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CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES
CSC 29 / CCEM 29

EXERCISE/EXERCICE
NEW HORIZONS

**THE AFLOAT LOGISTICS AND SEALIFT CAPABILITY (ALSC) SHIP:
WHAT VALUE WILL IT PROVIDE?**

By /par LCdr/c de c D. G. Harker

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ABSTRACT

As Canada enters the new millennium, the Canadian Forces is in a precarious position. During the past decade, a revolution in military affairs has been underway. During this same period, the Canadian Forces' budget has not permitted it to keep pace. This paper examines the Advanced Logistics and Sealift Capability (ALSC) Project in light of the capabilities it will provide, the current state of the Canadian Forces equipment and constraints imposed by defence funding. The paper confirms that there is a requirement within the Canadian Forces for each of the proposed capabilities. Further, it concludes that the ALSC ships will contribute to transforming the Canadian Forces to a more modern, efficient and combat capable joint force thus contributing to the future relevance of Canada's military.

Introduction

As we enter the 21st century, it is generally accepted that many of the world's militaries are undergoing a Revolution in Military Affairs (RMA). RMA is defined as "a major change in the nature of warfare brought about by the innovative application of technologies which, combined with dramatic changes in military doctrine and operational and organizational concepts, fundamentally alters the character and conduct of military operations."¹ "The central tenet of an RMA is that advances in technology must lead to significant changes in how military forces are organized, trained, and equipped for war..."² Within Canada, cuts to the defence budget, during the period the RMA was occurring, have resulted in a very limited defense procurement program.³ As a result, the equipment of the Canadian Forces has not been replaced and has continued to age, in some cases approaching obsolescence. The fact that the Canadian army's Leopard tanks are no longer considered to be capable of operating safely in low to mid level operations⁴, and the technological deficiencies of the air force's CF-18s⁵, are but two examples of equipment which is due for replacement or significant modernization.

Within the Canadian navy, the situation is similar, albeit not as critical as with the other services. With the introduction of the Canadian Patrol Frigates and the Maritime Coastal Defense Vessels and the extensive modernization of the Tribal Class Destroyers in the 90s, Canada's navy has entered the 21st century in reasonably good condition. The

¹ Elinor C.Sloan, *The Revolution in Military Affairs: Implications for Canada and NATO* (Montreal:McGill University Press, 2002), p 1.

² Ibid, p. 1

³ Canada, Auditor General, *1998 Report of the Auditor General of Canada-April*, (Ottawa: Auditor General of Canada, April 1998), Chap 3, p 2.

⁴ Ibid, p 4

⁵ Ibid, p 5

navy has a small but very capable fleet balanced between the East and West Coasts. The majority of the fleet is comprised of modern warships with first-rate command and communications capabilities, highly interoperable with, and second only to, the United States Navy. There are, however, two major deficiencies that are rapidly becoming critical.⁶ These two deficiencies are the replacement of the Maritime Shipborne Helicopter and the replacement of the aging Fleet Replenishment Ships (AOR). The issues surrounding the acquisition of a new helicopter have been well documented and the subject of intense scrutiny and debate within parliament and the press. The problem has become a political issue that will only be resolved when there is a political will to do so. The AORs are due for replacement as they will approach the end of their life expectancy in the year 2010. To replace these ships the navy has proposed a uniquely Canadian solution which combines the requirement to replace the capability to refuel at sea with the additional capability to provide sealift; a requirement that many feel the Canadian Forces is currently lacking. The proposal is called the Afloat Logistics and Sealift Capability (ALSC). This paper will argue that the ALSC ships are important if Canada's military is to maintain its credibility and relevance.

In order to demonstrate the benefits that the ALSC will provide to the Canadian Forces, the joint and maritime roles envisioned for the vessel will be examined and conclusions drawn with respect to their relevance to the Canadian Forces. The paper will then examine why these different capabilities should be combined into one platform. Three joint strategic roles are listed in the ALSC Concept of Employment Guidance.

⁶ Richard H Gimblett, "A "Transformational" Fleet for Canada in the 21st Century," *Maritime Affairs*, (Spring/Summer 2000), p 42.

