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# CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES CSC 32 / CCEM 32

#### EXERCISE/EXERCICE NEW HORIZONS

# The Maritime Component Requirement of the Standing Contingency Task Force

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#### **ABSTRACT**

Canada's International Policy Statement (IPS) coupled with its Defence Policy Statement (DPS) have highlighted the need to enhance existing capabilities as well the need to acquire new capabilities in order to meet its defence requirements. Key to the new capabilities is the Standing Contingency Task Force (SCTF) which is proposed to be a highly ready, rapid reaction force, capable of delivering troops and equipment overseas as part of a maritime force projection capability. Much of the contemporary discussion regarding the SCTF has centered on discreet aspects of the overall requirement, such as the acquisition of the core capability needed to transport the troops and equipment. The acquisition of a large troop carrier or an amphibious capability alone would not be sufficient to meet the DPS need. This paper will analyze the overall maritime requirement in the DPS associated with the SCTF and will argue that Canada will need to significantly enhance its exisiting capabilities as well as acquire major new capabilities in order to meet the full DPS requirement for the SCTF.

#### INTRODUCTION

In 2005, the Government of Canada published an International Policy Statement (IPS)<sup>1</sup> which outlined Canada's approach to its international interests. The IPS described specific challenges facing Canada and provided direction for meeting these challenges. As part of the overall IPS umbrella, Canada also produced a Defence Policy Statement (DPS)<sup>2</sup> which amounted to the first serious review of Canada's defence policy in over ten years. The DPS focused on Canada's role in an increasingly changing world and recognized the need for the Canadian Forces (CF) to become more "effective, relevant, and responsive at home and abroad." The DPS further stated that in order for the CF to accomplish this it would need to transform and key to this transformation would be the CF's adoption of "a fully integrated and unified approach to operations."

Two key pillars to this integrated approach will be transformation of the CF command structure and the establishment of fully integrated units.<sup>5</sup> Command structure transformation has been ongoing since publication of the DPS and significant changes have already been realized with new integrated joint command structures being established to enhance the CFs ability to deploy both at home and overseas.<sup>6</sup> Work has also begun on the establishment of integrated CF units, however, significant changes in capabilities will be necessary to address the new requirements as described in the DPS.

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<sup>&</sup>lt;sup>1</sup>Department of Foreign Affairs and International Trade, Canada's International Policy Statement, *A Role of Pride and Influence in the World*, 2005.

<sup>&</sup>lt;sup>2</sup>Department of National Defence, Canada's International Policy Statement, A Role of Pride and Influence in the World, Defence, 2005.

<sup>&</sup>lt;sup>3</sup> Ibid, 11.

<sup>&</sup>lt;sup>4</sup> Ibid, 11.

<sup>&</sup>lt;sup>5</sup> Ibid, 11.

<sup>&</sup>lt;sup>6</sup> Ibid, 11.

The DPS outlines a number of key change initiatives for the CF force structure which will be necessary for it to meet its new goals. Among these is the proposed establishment of a Standing Contingency Task Force (SCTF). Its purpose and structure would be as follows:

"A Standing Contingency Task Force will be established to respond rapidly to emerging crisis. This high-readiness task force will be made up of existing, designated maritime, land, air and special operations elements, organized under a single integrated combat command structure. It will be ready to deploy with ten days notice, and provide an initial Canadian Forces presence to work with security partners to stabilize the situation or facilitate the deployment of larger, follow-on forces should circumstances warrant."

The DPS outlines certain requirements for the SCTF while it implies some others and clearly standing up the SCTF as described will require significant changes to the CF. The DPS lacks the fidelity necessary to determine the exact requirements but this should be expected in any document produced at the macro level. However, this leaves the specific requirements open to much interpretation. There is danger in immediately jumping to conclusions regarding perceived capability requirements without first trying to determine what the real need is based on the policy intent of the IPS and DPS. The result could be the acquisition of significant material assets that in the end, do not meet the intent of the documents.

While an analysis of the requirements for all elements will be necessary at some point, this essay will focus on the Maritime Component capabilities necessary to address

<sup>&</sup>lt;sup>7</sup> Ibid. 13.

the new requirements as detailed in the DPS for the SCTF. Various briefs and discussions since the publication of the DPS have focused on the need for individual capabilities such as large ships for troop and equipment transport<sup>8</sup>; however the SCTF maritime requirement is much greater than this. It will be argued that the Canadian Navy will require robust forces, consisting not only of enhanced platforms but also significant new capabilities necessary to address all of the SCTF requirements. This will be done via a thorough analysis of the SCTF maritime requirements and a review of capabilities necessary to meet the requirements.

