CANADIAN FORCES COLLEGE / COLLÈGE DES FORCES CANADIENNES

AMSC 8 / CSEM 8

The need for an amphibious force for Canada – an operational requirement

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26 October 2005

ABSTRACT

The Canadian Government directed the leadership of the Canadian Forces in the Defence Policy Statement of 2005 to form three new joint operational combat formations, including a Standing Contingency Task Force. This paper will argue that in order to meet the expeditionary objectives stated by the government, the leadership of the Canadian Forces must stand up an amphibious force as part of the Standing Contingency Task Force in the transformed structure of the Canadian Forces. History has proven the value of amphibious forces throughout time. Many countries maintain an amphibious force as part of their expeditionary capability to provide flexibility and adaptability in all types of scenarios. Amphibious forces are by their joint nature effective, relevant and responsive and can be a key asset when intervening in failed or failing states. They also provide a valuable option when forces are required to provide humanitarian assistance or disaster relief. Other countries are also implementing this capability within their new structure and offer some sound concept that Canada should consider. The challenge to establish an amphibious element in the Canadian Forces is significant. However, options are available and the leadership needs to look at all alternatives to fulfill the mandate given by the government.

A self contained and sea based force is the best kind of fire extinguisher, because of its flexibility, reliability, logistic simplicity and relative economy.[1]

Sir Basil Liddell Hart

The Defence Policy Statement promulgated by the Canadian Government in April 2005 clearly states where the Canadian Forces will concentrate their attention on the international front: "The Canadian Forces will focus their expeditionary capabilities on operations in these states [failed and failing states]."[2] Neither NATO nor the Canadian military have an official definition for expeditionary operations, but the Royal Navy defines the terms as: "Military operations which can be initiated at short notice, consisting of forward deployed, or rapidly deployable, self sustaining forces tailored to achieve a clearly stated objective in a foreign country."[3] This definition is most suited to the Canadian context, considering both our countries are maritime nations, which have amongst their range of options the possibility to sail forces to achieve the objectives stated by our respective governments.

The direction for the leadership of the Canadian Forces to establish an expeditionary capability within our range of competencies is understandable. Canada is engaged, under the Prague Commitment to maintain rapidly deployable Forces.[4] Our government is also following in the footstep of countries such as Britain, France, Italy, the Netherlands, Spain, Singapore and Australia amongst others. British Defence Secretary Geoff Hoon

[1] Capt B.H. Lidell Hart, "The value of Amphibious Flexibility and Forces", *RUSI Journal*, 105, November 1960, page. 492.
[2] Canada's International Policy Statement, A Role of Pride and Influence in the World, DEFENCE, (further referred as DPS), page 3.
[3] British Maritime Doctrine, BR 1806, Second Edition, page 208.
[4] DPS, page 25. At the Prague summit in 2002, Allies (including Canada) agreed to an initiative, the Prague Capabilities Commitment (PCC), designed to enhance NATO's forces and close the capability gap between the US and European allies. More information can be found at: http://www.dfait-maeci.gc.ca/foreign_policy/nato/nato_policies-en.asp#prague

was quoted as saying: "Our need in the future is for flexible and adaptable armed forces properly supported to carry out the most likely expeditionary operations."[5] With this objective in sight, the Canadian Government directed the leadership of the Canadian Forces in the International Policy Statement of 2005 to form three new joint operational combat formations: the Special Operations Group, the Standing Contingency Task Force and Mission-Specific Task Forces.[6] All three of these units can be expeditionary in nature. The intent of this paper is to analyse the structure required to implement the Standing Contingency Task Force.

In the Canadian context, two options are available to deploy expeditionary forces abroad: deployment of the forces by air or by sea.

> Although strategic and tactical airlift is important for an expeditionary capability, it is appreciated that airlift alone cannot meet the many and varied tasks and operational conditions involved in the delivery, support and extraction of expeditionary forces. Many missions will be conducted in littoral areas readily accessible for delivery of the majority of the forces by sea. For others far removed from the littoral, long range heavy airlift to prepared and well defined airfields will be essential.[7]

In is not in the purview of this paper to discuss the requirement for airlift. Conversely, the statement above also advocates the requirement for delivery of expeditionary forces by sea. The first option to consider would be to transport these troops using normal sealift. Expeditionary operations will however require more than just sealift. Dedicated port facilities to deliver troops and equipment are not always accessible in many parts of

[5] John Hill, UK reshapes armed forces for expeditionary warfare, ISN, available at www.isn.ethz.ch/news/sw/details.cfm?ID=9311.
[6] DPS, page 13.
[7] An appreciation: meeting the needs of Joint Overseas Deployments of Canadian Forces in support of our Foreign Policies; John C. Eggenberger, Ralph E. Fisher, Richard H. Gimblett, Lewis MacKenzie; Royal Unoted Services of Vancouver Island; www.rusiviccda.org/opinion/opin-09b.html.

the world. More importantly, maritime expeditionary operations are more complex: "Developing an expeditionary capability involves much more than simply transporting a ground force to a troubled location. It also calls for provision of "*appropriate initial and long term tactical naval, air and logistic support…*(emphasized in text)" requiring appropriate command and control."[8] To fully meet the expeditionary objective, the Canadian Forces will need more than sealift.