“These are: sealift; headquarters for Joint Force Command and Control; and support to forces ashore.”⁷ In addition, the Concept of Employment Guidance indicates that the ALSC vessels will fulfill the traditional roles now filled by the existing AORs.⁸

Before the capabilities are explored in depth, it is necessary to first define what is encompassed in the ALSC project. The ALSC has its roots in an earlier project entitled the Multi-Role Support Vessel (MRSV). It is designed to address a number of capability deficiencies currently present in the Canadian Forces. More specifically, it is intended to “replace the aging AORs, address the requirement for sealift capability and provide support to forces ashore”⁹. To meet these requirements a minimum of three ships in the range of 35,000 tons is being considered. Each ship is anticipated to provide approximately 2,500 lane meters of deck space and be capable of handling sea containers thus providing a limited strategic lift capability. Each ship will also maintain the underway support capabilities found in the AORs currently in service. In addition, the ships will be capable of providing headquarters support to a deployed joint operation. To meet this requirement, the ships are anticipated to be capable of providing command and control facilities for a joint headquarters as well as the requisite accommodations for an embarked joint staff. Additionally, a modular unit capable of providing a 60 bed hospital and dental facilities will be incorporated in the design.¹⁰ Finally, the ALSC will be

⁷ Canada, Department of National Defence, *Canadian Afloat Logistics and Sealift Capability Ships (ALSC) Concept of Employment Guidance*, (Ottawa: DND Canada, 10 January 2000), p 6.

⁸ Ibid, pp 10-12.

⁹ Canada, Department of National Defence, *Synopsis Sheet (Identification) Project M 2673 Afloat Logistics and Sealift Capability*, (Ottawa: DND Canada, 4 November 1999), DWAN: [<http://dgmepm.ottawa-hull.mil.ca/special/alsc>]

¹⁰ *ALSC Brief*, ALSC Project Web Site, 10 May 2000, DWAN: [<http://admmat393.Ottawa-hull.mil.ca/workman/AOR/DEVELOPMENT/374/Management folder/Brief for ALSC 10 May 00>]

capable of supporting deployed forces ashore through the ability to self-load and unload their cargo and will possess “an ‘over the beach’ capability in a benign environment”.¹¹

Sealift

The debate over the requirement for military sealift within the Canadian Forces is not a new subject. In 1964, the Navy studied and acknowledged the requirement for a military sealift capability.¹² Although not specifically met, the Canadian sealift requirements were addressed to a limited degree using *HMCS Bonaventure*¹³ until 1967, *HMCS Provider* until 1998, and *HMCS Protecteur* and *Preserver* until the present.

Although all of these vessels were used for sealift from time to time, none were purpose-built for this mission and consequently, all were very limited in capability and ill-suited for the role. The requirement for a sealift capability, albeit limited, was recognized in the *1994 Defence White Paper*:

To maintain sufficient capability to sealift troops, equipment and supplies for multilateral operations, the support ship *HMCS Provider* (initially slated to be paid off in 1996) will be retained in service, and plans for the eventual replacement of the existing fleet will be considered.¹⁴

Today, the Canadian Forces’ sealift capability has been further reduced with the paying off of *HMCS Provider* in 1998. What little capability currently remains will disappear in 2010 when the remaining two AORs are scheduled to be paid off. Although there has been some discussion about a life extension program

¹¹ *Canadian Afloat Logistics and Sealift Capability Ships (ALSC) Concept of Employment Guidance*, p 10.

¹² Canada, Department of National Defence, *Operational Requirements for a Helicopter*, (Ottawa: DND Canada, 9 March 1964).

¹³ During the 1950s and 1960s, the aircraft carriers *HMCS Magnificent* and *HMCS Bonaventure* were used to transport army equipment to Suez and Cyprus respectively.

¹⁴ Government of Canada, *1994 Defence White Paper*, (Ottawa: Minister of Supply and Services, 1994), p 47.

for these vessels, it is highly unlikely that they could be extended beyond 2020.

Clearly what little sealift capability the Canadian Forces does possess will disappear within the foreseeable future.