# **REQUIREMENT ANALYSIS**

The maritime component requirements for the SCTF are generally scattered throughout the DPS document and there is a certain amount of overlap between these and other general naval needs. For instance, the DPS discusses the need to have ready duty forces on each coast, the requirement to support other government departments, as well as the need to conduct environmental surveillance and search and rescue, amongst others. Depending on the circumstances, some of these same forces could be required to deploy as part of the SCTF task group. While these other roles are important and will require maritime forces to assist, only those requirements related directly to the SCTF will be addressed here. Also, the addition of new capabilities to address new requirements will have a significant human resource and fiscal impact, however in the

<sup>&</sup>lt;sup>8</sup> Sharon Hobson, "Plain Talk", *Canadian Naval Review*, Volume 1, Number 4 (Winter 2004), available from <a href="http://naval.review.cfps.dal.ca/pdf/winter2006excerpt.pdf">http://naval.review.cfps.dal.ca/pdf/winter2006excerpt.pdf</a>; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>9</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005, 19.

interest of scope the essay will only focus on the naval power effects required by the IPS/DPS and the capabilities needed to achieve these effects.

The DPS states that in order to support littoral operations as part of the SCTF, the CF must acquire ships which will, "pre-position or deploy the SCTF, support land operations, provide a sea-based national or multi-national command capability, deploy tactical unmanned vehicles, and sustain naval task group operations worldwide. "10 These are the core maritime requirements necessary to support the SCTF concept, however, what do they really mean? Of the five items, only the forth, deploy tactical unmanned vehicles, appears to be reasonably straight forward and consequently will not be addressed here. The others however, can and do mean different things to different people and will therefore be analyzed individually. Also it bears mention that one could argue all five of these are actually capabilities as opposed to requirements and that if looked at from an effects based perspective, the requirement could be simply stated as the need for a rapid initial response to a national or international crisis in order to provide stabilization in cooperation with international partners. 11 However, for the sake of argument, these items will be treated as the naval power projection requirements in support of the effects desired from the SCTF.

Pre-positioning or deploying the SCTF is the first requirement to be addressed. The two terms, "pre-position" and "deploy", do not necessarily mean the same thing and the difference can be significant. Pre-positioning implies that assets are already on site

<sup>&</sup>lt;sup>10</sup> Ibid, 14. <sup>11</sup> Ibid, 13.

prior to mobilizing other forces. Of importance when viewing this in the Canadian context is whether the DPS is truly referring to pre-loading significant amounts of equipment on a large vessel and sending it overseas in advance of a conflict, which is the commonly held meaning, or whether the term is being used interchangeably with the term "deployed". <sup>12</sup> For the purpose of this essay it is assumed that the former is the case.

Pre-positioning is generally viewed in the context of strategic sea or airlift where significant heavy lift assets would be used to pre-position equipment. 13 Of issue for Canada is that the DPS does not clearly indicate what would be pre-positioned, this would have a significant impact on the size and type of vessel to be used. The United States Navy (USN) makes use of Large Medium Speed Ro/Ro's (LMSR) to meet their requirements. 14 Of course USN requirements would be much greater than Canada's; therefore, the quantity to be lifted as well as the frequency of conducting a heavy lift operation would not be as great.

Pre-positioning via sealift has its advantages and disadvantages. Sea lift is relatively cheap and vessels can be re-routed if requirements change. Also, a single LMSR is capable of carrying a significant amount of material. There are also different means by which a vessel can be acquired, such as a lease or outright purchase. Industry has made it known that it could adapt a commercial container ship to meet military

<sup>&</sup>lt;sup>12</sup> Department of National Defence, National Defence College, Strategic Sea Lift Capacity in the Common European Security and Defence Policy, Series 1 No. 20, 2002, 35.

13 Ibid, 35.

14 Ibid, 35.

requirements.<sup>15</sup> Disadvantages of pre-positioning via sealift include the potential that the equipment could end up in the wrong area due to a threat change<sup>16</sup> or, perhaps of greater significance, the potential requirement for a harbor or docking facility for offloading.

In view of the requirement for Canada to deploy overseas on short notice and the stated requirement for sustaining the SCTF task group in theater for up to six months, <sup>17</sup> Canada would seem to have a legitimate requirement for sealift, but would the assets need to be pre-positioned? The DPS only mentions pre-positioning once in the entire document and this is in the context of moving the SCTF into theater. <sup>18</sup> This is consistent with the concept of operations for the SCTF. <sup>19</sup> Based on the context of the DPS it would appear that Canada has a need for a deployable force with some lift capacity but not pre-positioning in the traditional sense.

Deploying a joint force consisting of soldiers, their equipment and landing capability<sup>20</sup> would seem to imply an amphibious requirement; however, the DPS does not specifically state that an amphibious capability is needed. It alludes to this type of requirement by stating that troops will need to be embarked in and operate from a maritime platform employing up to six medium lift helicopters for support to land

<sup>&</sup>lt;sup>15</sup> Commercial solutions to the JSS problem, *Strategic Lift Options for Canada and the Allies*, (Canadian Institute of Strategic Studies , 2005), 29.