British Forces, like all the other forces of the countries mentioned earlier, have embedded in their defence structure an amphibious element as part of their expeditionary forces. The advantages offered by amphibious forces are significant. One of the most important of these advantages is that amphibious forces provide a mobile national secure base of operations across many regions of the world. The United Nations refers to "(t)he ever more popular coasts" of the world, noting that in 2001 over half of the world's population lived within 200 kilometres of a coastline,[9] therefore reachable by an amphibious element. Canada does not presently have that option available. The ability to deploy forces from the sea would give the Canadian Government truly global reach. In order to meet this expeditionary obligation, the Canadian Forces will need to establish an amphibious capability, a key enabler at the operational level of the Defence Policy Statement.

To ensure commonality amongst readers, the NATO definition of amphibious operations will be used as the foundation for discussion of this paper: "a military operation launched

[8] Ibid
[9] UN Atlas of the Oceans at URL: http://www.oceansatlas.org//

from the sea by a naval and landing force embarked in ships or craft, with the principal purpose of projecting the landing force ashore tactically into an environment ranging from permissive to hostile."[10]

It is also important to understand what amphibious forces mean in the new world order. In today's realities, we rarely talk about war, but rather of "conflicts". In this context, amphibious forces are more likely to be employed in a range of operations that includes peace making, peace keeping, humanitarian assistance, disaster relief, non-combatant evacuation and even some domestic operations such as assistance in internal disaster relief in remote areas. These represent a broad range of tasking well suited to the flexibility of amphibious forces.

History

History offers many examples of the intrinsic value of amphibious forces. General McArthur used this capability with brilliance in the Korean War, landing at Inchon against all advice and playing a determining role in the outcome of the war. The British Forces also employed amphibious forces with great success during the Falklands War. During the Gulf War, an Amphibious Task Force was used as a decoy to fix the Iraqi Forces near the capital, allowing the coalition to proceed with their main force from the Saudi Arabian border against fewer forces. The Royal Marines were again involved in amphibious operations in 2003 during the Iraq War, conducting an assault on the Al Faw

[10] Allied Tactical Publication 8(B), Volume 1

Peninsula. All these examples occurred in a wartime environment, but there are also other examples of amphibious forces used for different purposes.

One such example occurred in 2000, where the British Government employed their Amphibious Forces in a "peace making" environment in Sierra Leone:

> A British naval ship, HMS Ocean, anchored near Freetown, the capital. Several hundred marines came ashore, reassuringly accompanied by guns, armoured cars and helicopters. Gunboat diplomacy jogged political talk. On November 10th, as the ship steamed near, rebels of the Revolutionary United Front signed a new ceasefire with the government.[11]

In the Canadian context, it is interesting to note that establishing an expeditionary force with elements akin to the force structure of the largest amphibious force in the world was considered as early as 1963:

> I believe that a role which is suited to a country of our size and having regard to financial burdens possible to be borne over a lengthy term, would be a tri-service force whose main objective was peace-keeping. I believe its organisation should be very much like that of the United States Marine Corps which is a mobile force complete with all its ancillaries and able to meet what are commonly called brushfire situations.[12]
>
> Lieutenant-General Guy Simonds.

More specific to amphibious operations, our recent history reveals numerous cases where the use of Canadian amphibious forces could have been contemplated if available as an option to the leadership of this country.

The unstable situation in Haiti over the recent years compelled the Canadian Forces to prepare contingency plans for a possible intervention on several occasions. A concept of

[11] Anonymous, The Economist, London, 18 November 2000, Vol 357, issue 8197, page 56.
[12] LGen Simonds' testimony, *Minutes of Proceedings and Evidence No14. Special Committee on Defence*, Mr Maurice Sauvé, Chairman, Ottawa, 17 October 1963, page 439.