Although recognized by the Canadian Forces, the importance of maintaining a sealift capability is not always obvious. To comprehend the importance of military sealift it is first necessary to understand what Canada expects from its military forces. Strategy 2020 summarizes the future strategy of the Canadian Forces as follows:

... to position the force structure of the CF to provide Canada with modern, task-tailored and globally deployable combat-capable forces that can respond quickly to crises at home and abroad, in joint or combined operations. The force structure must be viable, achievable and affordable.¹⁵

In this statement, the term globally deployable and the reference to the capability to “respond to crises abroad” speak to the requirement for the Canadian Forces to conduct operations that will be expeditionary in nature. This vision is supported by events that have occurred since the end of the Cold War, which have resulted in the Canadian Forces deploying, at an increasing tempo, to locations all over the world. Recent deployments to Kuwait, Kosovo, Somalia, East Timor and Afghanistan all serve to illustrate the requirement for Canadian Forces units to deploy further afield with increasing frequency. In order to meet these commitments, the Canadian Forces must transport a significant amount of material to locations outside of North America. This can only be accomplished by two mediums; air or sea. In fact, just about every deployment will

¹⁵ Canada, Department of National Defence, *Shaping the Future of the Canadian Forces: A Strategy for 2020*, Ottawa: DND Canada, June 1999, [www.cds.forces.gc.ca/pubs/strategy2k/intro_e.asp], p 6.

depend on a combination of the two. The initial feedback from Operation Iraqi Freedom illustrates how both airlift and sealift were essential in the success of the campaign.

US and British ability to use sealift to move heavy cargo and equipment to the Gulf and Turkey during the months before the war, and use Gulf ports, was critical to effective power projection. The combination of military and civil sealift and forward ports and bases made it possible to deliver virtually all of the equipment by sea and achieve a degree of tactical surprise because Iraq focused on personnel movements, rather than the equipment and logistic buildup. Airlift made a natural partner in rapidly moving men and women without the lengthy delays inherent in sealift, and in dealing with time sensitive cargo and personnel movements.¹⁶

This observation also serves to highlight essential differences between airlift and sealift.

Airlift, although faster and more flexible, is limited by volume and weight and is relatively expensive. Consequently, it is best suited for smaller or time-sensitive cargos.

Although sealift is subject to longer transit times, it is virtually unlimited by volume or weight and is well suited to deliver large loads at relatively low cost. These differences are further illustrated by the coalition experiences in the first Gulf War, where over 95 percent of all cargo was moved by sealift.¹⁷ Another important difference is the ability to preposition sealift assets in close proximity to the area of interest where their use may be required. With the endurance inherent in ships, these prepositioned vessels are capable of remaining in the vicinity for prolonged periods. It should be noted that this paper does not attempt to advocate one form of strategic lift over another but to illustrate the importance of sealift in the conduct of operations.

¹⁶ Anthony H. Cordesman. The "Instant Lessons" of the Iraq War: Main Report, Third Working Draft. , Washington, DC: Center for Strategic and International Studies, 14 April 2003, [CSIS.ORG, "Military Balance"], p 6.

¹⁷ MGen F.E Elam and LtCol M. Henderson, "The Army's Strategic Mobility Plan," *Army Logistician*, May-June 1992, pp 2-6.

As demonstrated above, sealift is an important element in any major deployment outside of North America. There are, however, different opinions as to how this can be accomplished within the constraints of the Canadian defense budget. Over the years, a number of options have been presented which warrant further discussion. These options include: maintaining the status quo, relying on foreign military sealift capability, chartering commercial vessels, or developing a Canadian Forces capability.