<sup>&</sup>lt;sup>16</sup> United States, Congress of the United States Congressional Budget Office, *Moving US Forces: Options for Strategic Mobility*, 1997.

<sup>&</sup>lt;sup>17</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005, 30.

 <sup>&</sup>lt;sup>18</sup> Ibid, 14.
 <sup>19</sup> Department of National Defence, Standing Contingency Task Force, Concept of Operations Update, TSG—7 Dec 05; available from <a href="http://barker.cfcacad.net/Admin/CFT/sctfconop.pps#281,13">http://barker.cfcacad.net/Admin/CFT/sctfconop.pps#281,13</a>; Intranet; accessed 11 April 2006.

<sup>&</sup>lt;sup>20</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005, 29-31.

operations as an "integral element of the Standing Contingency Task Force." This platform would not necessarily have to be amphibious, the helicopters and soldiers could operate and deploy from a LMSR. However, for the type of naval effects implied in the DPS, such as quick response, high readiness, and an integrated command combat structure deployable within ten days, 22 an amphibious capability would seem to be needed. The SCTF would be a small, highly ready component, capable of deployment at very short notice. This type of requirement is very similar to the maritime force projection requirement defined by the Royal Australian Navy, "The delivery of force from the sea is defined as maritime power projection and can take the form of the landing of amphibious or special forces or the delivery of seaborne land forces, or bombardment by guided or unguided weapons from seaborne platforms." Amphibious forces are designed to meet the type of requirement described in the DPS.

The debate over whether the Canadian Navy should invest in an amphibious capability certainly isn't new.<sup>24</sup> Noted Canadian naval policy analyst Peter Haydon argued that the time it would take to acquire such a capability and questions as to where, when and how it would be used made the suggestion untenable.<sup>25</sup> However, requirements can and do change. Certainly the original Leadmark 2020 referred to the requirement as being legitimate, just not affordable when compared to other more

<sup>&</sup>lt;sup>21</sup> Ibid, 29-31.

<sup>&</sup>lt;sup>22</sup> Ibid, p 13.

<sup>&</sup>lt;sup>23</sup> Commonwealth of Australia, "Australian Maritime Doctrine - RAN Doctrine 1 – 2000"; available from <a href="http://www.navy.gov.au/spc/amd/html/chapt5.html">http://www.navy.gov.au/spc/amd/html/chapt5.html</a>; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>24</sup> Lieutenant Commander G.P. Green, "Should Canada Consider An Amphibious Capability?" (Toronto: Canadian Forces College Command and Staff Course New Horizons Paper, 1996).

<sup>&</sup>lt;sup>25</sup> Peter Haydon, "Canadian Naval Future – A Necessary Long-Term Planning Framework." IRPP Working Paper number 2004-12, Nov 2004; available from <a href="http://www.irpp.org/wp/archive/wp2004-12.pdf">http://www.irpp.org/wp/archive/wp2004-12.pdf</a>; Internet accessed 11 April 2006.

pressing requirements (at the time).<sup>26</sup> Other navies similar in size to Canada, such as the Dutch and the Australians, have amphibious requirements. In fact Australian foreign policy sounds very similar to Canada's IPS in this regard. Three of the five key strategic tasks of the Australian Defence Force; Defeat of Attacks on Australia, Defence of Regional Interests, and Defence of Global Interests <sup>27</sup> require force projection in the form of a joint maritime capability as a critical enabler, "This would include both the projection of force and defensive measures to protect seaborne communications and national territory, including the measures to ensure that our land forces possess sufficient maritime mobility to accomplish their tasks." This statement is very similar to the statements in the DPS regarding maritime force projection and points to the requirement for amphibious capability,

"the Canadian Forces will enhance the ability of their ships to... carry out littoral operations as part of the standing Contingency Task Force... acquire ships that will be able to pre-position or deploy the SCTF, support land operations, provide sea-based national or multinational command capability and acquire weapon systems for surface ships to enable them to support and protect forces operating ashore." <sup>29</sup>

So, having looked at the first requirement in the DPS, pre-position or deploy, it would appear that from a naval power perspective, Canada does have a requirement for maritime force projection likely in the form of an amphibious capability with limited sealift capacity in order to quickly respond to a national or international crisis with an

<sup>&</sup>lt;sup>26</sup> Department of National Defence, *Leadmark: The Navy's Strategy fro 2020*, (Ottawa, Chief of the Maritime Staff, 2001).

