected ashore. Deficiencies in being able to protect the amphibious ship in general from shore based weapons and the inability to provide the essential firepower if forces ashore need them necessitates either upgrading the ships or relying on allies to provide the necessary covering fire. The former is prohibitively expensive and when having to justify the purchase of a ship such as the JSS to replace a current capability is difficult, attempting to purchase a major weapon system to support a force projection capability that does not currently exist becomes even more problematic due to fiscal restraint. Reliance on allies can be done but at the risk that the support may not be available when needed is a realistic scenario. In order to conduct amphibious operations, even in a fairly benign environment, requires local sea and air control be attained and kept. Purchase of an amphibious ship can only be accomplished by changing the role of the CF maritime fleet from a general purpose fleet to one that supports amphibious missions in the littoral. A change in role that is approved by the government will then be the catalyst to institute the necessary change in fleet structure. The recent announcement to purchase three JSS, coupled with a shelving of the SCF concept indicates the CF will not be assigned that role in the near future.

Joint Support Ship Delivers

In attempting to ascertain the applicability of attaining an amphibious ship, the current and near future roles assigned to the Canadian Navy are central in determining whether the Canadian government is seriously considering attaining an amphibious strategic capability. The missions, therefore, that are foreseen to be assigned would be related back to strategic level guidance, in this case, the *Strategy 2020* paper from 1999, the Navy's 2001strategic maritime document *Leadmark 2020* and the International Policy

Statement from 2005, as well as the evolving global geopolitical situation. In reading these documents it becomes obvious that the CF, in general, and the Navy in particular tried to formulate the strategic direction that should be undertaken. *Strategy 2020* focused on building a force structure that "focus on global deployability with allies and rapid response" while moving "towards an adaptable, multipurpose, combat capable force structure that makes the best mix of capital to produce desired tactical and operational level capabilities" and became the mantra to substantiate the forces of the future.[88] Indeed these exact words are found in the statement of requirement for the Joint Support Ship (JSS) promulgated in 2006 to support the purchase because it answers to the "strategic vision for the development of the CF".[89] The same theme permeates throughout LEADMARK where the emphasis is unchanged from *Strategy 2020*, but goes further to also state which capabilities are not to be pursued because they were not required for the defence of Canada or "are capabilities..more appropriate to a Major Global Force Projection Navy."[90] Finally, the IPS: (Defence) still pronounces that there is a rightful place for Canada in the international scene, reiterating that deployability is important and should be improved under a fundamental transformation of the Canadian Forces to meet developing geopolitical situations. It is in this atmosphere of "transformation" that the current Chief of Defence Staff stood up a team to look into the viability of creating a Standing Contingency Force, one built around a an amphibious

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[88] Department of National Defence, *Shaping the Future of the Canadian Forces: A Strategy for 2020*, (Ottawa, Canada Communication Group, 1999),6.

[89] Department of National Defence, "*Joint Support Ship Statement of Operational Requirement"* (Ottawa, NDHQ Project Office, 2006), 1.

[90] Department of National Defence, *LEADMARK, The Navy's Strategy 2020* (Ottawa: Canada Communications Group, 2001), 127.

ship; one even he admits is a "new CF capability."[91] Whether the current ongoing acquisition of the JSS already addresses the need for global deployability and projection within the Canadian strategic guidance framework, or if the augmentation of JSS with an amphibious ship is necessary remains the outstanding question.

The JSS statement of operational requirement (SOR) document outlines very clearly and concisely the Canadian Navy's vision of how it would integrate into the overall CF expeditionary operations capability sought after by the government. It also is also a window into how receptive the Canadian government is to the purchase of a major combatant such as this ship. The requirements are, with no small doubt, stemming from the Navy's past experiences in the roles it has traditionally performed in and seems close to the mark in answering those requirements to support land forces needs that have been, upon occasion, thrown their way.[92] The requirements outlined in the SOR are in line with the strategic guidance documents, which is important because final approval of this project lies with Cabinet. Cabinet must be seen to both address policy that has been issued publicly, one cannot counter one's own guidance (but it has happened before), as well as ensuring that Canada is spending money wisely and not to the detriment of conflicting other priorities such as public health care. By straying too far from traditional roles undertaken by CF ships brings the danger that Cabinet will perceive the acquisition request as an increase in capability, one that they may not view as necessary, therefore, the amphibious ship may be viewed also as unnecessary.