The status quo is unacceptable. In accordance with the *1994 Defence White Paper*, the Canadian Forces must be prepared to provide a vanguard component of a Canadian contingency force anywhere in the world within three weeks.¹⁸ Studies have indicated that the transport of this unit will require approximately 8,000 lane meters of cargo space. It is the transport of this vanguard unit that has come to be regarded as the minimum standard acceptable for an organic military sealift capability. The two AORs can provide only 620 lane meters of space each and are not compatible with modern container cargo. Although these ships contributed to the Canadian Forces efforts in Somalia and East Timor, their sealift capacity was relatively insignificant. Further, their design requires adequate port facilities, which are not readily available at every potential crisis area.¹⁹ The requirement to improve our sealift capability has been noted by the Auditor General in his report of April 1998,²⁰ as well as in the Standing Committee on

¹⁸ *1994 White Defence Paper*, p 39.

¹⁹ Sharon Hobson, "Canada Seeks to Establish Naval Strategic Reach," *Jane's Defence Weekly*, 27 September 2000, [www2.janes.co...=doc-view-print.hts&Prod-Name=JDW&].

²⁰ *1998 Report of the Auditor General of Canada*. Chapter 3,

National Defence and Veterans Affairs report, *Facing Our Responsibilities: The State of Readiness of the Canadian Forces*.²¹

For larger operations such as Operation APOLLO, Canada's contribution to the war on terrorism, the Canadian Forces have been forced to rely on allied strategic lift resources or on chartered commercial shipping. This has resulted in a deployment schedule subject to control by a foreign government or worse, by the availability of suitable vessels from commercial shipping lines. By depending on assets that we do not control, the Canadian Forces lose the freedom and flexibility to act when and where it chooses and risks delaying the deployment of rapid response units due to the priorities of other agencies. Further, as demonstrated by the *GTS Katie* incident²², the use of contracted foreign commercial sealift risks placing key elements of Canadian military power under circumstances where foreign governments or foreign owned shipping may influence their movements; thus surrendering control of elements of our national power to foreign interests.

Through the acquisition of an organic military sealift capability, the Canadian Forces would ensure it had the sealift necessary to respond to an immediate crisis. This sealift would be expected, as a minimum, to be able to move a vanguard unit quickly in response to a conflict without the delays and/or concerns endemic in chartering a commercial or a foreign military carrier.

²¹ Report of the Standing Committee on National Defence and Veterans Affairs, *Facing Our Responsibilities: The State of Readiness of the Canadian Forces*, David Pratt, MP Chair, (Ottawa: House of Commons, May 2002), pp 47-49.

Headquarters for Joint Force Command and Control

One of the observable changes occurring as a result of the RMA is a shift towards operations that are more joint in nature.²³ These are operations where armies, navies and air forces work together in an integrated fashion. Similarly, coalition or combined operations are also becoming increasingly more important and frequent.²⁴ Concurrently, warfare is undergoing “a change in focus from warfare at sea to naval forces projecting power from the sea onto land in the context of littoral warfare.”²⁵ As the focus changes, these joint and combined forces will require facilities from which command and control can be exercised. Canada has recognized the requirement for a joint command structure and has stood up the Canadian Joint Task Force Headquarters in Kingston²⁶.

Unfortunately, at present, if this organization were to deploy, it would be entirely dependant on the establishment of facilities ashore from which to exercise command and control. Thus, at least in the initial stages of a deployment, the headquarters would be forced to operate from a distance until the area was judged safe and secure. A similar situation would exist in a combined operation. The National Command Element would be unable to locate close to the Canadian contingent until proper ground facilities were established.

In the past, AORs have, on occasion, been used as a command and control platform for joint operations where suitable facilities were not available ashore. This was

²² “Keeping An Eye On Katie: Defense Department Urged To Take Heed,” *American Maritime Congress*, 8 Sep 2000, [<http://store.yahoo.com/us-flag/september82000.html>]

²³Sloan, Elinor C, “Canada and the Revolution in Military Affairs: Current Response and Future Opportunities,” *Canadian Military Journal*, Autumn 2000, p 8.

²⁴ Ibid, p 8.

²⁵ Ibid, p 8.