<sup>&</sup>lt;sup>27</sup> Commonwealth of Australia, "Australian Maritime Doctrine - RAN Doctrine 1 – 2000"; available from <a href="http://www.navy.gov.au/spc/amd/html/chapt4.html">http://www.navy.gov.au/spc/amd/html/chapt4.html</a>; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>28</sup> Commonwealth of Australia, "Australian Maritime Doctrine - RAN Doctrine 1 – 2000"; available from http://www.navy.gov.au/spc/amd/html/chapt4.html; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>29</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005, 14.

initial stabilizing force. There does not appear to be a requirement to pre-position significant quantities of material overseas in accordance with the common held view of the term. However, if one wishes to argue that pre-positioning in the DPS context is simply the need to send this type of force overseas in anticipation of a crisis, then this could be accepted.

According to the DPS, the next requirement for the maritime component of the SCTF is supporting land operations. 30 The DPS goes on to define this requirement in some detail, stating that Maritime forces will be able to, "sustain for up to six months a task group of up to four combatant vessels... capable of precision fire and support to forces ashore and will be used as an integral element of the SCTF..."<sup>31</sup> The "sustain" portion of this requirement will be dealt with later, but referring to precision fire, this is commonly viewed as,

"the capability to destroy selected high-value and time-critical targets." or to inflict damage with precision, while limiting collateral damage. Precision Fires consists of three elements: (1) target acquisition, (2) command and control to provide a capability to bring fire to bear on targets, and (3) precision munitions to produce desired target effects."<sup>32</sup>

This requirement is typically necessary in support of land forces deployed from a maritime power projection force in the littoral area. Canada does not presently enjoy any capability in this regard. If it is accepted that Canada has a valid requirement for an

http://72.14.207.104/search?q=cache:UojnpzlyZLIJ:www.wslfweb.org/docs/dstp2000/jwstppdf/07-PF.pdf+naval+precision+fire&hl=en&gl=ca&ct=clnk&cd=27; in

http://www.wslfweb.org/docs/dstp2000/MAINMENU.pdf; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>30</sup> Ibid, 14. <sup>31</sup> Ibid, 30.

<sup>&</sup>lt;sup>32</sup> United States, Department of Defence, Defence Science and Technology Strategy and Plans, February 2000: available from

amphibious force then the requirement for precision fire support would appear to be critical to the success of any mission, "Naval Gunfire Support (NGS) has always been an essential part of amphibious operation... Once the assault has started, the weight of naval fire can be a major factor in its success..." In an amphibious warfare environment or even in task group operations in the littorals, effective NGS or precision fire support can be of great benefit in support of land forces. Lack of precision fire would certainly limit the ability of the maritime component to support the land component, which would be paramount in an amphibious environment. This is supported by the view taken by the Australian Navy as indicated by the following extract from their Maritime Doctrine,

"Australia's naval forces do not possess the organic air capability to protect operations on land. They nevertheless have considerable potential to contribute to combat operations throughout the battlespace. Medium calibre guns in surface combatants can be used for naval surface fire support or shore bombardment operations, while air warfare weapons and sensors are used to contribute to antiair operations over the coast. This will be particularly useful if it can be integrated with airborne early warning and control and fighter aircraft, or with land-based sensors and weapons. Army battlefield helicopters (organic to the amphibious task group) and naval utility helicopters can provide extensive support to operations on land. In littoral zones, maritime forces prevent the adversary moving forces by sea. This protects the seaward flank of friendly land forces and denies the adversary the ability to conduct maritime manoeuvre."

Though one could argue that precision fire support is not essential for unopposed landings, lack of this capability could place the landing force at undue risk. This would imply that if Canada is to take an amphibious role seriously, it will require some means

<sup>&</sup>lt;sup>33</sup> Michael Evans, *Amphibious Operations, The Projection of Seapower Ashore*, (Brassey's Sea Power; vol. 4, 1990), 159.

<sup>&</sup>lt;sup>34</sup> Ibid. 159

<sup>&</sup>lt;sup>35</sup> Commonwealth of Australia, "Australian Maritime Doctrine - RAN Doctrine 1 – 2000"; available from <a href="http://www.navy.gov.au/spc/amd/html/chapt7.html">http://www.navy.gov.au/spc/amd/html/chapt7.html</a>; Internet accessed 11 April 2006.

of providing precision fire support to the land forces. The various types of precision fire support will be weighed against Canada's requirement later in the essay.