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[91] Rick, Hillier, "CDS Direction – Standing Contingency Task Force (SCTF) Integrated Tactical Effects Experiment (ITEEX)," NDHQ Letter, (May 2006), 2.

[92] OP TOUCAN and OP DELIVERANCE were such operations.

The JSS answers the requirements of the government of Canada very well. These ships address the primary mission of the CF, which is to defend Canada and Canadians. In the SOR is outlined eleven missions that support the "existing strategic direction."[93] Interestingly, or perhaps not so surprisingly, six of the eleven main missions envisioned for the JSS will be in direct support of Canada. It has a distinct Canada first approach. The remaining missions cover the defence of North America and expeditionary operations in support of the UN and collective defence efforts. The document articulates how JSS will accomplish the mission and that the ship's capabilities are directly linked to policy. It would be difficult to do the same with an amphibious ship for Canada because of the more specialized or focused mission it would work under. Although the amphibious ship could obviously do many of the same missions that JSS would undertake, and in some instances better than JSS due to its larger size and capacity, the added costs of procuring and maintaining this ship would require large increases to the CF budget for what many Canadians would see as missions that JSS could adequately accomplish. The fact that the amphibious ship can conduct a landing in a remote part of the world simply does not register with Canadians because they really do not see the need to land anywhere in force. The current threat to Canada is not direct and is relatively ambiguous, which by its very nature is difficult to articulate and more difficult to sell to the Canadian people and in turn the government.[94] The JSS addresses a requirement to replace an aging AOR fleet which has proven its worth over the last three decades and the

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[93] Department of National Defence, "*Joint Support Ship Statement of Operational Requirement"* (Ottawa, NDHQ Project Office, 2006), 4.

[94] John Treddenick, "Defence and Economics: Some Issues for the post-Cold War World," *The Canadian Journal of Economics*, Volume 29, (April 1996), S645.

additional sealift capacity, joint headquarters capability and an ability to conduct cargo transfer that is included in its current configuration seems to answer shortfalls of the previous AORs.

There is a counter argument addressing the use of JSS for the expeditionary capability requirement of the CF. There are those that think that "as attractive as the JSS may be for both the CF and government decision makers, problematic issues remain."[95] The contention is that by integrating all these capabilities into one platform and then only purchasing three of them will lead to an overstretching of this resource from the beginning. However, what must be understood is that reliance on allied support ships and use of commercial shipping to move CF equipment will continue despite having these new ships. It will also signal a change in the direction of the Canadian Navy "and lead the CF down alleys it might prefer not to travel".[96] Paul Mitchell's comment assumes that the JSS capabilities will be seen as the means to move the Army around whilst still providing support to the fleet concurrently, that in attempting to accomplish all its tasks, it will in the end do none well, thereby actually decreasing overall capability of the fleet. He is obviously siding in the debate with those that consider that these types of roles, fleet sustainment and sealift/amphibious operations, need to be kept in separate vessels. However, unless government is forthcoming with a huge monetary injections into the CF capital budget, a more pragmatic approach in combining more than one role into a single unit is essential to demonstrate the vessel's importance. Furthermore, employment of JSS will continue to be administered as the AORs are now, that is, through careful

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[95] Paul Mitchell, "Joint Support Ship: Transformation or White Elephant" *Proceedings*, Vol. 130, Issue 3, (March 2004), 64.