²⁶ Ibid, p 8.

the case in 1993, when a Canadian Joint Task Force was deployed to Somalia and again in 1999, when a Joint Task Force was deployed to East Timor. In both instances, a *PROTECTEUR* Class AOR was used to provide limited logistic support to personnel ashore and to accommodate the Joint Force Headquarters. Both operations were relatively simple and had minimal communication requirements. Today, the nature of communications has changed. The *PROTECTEUR* class, as currently configured, does not possess sufficient command, control, communications, computers and intelligence (C4I) capabilities to support a modern joint operation. The navy's command and control vessels, the *IROQUOIS* Class guided missile destroyers (DDG), possess an extensive and modern communication suit but are ill suited as a location for a Joint Force Headquarters. These vessels are specifically designed for their maritime role in a tactical or mid-level operational situation and therefore lack the accommodation to house a larger Joint Task Force Headquarters or National Command Element.²⁷

If Canada is to continue to progress the development of joint capabilities, they will have to address the requirement to provide suitable command and control facilities for the commander and his headquarters. As noted above, these joint operations are occurring in areas where power land and air power are projected ashore from naval units operating in the littoral areas of the oceans. It is therefore logical to develop a seagoing command and control capability to support a Canadian Joint Force Headquarters for future operations and deployments.

²⁷ *Canadian Afloat Logistics and Sealift Capability Ships (ALSC) Concept of Employment Guidance*, p 8.

Support to Forces Ashore

In response to the demand for “more rapidly mobile and flexible ground forces”²⁸ and the shift towards “jointness”²⁹ in operations, most of Canada’s potential allies have developed amphibious capabilities to enhance their ability to conduct expeditionary warfare. If Canada wishes its military to remain relevant and be a welcome partner in coalition operations, it must maintain some degree of interoperability with its allies. With that in mind, one must question what type of amphibious operations the Canadian Military is likely to undertake. According to Dr. Richard Gimblett, “It is not unreasonable to ...accept that general warfare is unlikely in the foreseeable future, or that Canada would not find itself operating alone in a hostile environment.”³⁰ He further deduces, “... the latest iteration of an activist Canadian foreign policy demands the rationalization of the Canadian Forces as a more efficient deliverer of “peacekeeping” (humanitarian assistance) operations.”³¹ If this assessment is correct, then it is both militarily desirable and politically acceptable that the Canadian Forces develop an amphibious capability that focuses on operations at the lower end of the combat spectrum. That would require an amphibious capability best suited for low intensity operations; operations focused on the battle for the hearts and minds vice an offensive frontal assault on a beach. In most navies, support to troops ashore is achieved through the use of ships specifically designed and specialized to perform the role.

²⁸ Sloan, “Canada and the Revolution in Military Affairs: Current Response and Future Opportunities,, p 8.

²⁹ Ibid, p 8.

³⁰ Gimblett, “A “Transformational” Fleet for Canada in the 21st Century, p 44.

³¹ Ibid, p 44.

In the case of the ALSC, although not part of the original concept, it is anticipated that the flexibility inherent in a vessel of this nature will provide limited but functional capabilities, useful in the provision of support to troops ashore. In accordance with the *Concept of Employment Guidance*, it is assessed that the ALSC will be capable of non-combatant Evacuation Operations (NEO), including the provision of command and control facilities; the provision of medical, dental and rest and relaxation facilities to ground troops; and the provision of helicopter support, utilizing both maritime and land tactical helicopters.³² These estimates appear to be short sighted and based on a combat scenario. The usefulness of a vessel with over-the-beach capability is virtually unlimited in the low level amphibious operations discussed previously. This flexibility will enable the Canadian Forces to support allied amphibious and expeditionary operations and provide valuable options to the government in future crises.

Fleet Replenishment

As described earlier in this essay, the Canadian Forces currently has a relatively modern navy that is well positioned to face the challenges of the 21st century. The combat capable fleet is comprised of twelve modern frigates constructed in the late 1980s and the early 1990s, four guided missile destroyers built in the early 1970s but extensively updated in the 1990s, and four modern and capable submarines purchased from the United Kingdom in the late nineties. This blue water fleet is supported by two aging *Protecteur* class fleet replenishment ships and twelve coastal defence vessels. The coastal defence vessels are operated by the naval reserve, designed for coastal sovereignty patrols and have a limited mine countermeasures capability. Although

³² *Canadian Afloat Logistics and Sealift Capability Ships (ALSC) Concept of Employment Guidance*, p 9.

numerically small, Canada's fleet is relatively high tech, having worked hard to maintain their interoperability with the United States Navy throughout the last decade. As a result, with the exception of the AORs, the Canadian Navy has kept pace with the RMA.