operation for a non-combatant evacuation operation was formulated in 1988 and revised in 1994. A similar type of operation was devised for the extraction of UN land-based forces in the Former Republic of Yugoslavia in 1994-1995. Perhaps the closest Canada has ever come to deploying an amphibious capability was in Somalia in 1992. The operation was called Operation Deliverance and involved the deployment of HMCS PRESERVER (an Auxiliary Oiler Replenishment ship) and an enlarged Sea King detachment in support of Canadian land forces ashore in Somalia. Another similar example was the deployment of a Joint Task Force to East Timor under the auspices of Operation TOUCAN. The Joint Task Force was composed of a command element, HMCS PROTECTEUR and its embarked Sea King detachment, and an infantry rifle company group from the Royal 22ième Regiment. Amphibious forces could also have been deployed in a disaster relief role with the Disaster Assistance Relief Team to Sri Lanka in support of the relief effort following the Tsunami or to assist the United States in the efforts in New Orleans following Hurricane Katrina. These historical examples illustrate that the establishment of an amphibious capability for Canada is an option that should be re-visited.

The Defence Policy Statement

The Canadian Government promulgated a Defence Policy Statement in April 2005, which replaces the 1994 Defence White Paper as the policy guideline for the future of the Canadian Forces. The document brings to the forefront some key concepts that will guide the leadership of the Canadian Forces in moulding the Forces of the future:

> The Government also recognizes the importance of meeting threats to our security as far away from our borders as possible, wherever they may arise.(…) This is especially the case in failed and failing states. Canadians are proud of the role their military has played in protecting people who cannot protect themselves, in delivering humanitarian assistance to those in desperate need, and in rebuilding shattered communities and societies.[13]

The notion of failed and failing states is referred to frequently in the Defence Policy Statement and is one of the key reasons the Canadian Government is thinking expeditionary. The basic description of this type of states revolves around:"(T)he inability of governments in these countries, and others like them, to maintain political authority, to provide security and other basic services, and to protect essential human rights…" [14] The Standing Contingency Task Force is purposely built to deploy in these part of the worlds: "...the SCTF (Standing Contingency Task Force) is clearly designed to deal with the threat posed by failed and failing states, which are seen as planting "the seeds of threats to regional and global security", whether in the form of terrorists sanctuaries or refugee flows."[15] Although not all of these states are reachable by sea, recent history as demonstrated that an amphibious element could have been employed in situations such as Cambodia, Somalia, East Timor, Sierra Leone, Côte d'Ivoire and Haiti.

An amphibious capability would allow the Canadian Government to fulfill any of these strategic objectives: protecting people, delivering humanitarian assistance or providing security during the rebuilding phase. One of the key advantages with amphibious forces in this situation is that they are, for the most part, self-sufficient. Amphibious forces "are

[13] DPS, page 2.
[14] Ibid, page 5.
[15] The Defence Policy Statement and its vision of expeditionary capability, David S. McDonough, Commentary, a publication of the Royal Canadian Military Institute, May 2005, page 2.

not reliant on forward operating bases, permissive entry or host-nation support, making them highly responsive to changing circumstances."[16] As we have seen during the recent operations in Afghanistan with Camp Julien, forces can operate directly from a base established within the country of operation. However, this comes at a large cost both in resources and in the significant logistical challenge associated with building such a camp. Another advantage of amphibious forces is their mobility. Any change in the security situation in the country where Canadian troops are deployed which could require a prompt evacuation could effectively be managed considering that the transport required to conduct the evacuation is located just off shore. In the case of Camp Julien for example, an air evacuation would have been the only option, which presupposes the availability of significant airlift and a secure airfield. Mobility in these types of situations represents a significant element of flexibility.

Another fundamental component of the Defence Policy Statement is the notion of the three-block war:

> Our land forces could be engaged in combat operations against well armed militia forces in one city block, stabilisation operations in the next block, and humanitarian relief and reconstruction two blocks over.[17]

This is also valid for maritime forces and air forces. The key aspect of this premise is the ability of all elements to adapt to a constantly changing environment. By their composition, amphibious forces bring to the area more flexibility than a land component alone. By their inherent joint nature, the joint force commander has more tools available to meet changing circumstances. The availability of an air component to support

[16] Semaphore, Newsletter of the Sea Power Centre – Australia, Issue 8, August 2004.
[17] DPS, page 8.

operations ashore and of maritime forces to contribute firepower from sea for force protection if required will add a dimension that has not previously been available. The equipment required to operate in the three environments will also be readily available, allowing the forces ashore to manage most unforeseen situations. "…The Canadian Forces will seek to maintain the right mix of military capability to ensure that they can carry out all potential aspects of a three block war."[18] Due to the intrinsic jointness and flexibility of amphibious forces, they bring to the theatre a mix of military capability.