[96] Ibid.

application of defence priorities to the ship's scheduled missions. Therefore, if there is a need to provide sealift for the Army to a remote Pacific island and concurrently a need to ensure a naval task group has sustainment during a deployment, naval staffs in concert with NDHQ direction will assign the JSS to the higher priority mission. There will be a requirement from time to time, for Canada to either rely on allied tanker support for sustainment or commercial shipping to move Canadian Army equipment. It never was the intention to remove completely the CF from reliance on other means to address operational requirements. JSS just provides additional options for the naval employers. Of course, the greater number of JSS one has, the more options that are available. Finally, certain operations will preclude the use of commercial sealift either due to the inordinate high level of risk associated to the operation or there simply are no available ships to be leased and JSS will be needed. In a sense the JSS becomes an insurance policy of sorts, a last resort asset that would upon occasion require a shifting of CF priorities.

The decision to proceed with the building of three ships only meets the essential requirements of the navy.[97] Strategically, the geographic fact that Canada has three major oceans that access the rest of the world via sea lanes of communication, which are separated by the continent of North America, requires that one ship minimum per coast is required. In order to maintain one ship ready to deploy requires at least two ships so that when one is undergoing refit, the other remains available. Despite the fact that Canada has operated three AORs in order to maintain two ship availability in past, the lack of a

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[97] Department of National Defence, "*Joint Support Ship Statement of Operational Requirement"* (Ottawa, NDHQ Project Office, 2006), 12.

fourth ship restricts the CF in being able to address ongoing naval commitments both in Canada and overseas concurrently.[98] An argument could be made that since an amphibious ship is not in the interest in Canada, a fourth, or even fifth JSS actually *is in the interest* of Canada by ensuring that sufficient ships are available to meet both national and allied commitments simultaneously. Many statements that Canada would be purchasing an amphibious craft implied that only a single unit would be purchased. Single unit purchases are not uncommon as can be seen from other countries such as Spain which is pursuing a Ship of Strategic Projection.[99] However, the same maintenance philosophy applies, and at least two vessels would be needed to ensure one is available for contingency operations. This maintenance requirement significantly increases the costs of both purchase and sustainment aspects of this type of fleet; Canada will not bear such a cost.

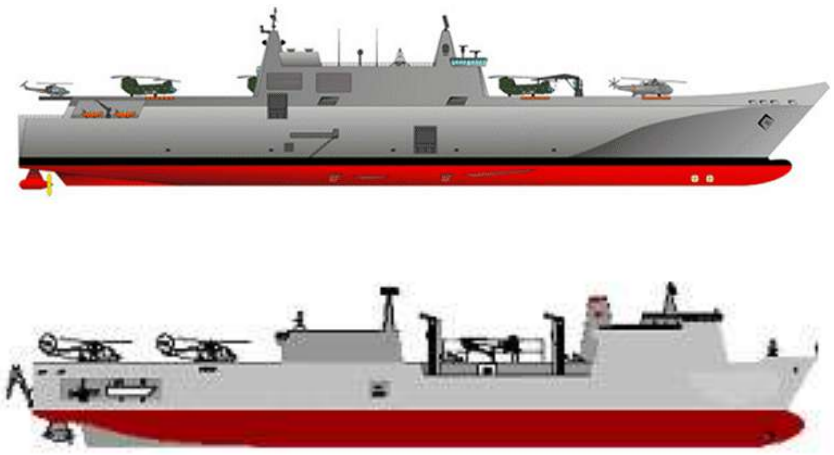

Figure 4. Spanish Strategic Projection Ship (above) in comparison to Canadian JSS.

Source: Global Security.Org and PMO JSS websites

[98] Peter Haydon and Dan Middlemiss, "A Conversation with Vice-Admiral Drew Robertson," *Canadian Naval Review*, Winter 2007, 8.

[99] No author, "Ship of Strategic Projection," *Global Security.Org*, [journal online]; available from http://www.globalsecurity.org/military/world/europe/bpe.htm; Internet; accessed 21 February 07.

CONCLUSION

The acquisition of an amphibious ship is not in the strategic interest of Canada because it entails a fundamental shift in the CF role, in particular the maritime component. A change in role requires a substantive adjustment to force structure in order to fulfill the new requirements of undertaking an amphibious role and operating an amphibious ship. Assuming new and different roles may not be so new for the CF. Canada became involved in expeditionary operations during World War Two, commencing with the conversion of the PRINCE class ships into landing ship infantry vessels and the manning of landing craft flotillas for employment in European waters.