Unfortunately, one of the limitations of operating frigates and destroyers is their size. Both frigates and destroyers are relatively small ships and by consequence, carry relatively small quantities of fuel, ammunition and supplies. These ships are designed for speed and maneuverability, not fuel efficient consumption, and are limited by size in their ability to conduct second line maintenance. As a result, without support at sea, frigates and destroyers must operate close to a shore based support facility and return to refuel and re-supply on a regular basis. The role of the fleet replenishment ship is to provide at-sea refueling, re-supply and some second line maintenance, thus extending the reach and endurance of the fleet.

From a strategic perspective, navies that can operate for extended periods at long distances from their homeports are able to extend their influence beyond their national or regional waters and provide their government with an instrument of national power with global reach. Therefore, if the Canadian government wants a navy capable of supporting government policy on the global stage, it is essential that the navy retain its capability to replenish its ships at sea. In short, AORs are an essential element in Canada's navy if it is to remain relevant and capable of showing presence and providing force projection on a global scale.

The *1994 Defence White Paper* directs the Canadian Forces to "...retain the capability to make a significant and responsible contribution to international peace and security..."³³ More specifically, the navy is mandated to deploy "a naval task group, comprised of up to four combatants (destroyers, frigates or submarines) and a support ship"³⁴ anywhere in the world. These statements clearly indicate the government's desire for Canadian naval forces to be globally deployable. The capability to deploy globally will be at risk by 2010 if a replacement for the existing AORs is not in place. By that date, the *Protecteur* Class AORs will be 40 years old and are projected to have reached the end of their operational lives.³⁵ A life extension program has been considered but is generally considered too expensive³⁶ for the limited number of years it will add to the life of the ship.

Clearly, if the Canadian government wishes its navy to remain a viable and relevant instrument of foreign policy, a fleet replenishment capability must be maintained. Further, the usefulness of the capability currently resident in the fleet is finite. Given the normal length of capital procurement projects in Canada, it is essential that the project to provide an AOR replacement proceed as soon as possible. Failure to do so will result in the Canada's navy being reduced from one of global influence to a navy restricted in its ability to operate at a distance from its own coastline and, consequently, of regional significance only.

³³ *1994 Defence White Paper*, p 38.

³⁴ *Ibid*, p 38.

³⁵ PMO ALSC Website, DWAN, [<http://dgmepm.Ottawa-hull.mil.ca/special/alsc/deficiency.htm>]

³⁶ Canada, Department of National Defence, *Surface Combatant Study: Final Report (Draft Copy)*, (Ottawa: DND Canada, 1997), pp 39-45.

Why ALSC

Thus far, this paper has examined each of the capabilities being proposed for inclusion in an ALSC ship. These examinations have demonstrated that it would be logical and practical to develop a limited Canadian military sealift capability. It is logical, as well, to develop a seagoing command and control capability to support a Canadian Joint Force Headquarters. A ship capable of providing sealift and command and control capabilities also will have inherent capabilities that will enable the Canadian Forces to support allied low intensity amphibious and expeditionary operations, thus providing valuable options to the government in future crises. Additionally, it is clear that if Canada's navy is to continue to exercise global influence in support of the Canadian government, replacement vessels must be procured by 2010. The question that must then be answered is; why should these very different capabilities be combined into one platform?

The primary answer to that question is cost. As previously discussed, there is a RMA in progress. During the past ten years, the Canadian Forces have not kept pace with the rapidly changing technologies and the revolution of modern warfare. Further, the defence budgets of the last decade have not allowed the Canadian Forces to replace or update the majority of its aging equipment. Consequently, a significant number of the Canadian Forces' major equipments are due to reach the end of their service lives within the next seven to twelve years. The Canadian Forces cannot afford to replace all this equipment and simultaneously make significant advances in technology.³⁷ Barring massive increases in defence spending, if Canada is to replace rusting out equipment and

keep up with the RMA, compromises will have to be made. The ALSC is such a compromise.