The Defence Policy Statement also brings to light the importance for the Canadian Forces to be "…more effective, relevant and responsive…"[19] Each one of those terms is subsequently defined individually. By effective, the government wants the Forces to better integrate maritime, land, air and special operations forces. "The overall goal will be "focused effects": the ability to deploy the right mix of forces to the right place, at the right time, producing the right result."[20] Amphibious operations can produce this type of effect. The amphibious force commander will have the flexibility to adjust the composition of his force depending on the type of mission he will be tasked with. He can decide to adjust the type of equipment to be embarked or even the type of land forces required to increase the probability of success of his mission. The commander can also conduct training en route, discussing possible eventualities with his embarked troop. Arriving in the theatre of operations by sea, he can also decide to wait for the most appropriate time before actually deploying his forces ashore. By controlling the force composition, the timing of the arrival of his troops ashore and being able to prepare his

[18] DPS, page 27
[19] ibid, page 11
[20] ibid, page 11

troops before disembarking in theatre, the commander of the forces deployed will enjoy substantial operational leverage to meet mission objectives.

By relevant, the Canadian Forces will need to "adapt their capabilities and force structure to deal, in particular, with threats that arise from the kind of instability that we have seen abroad, especially in failed states."[21] The implementation of an amphibious component directly addresses the adaptation in capability mentioned in the policy statement. This new option will provide the government more options when selecting the appropriate course of action based on their political or strategic objective. There will be more alternatives available to deal with developing situations in failed states, both from a military and humanitarian perspective. The Canadian Forces will not have to rely on rented air or sealift or request assistance from other forces to deploy to an area, nor on the kindness of a host nation. The amphibious forces will be self sufficient, arriving in theatre with the resources required to favourably influence the situation.

The final objective given by the Canadian Government in this general theme is the requirement to be responsive. "[The Forces] will arrive on scene faster, make a rapid transition to operations once there, move more effectively within theatre, and sustain deployments, in some cases, for extended periods."[22] Current capabilities allow the Canadian Forces to dispatch a reconnaissance team at short notice to most parts of the world, but the challenge lies in the time required to deploy the main effort in theatre. Following the Tsunami in South East Asia, the government approved the deployment of

[21] DPS, page 11.
[22] ibid, page 11.

the Disaster Assistance Response Team to Sri Lanka. The reconnaissance party dispatched to the region in relatively short order, which is expected considering they are on twelve hours notice to move. However, the arrival of the main effort was constrained by the time required to load up the equipment and transport it into theatre. Although not as fast as other options, an amphibious element meets all the other objectives of a responsive force. Interesting to note that one of the first images of a relief effort in the area was from a United States naval helicopter flying off the deck of an Expeditionary Strike Group located in the area.

In order to address these new objectives given to the Canadian Forces by the Canadian Government, the Forces will need to transform. Clearly stipulated in the Defence Policy Statement is the requirement to create a Standing Contingency Task Force, the foundation for the establishment of an amphibious capability:

> 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…[The task force will] 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.[23]

In his presentation given to military personnel at the National Defence Headquarters in early 2005 to explain his vision, the Chief of Defence Staff indicated that the Standing Contingency Task Force calls for a fully joint, highly mobile combatant formation at the battle group level, deployed by sea, maintained on high readiness for use in preventive and \ or responsive missions in failed or failing states, primarily in a short-duration

[23] DPS, page 13.

interim capacity pending arrival of follow-up forces. The Chief of Defence Staff also garnered the support of some of the academic community in endorsing his vision. Dr Richard Gimblett made the following statement during his appearance in front of the Standing Committee on National Security and Defence in February 2005:

> The Canadian Forces of the future should have ships capable of landing peacekeeping or peacemaking troops on a hostile shore, a Senate committee was told yesterday… [Dr. Gimblett] said his idea wouldn't involve troops storming ashore like something out of Saving Private Ryan. But he does envisage landing against some opposition…"The troops should be prepared to meet and project violence when they land," he said… Gimblett's idea would involve vessels big enough to carry a battalion of troops, their vehicles and supplies to last a few days.[24]

In describing the Standing Contingency Force in these terms, the Chief of Defence Staff confirmed that this high-readiness task force would require joint forces to be deployed by sea to respond rapidly to emerging crisis: ”We’re talking about taking army task forces, navy task group and air capability… and have it ready to deploy either in Canada or around the world as an entity that says ‘Canadian’ on it…”[25] The Standing Contingency Task Force will therefore conduct “a military operation launched from the sea by a naval and landing force embarked in ships or craft, with the principal purpose of projecting the landing force ashore tactically into an environment ranging from permissive to hostile”[26]; the definition of an amphibious operation.

[24] Canadian Press Item, “Military should have troop landing ships: analyst”, The Moncton Times and Transcript, 22 February 2005, page C1.
[25] Chris Wattie, “Top general wants huge warship for new task force: Major overhaul”, National Post, 14 February 2005, page A6.
[26] Allied Tactical Publication 8(B), Volume 1.