Command and control is a critical element in any operation and certainly for the sea-based national or multi-national capability envisioned for the SCTF, effective command and control would be essential. Canada continues to improve its command and control capabilities, with interoperability with the USN being an important component of this.<sup>36</sup> It is reasonable to accept therefore, that command and control in the combined joint environment<sup>37</sup> anticipated for the SCTF is a legitimate and key requirement. One item of note though which the CF should consider is the doctrinal issues regarding command and control which are typical of amphibious operations. The question of transfer of operational authority (TOA) when the land forces cross the invisible boundary between being part of a maritime component and becoming strictly a land component must be considered.<sup>38</sup>

The final requirement to be addressed is the sustainment of naval task group operations worldwide. Sustainment will be viewed from two perspectives; force generation/employment and "in theater" support. With respect to force generation and employment, operational sustainment is identified in Leadmark 2020 in terms of the number of hulls required to meet operational commitments while still regenerating forces,

<sup>&</sup>lt;sup>36</sup> Department of National Defence, Canada US Relations, available from <a href="http://www.forces.gc.ca/site/focus/canada-us/backgrounder\_e.asp">http://www.forces.gc.ca/site/focus/canada-us/backgrounder\_e.asp</a>; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>37</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005.

<sup>&</sup>lt;sup>38</sup> United States, Department of Defence, *Joint Doctrine for Amphibious Operations*, 19 September 2001, available from <a href="http://www.dtic.mil/doctrine/jel/new\_pubs/jp3\_02.pdf">http://www.dtic.mil/doctrine/jel/new\_pubs/jp3\_02.pdf</a>; Internet accessed 11 April 2006.

"In order to adequately respond the navy needs adequate capacity – basically enough ships, submarines, and aircraft – to provide the government the choice, voice, and options to act immediately, sustain for as long as needs be, and then to generate and regenerate the forces for the duration of the crisis and beyond for the next contingency. Force generation (maintenance, training and trials) consume almost 70% of available ships days, whether at sea or alongside. This leaves only 30% of available ships to meet standing and contingency operations. Fleet size thus must be four times the requirement to meet assigned governmental tasks."

This is an important consideration when determining the size of fleet required for support of task group operations in general. The point here is that when looking at the SCTF, the requirement is not as simple as providing the exact number of hulls needed for the initial and follow on task groups. One must also consider vessels in refit or in a lower state of readiness or vessels already involved in other operations which may make them unavailable to the SCTF. The factor of four suggested by Leadmark would have a significant impact on the total fleet requirements to meet all operational and force generation needs.

The second sustainment requirement involves the need to sustain forces in theatre. According to the DPS, for the SCTF this must be done, "indefinitely (for) two ships (one from either coast)... or a submarine and a ship for operations in direct support of the Special Operations Group or as forward elements of the SCTF anywhere in the world." The DPS goes on to say that the four combatant elements which provide precision fire

<sup>&</sup>lt;sup>39</sup> Department of National Defence, *Leadmark: The Navy's Strategy fro 2020*, (Ottawa, Chief of the Maritime Staff, 2001).

<sup>&</sup>lt;sup>40</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005, 30

support to the SCTF must be sustained for up to six months.<sup>41</sup> The navy's ability to sustain in theatre operations is presently provided by two operational replenishment ships (AORs) which are near the end of their lives and are due for replacement. The DPS requirement clearly outlines the need for this type of capability in order to meet the needs of the SCTF and its supporting elements, it is uncertain however if the planned number of replacements will meet the enhanced need.

#### **CAPABILITIES**

Based on the forgoing analysis, the DPS dictates requirements for sealift, maritime force projection, command and control, precision fire support, and force sustainment. Potential capabilities for meeting these requirements will now be addressed. It must be remembered when conducting this analysis that certain capabilities can cover more than one requirement, however, for each capability it will be shown that there are limitations and for certain platforms, it will be shown that while they can perform multiple roles, some of these roles are in fact conflicting.

First to be examined is the capability needed to meet the sealift requirement. The amount of sealift required by Canada is certainly not as great as that of the USN, and is more likely in the same general area as that required by Australia or the Netherlands.

The Australian's provide sealift for their expeditionary forces via their amphibious vessels with a stated requirement as follows, "we have identified the specific requirement to deploy a Combined Arms Battle Group consisting of an embarked force of about 2 000

<sup>41</sup> Ibid, 30.

personnel. We need to be able to sustain embarked forces afloat for 45 days and ashore for 10 days."<sup>42</sup> While it would appear that this force is perhaps larger than that envisioned for the SCTF, the sustainment period would seem shorter considering that the DPS states an indefinite sustainment period for the first two ships deployed with the SCTF and up to six months for the four ship follow on task group.<sup>43</sup> What the DPS appears to mean is that the sustainment period would be accomplished through use of an initial amphibious and/or joint support capability, followed by a logistics tail which could make use of an enhanced sealift or airlift capability.