Assuming the government is committed to maintaining a globally deployable force, the navy must replace the AORs. The additional capabilities included in the project would be available at a significant, but relatively small, extra cost. One 1999 study places the incremental cost to include a sealift capability at approximately 20 million dollars per ship³⁸ (+/- 50%); a relatively minor increase in a project with an estimated total cost close to 2.5 billion dollars.³⁹ To offset these initial procurement costs, there would be some savings in maintenance and crewing as the Navy has proposed the ALSC vessels be crewed within the personnel envelope currently assigned to the existing AORs, with some variance for the scope of the mission.⁴⁰ Clearly, given current funding levels, the ability to piggyback additional capabilities onto essential projects is both pragmatic and necessary if the Canadian Forces are to remain relevant.

Setting the budgetary issues aside, the combination of capabilities into a single joint platform will be a positive step forward for the Canadian Forces and in keeping with current trends seen in the RMA. Not only will it contribute to developing “more rapidly

³⁷ Brian S. MacDonald, *After the Mass extinction of the Canadian Forces: Capital budgets and Future Policy Options*, (Toronto: Atlantic Council Paper 12/02, 2002), [www.atlantic-council.ca]

³⁸ R. Dickenson, Maj. M. MacDonald and P. Comeau, *Strategic Lift Concept Study and Analysis: Utility of Sealift Capability of the Proposed Ship Design for Project M2673 – ALSC*, (Ottawa: DND Canada, April 1999), p 8.

³⁹ Canada, Department of National Defence, *SCP Detailed project Sheet, Project 00002673 – Afloat Logistics And sealift Capability*, DWAN: [http://vcds.mil.ca/Cid/View/Reports/projectsps_e.asp?DSP-Nbr=00002673]

⁴⁰ Crew size would be augmented dependant on the assigned mission. A similar concept is currently employed in the MCDVs where additional personnel with specific skill sets are added dependant on the complexity of the assigned mission.

mobile and flexible ground forces”⁴¹but, working together in a joint operational combat unit, would “ drive the navy, army and air force together as a coherent fighting force, something that was not achieved during the Cold War and unification.”⁴² Initially, this would likely result in some conflicts as traditionalists attempt to protect their customary roles. However, over time, it would serve as a catalyst to transform the Canadian Forces into the “light, lethal and mobile force”⁴³ that will be required in the 21st century.

Conclusion

As Canada enters the new millennium, the Canadian Forces is in a precarious position. During the past decade, a RMA has been underway, during which new information technologies as well as leaner, mobile and flexible joint forces have begun to emerge. During this same period, the Canadian Forces’ budget has not permitted the Canadian services to keep pace. Faced with aging equipment, in addition to the demands of the RMA, the Canadian Forces will be required to be both innovative and ready to accept compromise if they are to transform their forces and maintain a credible force, capable of serving government needs. The ALSC project has addressed four known deficiencies. First, it will provide a strategic sealift capability to support the Canadian army’s rapid response units. Second, it will provide headquarters facilities to support Canadian Joint Force Operations. Third, it will provide the capability of supporting Canadian Forces deployed operations from the sea. Finally, it will provide a replacement for the aging fleet replenishment ships of the Canadian Navy. All of these capabilities

⁴¹ Sloan, Canada and the Revolution in Military Affairs: current response and Future Opportunities, p 8.

⁴² Lewis MacKenzie, “We Need Light, Lethal and Mobile Forces,” *National Post*, 26 January 2003, www.nationalpost.com...B7D46ED27-CAA9-41E7-80BE-25F013B65B03%7

⁴³ Ibid.

will contribute to producing modern “light, lethal and mobile self contained forces”⁴⁴ that work in the joint environment. The ALSC ships will facilitate the Canadian Forces development in accordance with the trends present in the RMA and thus contribute to maintaining a capable and relevant military force.

⁴⁴ MacKenzie, “We Need Light, Lethal and Mobile Forces,”

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