Canadian Amphibious Forces

The foundation of this Standing Contingency Task Force, the amphibious forces, will be joint, highly mobile and self sustained, allowing the Task Force to respond to a multitude of tasking from high-level conflict to disaster relief. It will enable the government to have an embarked force capable of manoeuvring at sea over 300 nautical miles a day, ready to execute any mission. In a period of conflict, the mobility of the Task Force will complicate the task of the opposing forces, even forcing them to adopt a course of action that will constrain their operational manoeuvrability, as seen during the Gulf War when five Iraqi divisions were tied down near the capital due to the mere presence of an amphibious landing unit off their coast.

The amphibious element of the Standing Contingency Task Force will allow Canada to base forces at sea, and in some capacity project power ashore when the need arises: "…The SCTF (Standing Contingency Task Force) should represent a relatively significant power projection capability for the Canadian Forces."[27] To ensure the success of the Standing Contingency Task Force, Canada, and the Canadian Forces in particular, must look at the type of forces they will need to stand up to meet the requirement of the Defence Policy Statement.

The Navy has always considered amphibious operations as part of its domain. In 1996, the Commander, Maritime Forces Atlantic, sponsored a study to "examine and explore

[27] The Defence Policy Statement and its vision of Expeditionary capability, David S. McDonough, Commentary, a publication of the Royal Canadian Military Institute, May 2005, page 2.

the emerging joint and littoral nature of post-Cold War operations."[28] The Army joined the study and the terms of reference were expanded to include all aspects related to Sea-Based Expeditionary Joint Operations (SBEJO). The study, published in 2004 identifies two primary areas in which a Sea-Based Expeditionary Joint Operation is required:

a. influence and intervention, and
b. military Operations other than War (MOOTW), i.e. non combatant evacuation, humanitarian assistance and disaster relief.

The influence and intervention theme relates not only to the military capability of conducting such a type of manoeuvre, but also to the timely and expeditious aspect of these types of operations. Other countries have identified similar types of requirements and have built capability type forces to address this requirement. [29]

The aim of the following analysis will be brief and limited to three countries, the United States, United Kingdom and Australia, as they offer a very broad view of the type of amphibious forces presently sailing the oceans of the world. The scope is to formulate general guidelines for the construct of Canadian amphibious forces.

The United States Marine Corps is an integrated joint force, capable of responding to a broad range of amphibious tasking. The largest force of this type in the world, it is capable of conducting a forced entry if the need arises. Using the Expeditionary Strike Group as their delivery platform centred on a Marine Expeditionary Brigade, a fourteen to seventeen thousand strong force, the capability is too rich for Canada. However, their

[28] Sea-Based Expeditionary Joint Operations Study (SBEJO), Main Report, Canadian Forces Maritime Warfare Centre, 11 June 2004.
[29] SBEJO, page 1.

doctrine is based on years of experience and could certainly be used in developing the Canadian concept, although it would have to be adapted to suit.

The United Kingdom employs a model where the Royal Navy is responsible for deploying the amphibious forces of the country, using Royal Navy and Royal Marine assets, all under Royal Navy control. Their force is highly integrated and efficient. Their recent operational experience in Sierra Leone and the Iraq War demonstrated this operational efficiency. From a doctrinal perspective, Royal Marines and the British Army make common use of the latter's doctrine, an element for our land forces to consider at a later stage. However, as with the US Marines, the British amphibious forces are more complex and significantly larger (over 2500 commandos) that the force Canada should envisage. Further, due to their unique composition, where the Royal Marines are integrated into the Royal Navy, this construct is not suitable for the Canadian approach.

Australia is a nation with many affinities to ours, including scale of financial, human resources and material constraints. "[Australia] is a thriving country closest in many respects to ours and developing a highly versatile expeditionary capability without a history for an established Marine force or the traditions for such forces like Britain and the United States."[30] They embarked last year on a road similar to Canada with respect to amphibious forces: "In 2004, national defence policy has changed significantly and is

[30] An appreciation: meeting the needs of Joint Overseas Deployments of Canadian Forces in support of our Foreign Policies; John C. Eggenberger, Ralph E. Fisher, Richard H. Gimblett, Lewis MacKenzie; Royal Unoted Services of Vancouver Island; www.rusiviccda.org/opinion/opin-09b.html

focused on the ability to project military power beyond Australia's shore." [31] This strategic change is easily understandable considering the geographic location of Australia, their involvement in Somalia, East Timor, Salomon Islands and their role in the Iraq War. Like Canada, they do not have an amphibious capability as part of their military expeditionary forces. Early indications are that they will develop a construct similar to the one Canada is investigating. "As the Army continues to define its Amphibious Battle Group and Combat Team concepts…"[32] the Army will be the Land Force element of their amphibious forces.