Although Canada has chosen not to re-enter into the amphibious warfare realm since, there exists a strong latent desire by some within the CF to pursue attaining this significant national capability. Throughout the intervening years two distinct camps on the issue have emerged: the first advocating that Canada requires the capability in order to make a mark on the world stage and to contribute in a significant way to global security; regardless of the cost and the second group, advocating that national interests do not coincide with this type of capability and is a "capability too far," coming at the expense of the remainder of the CF. In past, developing and funding this useful force would have required repatriation of the Canadian NATO forces stationed in Europe, a strategically important commitment at the time and continues to be in the form of the Afghanistan mission and is in the national interest of Canada. A quick study of Spain, United Kingdom and Australia reveal how their geopolitical and geographic situations have formulated their national interest and consequently their requirement for amphibious

capabilities. Canada does not have the same geopolitical concerns and therefore has not pursued amphibious operations as a primary role for the CF on this basis.

For Canada, attaining an amphibious ship is a significant change in the national approach to naval warfare and by extension a radical change in fleet structure. Currently the Canadian fleet, had it acquired an amphibious ship, cannot adequately and properly support an administrative landing. Lack of capability to provide close air support in the form of either fighter bombers or attack helicopters, the absence of naval fire support systems on current ships and a general lack of properly navalized helicopter transport and sea transportation systems would require a radical shift in national procurement strategies to build this capability. It would take many years to be completed. Throughout this time the political wherewithal must be retained, difficult because of the inherent differences in philosophy and approach to defence in Canada by the major political parties. One only has to refer to the Chrétien cancellation of the EH-101 Maritime Helicopter Project to see how swiftly the fickle winds of political change can be applied. During the early 1960s Admiral O'Brien identified that the conduct of amphibious operations meant potential fundamental change of roles within the CF. Unless there is a sincere, significant and robust application of applying amphibious capability within a national strategic context, Canada is better off maintaining a more general purpose Navy with the limited lift capacity in the JSS ships.

The maintenance of a general purpose Canadian Navy since the end of the Cold War has been extremely beneficial because it has been achieved during times of financial cutbacks to the CF in the 1990s and has made the Navy, with upgrades to communications and information technologies, relevant in the post 9/11 era maritime

interdiction operations arena. This ability to maintain relevancy may disappear in future if Canada decides to move ahead on the purchase of an amphibious type ship because it would cause a severe drain on finite resources both within the Navy and throughout the CF like the BONAVENTURE did in the 1960s. Avoidance of fiscal cutbacks is particularly crucial in the next few years as the CF pursues building the JSS, starting the Halifax Class modernization project, continuing introduction of the VICTORIA class submarine and the yet to be agreed upon Single Class Surface Combatant project to replace the frigates and destroyers within fifteen years. Shifting to an amphibious ready force would mean altering or canceling portions of the aforementioned projects to support an amphibious capability, a radical and costly venture at this point. Therefore, the recent announcement that the SCF concept will be shelved for three years is not very surprising and is indicative that the leadership has finally become aware or been told by government that this venture, at the moment, is unachievable and not currently in the interest of the country.

Canada's position alongside the world's hegemon and at a distance from any direct threat to the nation has resulted in a dilemma regarding amphibious aspirations. The same oceanic buffer that insulates Canada from direct threat also implores an expeditionary capability in order to participate in a meaningful way on the world stage. It is the amount of national will, and in which manner to participate on the world stage, that strengthens or weakens the debate for an amphibious capability. An internationalist stance in the post Cold War era for peace support operations lends itself to an amphibious expeditionary capability. Conversely, a "Canada First" and North American defence emphasis perhaps explains the current hesitancy to commit to this different role.

Government willingness to change roles for the CF is the means that will allow clearly articulated defence policies to emerge that support amphibious expeditionary operations by the CF. Until a fundamental change to Canada's international stance is taken and subsequently implemented in a change of role for the CF via defence policy, then every following venture into an amphibious ship purchase will indeed be a strategic misstep for Canada and the CF.

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