To address their initial sealift and deployment requirements the Australians will be acquiring new Landing Platform Dock (LPD) vessels capable of carrying sufficient material to support the force for the initial period previously mentioned. This is very similar to the Royal Netherlands Navy which will be acquiring an LPD capable of sustaining a significant Maritime Power Projection force for the same period as the Australians. These vessels could meet Canada's requirement for a quick response, but could not sustain the force in theatre for the indefinite period stated in the DPS.<sup>44</sup>

Replenishment vessels can also provide a sealift capability. In fact Canada has tried to incorporate this into its Joint Support Ship capability. <sup>45</sup> However, as confirmed

<sup>&</sup>lt;sup>42</sup> Commonwealth of Australia, Royal Australian Navy, Speeches by Former Chiefs of the Navy, Vice Admiral Chris Ritchie, available from <a href="http://www.navy.gov.au/speeches/2004/defencewatch.html">http://www.navy.gov.au/speeches/2004/defencewatch.html</a>; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>43</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005, 30.

<sup>&</sup>lt;sup>44</sup> Ibid, 30.

<sup>&</sup>lt;sup>45</sup> Department of National Defence, The Joint Support Ship Statement of Operational Requirement, Version 3.0, 18 May 05, available from <a href="http://www.forces.gc.ca/admmat/dgmepm/pmojss/docs/JSS\_SOR\_V3\_18-May-05.pdf">http://www.forces.gc.ca/admmat/dgmepm/pmojss/docs/JSS\_SOR\_V3\_18-May-05.pdf</a>; Internet accessed 11 April 2006.

by Australia<sup>46</sup> and by Canada as well<sup>47</sup>, this capability is limited. Also, replenishment ships have a primary role for refueling and re-supplying deployed forces which could make them unavailable to perform in a sealift capacity. This is the type of conflicting requirement referred to earlier. If the supply ship(s) are being used in a sealift capacity they would not likely be available to perform their primary function of replenishing the task group.

The most significant sealift capability is provided by LMSR vessels. These are used by the United States to pre-position forces around the globe as well as to meet general sealift requirements. This class of vessel could meet Canada's requirements except for those requiring forces to be landed in the absence of port, dock or other discharge facilities. This is where an amphibious capability becomes critical. If Canada's requirement was simply to get forces to a distant shore where personnel and resources could be offloaded onto a dock, the LMSR could certainly meet the requirement to sustain the SCTF for the period stated in the DPS. However, the

<sup>&</sup>lt;sup>46</sup> Commonwealth of Australia, "Australian Maritime Doctrine - RAN Doctrine 1 – 2000"; available from http://www.navy.gov.au/spc/amd/html/chapt9.html; Internet accessed on 11 April 2006.

<sup>&</sup>lt;sup>47</sup> Department of National Defence, The Joint Support Ship Statement of Operational Requirement, Version 3.0, 18 May 05, available from <a href="http://www.forces.gc.ca/admmat/dgmepm/pmojss/docs/JSS\_SOR\_V3\_18-May-05.pdf">http://www.forces.gc.ca/admmat/dgmepm/pmojss/docs/JSS\_SOR\_V3\_18-May-05.pdf</a>; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>48</sup> "The LMSR ships are Large (950 feet long, 106 feet wide, 55,000 long ton displacement), Medium Speed (24 knots), Roll-on/Roll-off (RO/RO) vessels. The sealift ships are capable of self-sustained RO/RO and Lift on/Lift off (LO/LO) operations at a pier and in a Logistics-Over-the Shore (LOTS) scenario through stern and side port ramps to a RO/RO Discharge Facility (RRDF). In addition, the LMSR is capable of self-sustained LO/LO cargo operations in a LOTS scenario by interfacing with lighterage. The LMSR ships are not armed, and do not have a combat system. They do have C3I suite sufficient to perform their intended mission in conjunction with other Naval vessels. (A) Watson-class LMSR can carry an entire U.S. Army Armor Task Force including 58 tanks and 48 other tracked vehicles, plus more than 900 trucks and other wheeled vehicles." Global Security, *T-AKR USNS Bob Hope Large, Medium-speed, roll-on/roll-off ships [LMSR]*; available from

http://www.globalsecurity.org/military/systems/ship/takr-300.htm; Internet accessed 11 April 2006.

49 Ibid.

requirement would appear to be for a capability to land forces without benefit of docking or harbour facilities.<sup>50</sup>

So, for Canada to meet the strict requirement as stated in the DPS, it will require a sealift or airlift capability beyond the initial amphibious capability as well as the capacity provided by the replenishment ship(s). Options for the lift requirement could include permanent lease or purchase of a LMSR vessel. But perhaps a more efficient approach would be to lease a vessel on an as required basis. This has its obvious drawbacks, the vessel doesn't belong to the navy and could be susceptible to union issues or the vagaries of private ownership; however, a full time capability would be a relatively expensive proposition considering the probable infrequent use of the vessel.