Australia is attempting to define the context where amphibious forces may be employed in terms that should resonate with the Canadian Forces leadership:

> …we [Australia] need some capability to manoeuvre forces and land them in an actual or potentially hostile environment, but only in areas not actively or heavily defended by an enemy force at the time. Seizing points of entry and egress for the evacuation of Australian citizens from regional trouble spots, or as a base for subsequent regional assistance or peacekeeping operations, are two obvious contingencies based on recent Australian Defence Force operational experience.[33]

This articulation of the role of the Australian amphibious forces is clear, adapted to today's world and in line with interventions in failed or failing states as stated in the Defence Policy Statement. It provides some foundation for building the infrastructure required and in procuring the equipment necessary to implement the strategic objective. By adapting this definition to the Canadian context, the Canadian Forces will be able to

[31] The Australian Defence Force and the continuing challenge of amphibious warfare, Lieutenant Commander Bob Moyse, RAN, Australian Army Journal, Volume II, Number 1, page 107.
[32] Semaphore, Newsletter of the Sea Power Centre – Australia, Issue 8, August 2004.
[33] Amphibious manoeuvre: On and off the water, Howard Anson, Defender, Spring 2004, page 31.

fulfill the requirements of the government and proceed with the implementation of the amphibious capability required for the Standing Contingency Task Force.

It is important to note that the Standing Contingency Task Force and its amphibious element can also be employed in other roles than in an intervention type of operation. One possible option in situations such as the recent Tsunami in Asia or for the relief effort following Hurricane Katrina that recently took place off the coast of New Orleans would be to load a pre-determined disaster relief package in the amphibious ship in anticipation of a possible deployment. Based on the scenario, the leadership of the Canadian Forces could even consider sailing the ship with the Disaster Assistance Response Team and their equipment embarked in the general direction of the disaster, awaiting final confirmation from the government that Canada will participate in the relief effort. A certain level of risk is associated with this course of action; however it would be another option for the government, option that is not presently available. The location of the deployment would certainly be a determining factor in deciding if the disaster team would be flown or would sail to the scene.

However, one of the most significant advantages of using the amphibious forces to deploy in humanitarian assistance or disaster relief operations is that the amphibious forces arrive on scene with a more robust structure than forces flown to the area. With the embarked Disaster Assistance Response Team, effective command, an element of the landing forces and appropriate landing capabilities, the commander on the scene can deploy swiftly, move into the theatre, maintain the link with authorities in Canada and,

more significantly sustain the deployment of the first element for an extended period if required. The Forces are more responsive to the situation with an amphibious force as opposed to a force flown directly to a disaster area. Understandably, forces deployed by airlift can expect very little support from the country where they operate due to the state of the infrastructure in the area. The air component of the amphibious force represents another asset: "In the week following the tsunami, Jan Egeland, the UN Emergency Relief Coordinator, asked member nations to contribute transport aircraft, trucks,… and sea-borne helicopters to be used outside the coasts to lessen the congestion of airfields ashore."[34] Self-sustainment in humanitarian assistance represents an undeniable advantage. The same basic principles apply to a conflict type situation, where the adaptability, deployed command and control and sustainment advantage of an amphibious force is key to the success of the operation.

Challenges

The implementation of a Canadian amphibious capability will not be without challenges. The key issues that will need to be resolved are in the area of capital acquisition, personnel required to fulfill the requirement, the training that will need to be instituted to establish the capability and finally the cost of standing up this capability, both from equipment and a personnel perspective. As has been pointed out:

> Effective "amphibiosity" requires appropriate shipping for sea control, air defence, sea transport, ship-to-shore fire support, across the beach landings, logistic resupply and medical support tasks. It also requires versatile and

[34] The Need for Canadian Strategic Lift, Ray Szeto and Barry Cooper, Calgary Policy Research Centre, the Fraser Institute; Studies in Defence and Foreign Policy, a Fraser Institute Occasional Paper, Number 5, August 2005, page 4.

> marinised rotary-wing aircraft, well-equipped troops, flexible communications and logistic systems, and sound doctrine and training.[35]

In order to meet these challenges, the Canadian Forces will need to define each of these issues and identify possible courses of action. This detailed analysis is necessary to have a better understanding of what is truly required to stand up this key operational capability.

As original guidance for the capital part of this equation, the Chief of Defence Staff expressed his views in February 2005 on the requirement for a ship to transport Canadian troops:

> Canada's top general says he needs a big amphibious expeditionary warship to realize his plans for a Canadian Task Force to take our navy, army and air force anywhere n the world for everything from humanitarian missions to all out wars. (…) General Hillier said (he?) may have to acquire a ship like the Royal Navy's HMS Albion, an 18,500 tonne, 176 metre long amphibious assault ship that can carry up to 700 Royal Marines and their equipment and armoured vehicles. Another possibility is the U.S. Navy's San Antonio class, an even larger troopship and helicopter carrier, but the General said those vessels might be out of range.[36]

The identification and procurement of a ship capable of fulfilling this mission will be one of the key challenges of the leadership of the Canadian Forces. There are a number of options available on the market at this stage. As mentioned by the Chief of Defence Staff, these options include the USS San Antonio Class and the UK Albion Class, but there is also the Netherlands' Rotterdam Class or the French Mistral Class. The possibility of transforming a commercial Roll on – Roll off (Ro/Ro) vessel to fulfill the basic requirement of an amphibious platform should also be investigated. An important

[35] Amphibious manoeuvre: On and off the water, Howard Anson, Defender, Spring 2004, page 32.
[36] Chris Wattie, "Top general wants huge warship for new task force: Major overhaul", National Post, 14 February 2005, p.A6.

international ship builder is promoting the concept, which offers some significant advantages in terms of costs and availability.[37] The expertise and the technology to transform a commercial ship to meet Canadian specific requirements are accessible. "The Royal Navy's experience in the 1982 Falklands War proved that merchant ships could be adapted quickly to meet a host of military tasks."[38] Each option must be analysed and weighted against the aim of implementing an amphibious capability that meets Canadian requirements by 2009, the timeline given by the Chief of Defence Staff for implementation of the initial operational capability.[39]

A series of factors will influence the type of vessel the navy will need to transport the land forces element of the amphibious force and their associated equipment. Amongst the key ones are the availability of the vessel, the number of personnel to be transported as part of the Landing Force, the platform capability to carry an air component element, which will be needed to support the landing of the troops and to sustain these troops once ashore, and naturally the cost of the vessel.

Based on the statement from the Chief of Defence Staff in the National Post, the envisaged size of the Landing Force should be around 700. Some analysis from an independent source considers this number to be low: "It will be necessary to draw the minimum force from a rapid reaction force of brigade size. The Brigade would consist of three battle groups of 800 to 1000 men each. … The initial priority will be one battle

[37] Military Seal Lift, "Amphion", Canadian Naval Review, Volume 1, Number 2 (Summer 2005) page 32.
[38] Ibid, page 32.
[39] CDS Transformation SITREP 02/05 - September 2005.

group by sea…"[40] The examples of ships used by the Chief of Defence Staff in the National Post article fail to meet the objectives with regard to number of troops the capability of the vessel with regard to carry an efficient air component. The San Antonio Class can carry approximately 700 troops, but does not have room for more than two helicopters. On the other hand the Albion can carry only 305 landing troop and has room for only three helicopters. Two other possibilities exist with similar characteristics. One is the French Mistral class, which can carry approximately 450 troops and up to ten helicopters and Netherlands' Rotterdam class that can ferry a landing troop of approximately 600 with up to six helicopters. Of course, the number of platform required to meet the objective can be increased, but this will come at a higher price.

Indeed, the cost associated with each option is significant. As an example, the price for an Albion Class ship is approximately $640 million, while a Mistral ship sells for $500 million and a Rotterdam, which is using commercial standards, is estimated at $250 million.[41] The cost of acquiring such a ship will be significant considering the generally restrictive fiscal environment of the Department of National Defence. In order to implement the capability, the Canadian Forces will need to investigate all available options, including the leasing of one of the ships mentioned above or a civilian ship that could be modified to meet Canadian requirements. The advantages of selecting a commercial vessel adapted to the amphibious role could be important. First, the timeline

[40] An appreciation: meeting the needs of Joint Overseas Deployments of Canadian Forces in support of our Foreign Policies; John C. Eggenberger, Ralph E. Fisher, Richard H. Gimblett, Lewis MacKenzie; Royal Unoted Services of Vancouver Island; www.rusiviccda.org/opinion/opin-09b.html

[41] Price estimate are based on a table build by the staff at the Directorate of Maritime Strategy as of 4 October 2005 and from Amphibious manoeuvre: On and off the water, Howard Anson, Defender, Spring 2004, page 32.

required could be significantly less than a military ship. The other advantage is the overall cost, where an option to lease could be negotiated, greatly reducing the initial expenditure in capital funds.