The next requirement is to deploy the SCTF "anywhere in the world with 10 days notice."51 The intent of this requirement, as stated, is to quickly bring an initial force to bear in order to meet a national or international crisis. Ten days notice requires a high state of readiness for all elements of the joint force. Also, the force would need to train and work together in order to be effective. At the core of this force would be a vessel which would move it into theatre and then land forces where required. Again, if Canada accepted the restriction of relying on local docking or harbour facilities, this requirement could be met with a LMSR. However, as stated, the requirement in the DPS really points toward a more flexible force, capable of landing forces in the absence of ports or docks. This type of requirement is typically met by an amphibious capability.

<sup>&</sup>lt;sup>50</sup> Department of National Defence, Canada's International Policy Statement, A Role of Pride and Influence *in the World, Defence*, 2005, 30. <sup>51</sup> Ibid, 13

Many nations have acquired amphibious forces in order to address their national interests. Again, the Dutch and the Australian navies are good examples. As previously mentioned, the Dutch are in the process of acquiring a new LPD with significant amphibious capacity along with impressive command and control capability. This new vessel will be a variant of the ROTTERDAM Class, capable of carrying a battalion of marines (approximately 600 soldiers), 90 armored infantry fighting vehicles, a 400 person Combined Joint Task Force Headquarters, capacity for four Landing Craft Utility (LCU)<sup>52</sup>, and capacity for four helicopters. Also included will be onboard hospital facilities including two fully equipped operating rooms, ten intensive-care beds, X-ray facilities, treatment rooms, and an emergency sick bay able to handle 100 casualties. The vessel will be able to disembark soldiers on a beach and support them for ten days.<sup>53</sup> Clearly a vessel of this nature could provide sufficient initial sealift capability, and be able to deploy land forces in the absence of harbour facilities but again, it would not be adequate to support a deployed force for the period indicated in the DPS. Follow on force sustainment would still need to be addressed by sea or airlift assets.

Command and control is a critical requirement in today's combined joint warfare environment and therefore this capability is inherent in newer amphibious warfare vessels. If the Canadian Navy were to pursue a capability similar to the ROTTERDAM,

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<sup>&</sup>lt;sup>52</sup> "Landing craft are used by amphibious forces to transport equipment and troops to the shore. Landing craft are capable of transporting tracked or wheeled vehicles and troops from amphibious assault ships to beachheads or piers... LCU's have both bow and stern ramps for onload/offload at either end." *United States, Department of Defence, United States Navy Fact File*; available from <a href="http://www.navy.mil/navydata/fact\_display.asp?cid=4200&tid=1600&ct=4">http://www.navy.mil/navydata/fact\_display.asp?cid=4200&tid=1600&ct=4</a>; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>53</sup> AMI International, *Netherlands - Rotterdam Class Landing Platform*, *Dock (LPD)*, 2001; available from <a href="http://www.amiinter.com/samples/netherlands/NL3301.html">http://www.amiinter.com/samples/netherlands/NL3301.html</a>; Internet accessed 11 April 2006.

then a command and control suite similar to that provided for the Class would likely meet the DPS requirement. The new command and control systems for ROTTERDAM's follow on variant will be compatible with US and United Kingdom versions to ensure interoperability. "The RNIN installed a command and control system based on the US Joint Maritime Command Information System (JMCIS), partially to ensure full compatibility with UK and US Navy amphibious ships." Considering Canada's desire to remain operable with the USN, acquisition of a platform with this capability would seem to make sense.

The DPS states that the supporting task group for the SCTF would also have a requirement for a national or multinational command component capability. <sup>55</sup> This would therefore mean that at least some combatant vessels in the Canadian inventory would require enhanced command and control capacity. Certainly if all vessels were fitted this way, the Navy would have greater flexibility in meeting this requirement. However, when looking at the space limitations of the current Halifax Class, this would be a significant challenge. Also, though the Iroquois Class would have the size, these ships are nearing the end of their lives so it is therefore questionable whether this investment would be worthwhile. This class also has significant weight and stability issues making it difficult to fit new capabilities. Canada would have to look at enhancing the Halifax Class or perhaps expediting the delivery of the follow on class in order to address the requirement.

<sup>&</sup>lt;sup>54</sup> Ibid.

<sup>&</sup>lt;sup>55</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005, 30.

According to the DPS a precision fire support capability would rest with the task group in support of the amphibious force. 56 The suggested size of this task group would be up to four combatants with up to two combatants already deployed with the SCTF.<sup>57</sup> While precision fire support is not presently available in the Canadian Navy inventory this capability could be put into the existing classes, however, it would require significant engineering. There are two main types of precision fire from a maritime component; naval gunfire support using guided munitions and guided missiles (Tomahawk Land Attack Missiles for example). The Canadian requirement could be met by either of these capabilities. A final decision would be based on a number of criteria, however it would most likely be a balance of effects required against affordability. In any event delivering this would be a significant, costly and lengthy undertaking. However, if the DPS requirement is to be met Canada will have to pursue one of these options with naval gunfire support through the use of extended range guided munitions arguably being the cheaper of the two.<sup>58</sup>

Sustaining forces may be the most understated requirement in the DPS. First, when considering the total number of forces required to sustain operations, Leadmark suggests using a factor of four to determine the total number of hulls needed in the fleet.<sup>59</sup> The SCTF states a requirement for two initial combatants, surface or subsurface with a

<sup>&</sup>lt;sup>56</sup> Ibid, 14. <sup>57</sup> Ibid, 30.

<sup>&</sup>lt;sup>58</sup> Sandra I. Erwin, "Naval Guns: Can They Deliver 'Affordable' Precision Strike?", National Defence Magazine, March 2001; available from http://www.nationaldefensemagazine.org/issues/2001/Mar/Naval Guns.htm; Internet accessed on 11 April

<sup>&</sup>lt;sup>59</sup> Department of National Defence, Leadmark: The Navy's Strategy fro 2020, (Ottawa, Chief of the Maritime Staff, 2001).

follow on requirement of up to four combatants.<sup>60</sup> Using the Leadmark criteria, this would imply a fleet of up to twenty four combatants just to potentially meet the SCTF portion of the overall fleet requirement. Second, in order to support forces in theater, Canada will certainly need a replenishment capability along with the enhanced sealift or airlift previously mentioned. AORs enable a navy to extend its reach to all corners of the world. They are considered a force multiplier meaning that they are platforms, "with latent capabilities which, when applied in conjunction with other assets, has a multiplier effect on applied capability. For example, underway replenishment ships have a force multiplier effect on surface combatant capability."<sup>61</sup>

As a force multiplier, these vessels would be critical to the operational reach of any Canadian task group, not just SCTF. With fleets on each coast and with the new requirement for SCTF there could be a need for up to three AORs at sea at any given time in support of ongoing operations. Failure to provide for this would mean Canada would lose significant ability to perform its roles as dictated by the IPS and DPS. To keep three AORs operational at all times would likely require a total of no less than four ships, perhaps even five, when you consider that vessels would need refitting or maintenance which would have them out of service for a considerable period.

<sup>&</sup>lt;sup>60</sup> Department of National Defence, Canada's International Policy Statement, *A Role of Pride and Influence in the World, Defence*, 2005.

<sup>&</sup>lt;sup>61</sup> Commonwealth of Australia, "Australian Maritime Doctrine - RAN Doctrine 1 – 2000"; available from http://www.navy.gov.au/spc/amd/html/glossary2.html; Internet accessed 11 April 2006.

<sup>&</sup>lt;sup>62</sup> Department of National Defence, Canada's International Policy Statement, A Role of Pride and Influence in the World, Defence, 2005.

The Joint Support Ship (JSS) is meant as a replacement for Canada's aged Protecteur Class, with the intention of acquiring three to four vessels.<sup>63</sup> Canada should look at this requirement in light of the DPS and consider an option for at least one more vessel in order to address the new requirements.

### **CONCLUSION**

The DPS outlines new roles and requirements for a transformed Canadian Forces. The SCTF is an important part of the transformation and will provide the CF with an expeditionary capability which would allow it to quickly respond to existing and emerging threats worldwide. However, the DPS requirements are far more involved than just moving troops into theater. Based on the analysis of the DPS and the types of capabilities which could possibly address the requirements, Canada would need a force structure consisting of (arguably) as many as twenty four combatants with precision fire support and national and multinational command and control capability for joint and combined operations. In order to support the core SCTF requirement for deployment, Canada would need an amphibious capability, ideally along the same lines as that provided by the second of the ROTTERDAM Class, with associated LCU and helicopter assets. In order to sustain the SCTF as well as provide support to other Canadian task groups on both coasts and worldwide, Canada would require no less than four replenishments ships and would also require some lift capability to sustain forces in theater indefinitely in accordance with the DPS.

<sup>&</sup>lt;sup>63</sup> Department of National Defence, The Joint Support Ship Statement of Operational Requirement, Version 3.0, 18 May 05, available from <a href="http://www.forces.gc.ca/admmat/dgmepm/pmojss/docs/JSS\_SOR\_V3\_18-May-05.pdf">http://www.forces.gc.ca/admmat/dgmepm/pmojss/docs/JSS\_SOR\_V3\_18-May-05.pdf</a>; Internet accessed 11 April 2006.

The fleet at present can not provide this; therefore, Canada will require robust naval forces, with enhanced capabilities as well as significant new capabilities if the country is serious about providing the forces necessary to meet the IPS/DPS objectives. Canada can not afford to economize on the full requirement if it expects to effectively address these new roles.

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