The other expense associated with this new capability is related to the personnel required to implement the capability. The first element to consider is that Canada does not have any personnel designated or trained to perform the task of the landing force of an amphibious task force. Admiral Jackie Fisher, Royal Navy, has been quoted as saying: "The army is a projectile to be fired by the navy."[42] A significant challenge lies ahead of the army for them to formulate the doctrine, procedures and tactics required to perform this task, and to train troops to execute it. Although many allies are prepared to assist Canada in dealing with the first part, the training requirement will be significant considering the departure point. The number of troops will also be a key factor. The most logical option would be to look at a Battle Group size force, as mentioned earlier, composed of 700 to 1000 troops of all ranks, a force capable of influencing events ashore. However, this number is greatly affected by the amphibious platform selected. To be operationally efficient, the Landing Force needs to be sufficient in number, well trained and with the proper infrastructure to support them. Meeting these demands represent a significant challenge for the army.[43]

[42] Gooch, John, Maritime Command: Mahan and Corbett, Seapower and Strategy, 1989, page 41.
[43] For a more complete discussion on the composition of the Landing Force, see Tac Amphib Occasional Commentary #5, *Thoughts on the Land Component, The Army Landing Force and SCTF*, prepared by CFMWC Tac Amphib (Maj Bradford), 18 June 2005.

The same type of demands will be placed on the navy personnel field. "The new specialist amphibious ships and their landing craft will … need to extend and maintain skills in multiple-aircraft flight deck operations while conducting landing craft well dock operations, in all weathers and conditions, and in all threat environments."[44] The creation of new spheres of expertise required to fulfill the tasks identified above will require the navy to change their infrastructure. The introduction of a new class of ship will also bring along with it the requirement to train personnel to operate and maintain these ships, as well as the creation of a shore infrastructure to keep those ships afloat. As is the case for the army, the potential to acquire the required expertise through the empirical knowledge of our allies is certainly an advantage. However, with the present force structure, the navy will be challenged to meet the growth in personnel associated with the introduction of an amphibious capability.

The introduction of an amphibious force within the Canadian Forces represents an undeniable challenge for all. The next step in the process is to look at the affordability of this capability. As discussed in the previous paragraphs, a series of new requirements will need to be defined to clearly understand the implication of the implementation of an amphibious force. From a new ship to personnel, to the tools required by the landing force, without neglecting the need for a new utility helicopter and a platform to land troops ashore, they all represent issues to be investigated.

From the brief analysis conducted above, an estimation of the resources an amphibious force would require to deploy in an area for a specific mission can be performed. The

[44] Semaphore, Newsletter of the Sea Power Centre – Australia, Issue 8, August 2004.

first element of the force would be a landing ship with the associated tools to land the army element (helicopters or landing crafts) and an army component of approximately 700 troops. The landing ship cannot proceed to the area independently. It will require force protection and some form of logistical support. For force protection during the transit to the area as well as once in theatre, the current Canadian Task Group composed of an Algonquin Class destroyer and one or two Halifax Class frigates, with the addition of a capacity to provide fire support to troops deployed ashore if required, could fulfill that role. A submarine deployed with the Task Group could also provide an option to send forces ashore prior to the arrival of the main force, assist with the initial gathering of intelligence in the area of operations and provide some support to the force protection element of the ships at sea. For logistical support, the Joint Support Ship will provide the main part of sustainment required by the force. It can carry some of the army equipment (approximately one third of a battle group requirement) and includes a command and control facility as well as some medical facilities, room for two helicopters and limited troops[45]. Not included in the discussion is the requirement to purchase a helicopter capable of operating in his type of environment and the air support required during the deployment and once in the theatre of operation for force protection if the threat warrants it.

These investments represent a significant cost in resources that are not presently available within the Department of National Defence funding envelope. Options are however

[45] The Need for Canadian Strategic Lift, Ray Szeto and Barry Cooper, Calgary Policy Research Centre, the Fraser Institute; Studies in Defence and Foreign Policy, a Fraser Institute Occasional Paper, Number 5, August 2005, page 12.

available, and the Canadian Forces need to explore both internal and external avenues to satisfy this requirement.

The Canadian Government expressed clearly in the Defence Policy Statement the requirement to influence events abroad: "Our new defence policy will give the Canadian Forces the guidance they need to help Canada convey its distinct values and particular approach to conflict resolution around the world." [46] The Minister of National Defence also states: "The Government has made a solid financial commitment to the Canadian Forces that is unparalleled in the past two decades."[47] Implementing an amphibious capability for the Canadian Forces is a long-term project, and one that will be costly. Although plans are afoot to move quickly with the implementation of amphibious doctrine and training, the permanent force structure, and more importantly the identification and purchase of a platform to transport the Standing Contingency Task Force will take some time. The lease of a ship in the interim to experiment with the concept and train our forces would be a judicious choice. It would also allow the Canadian Forces some flexibility with regard to procurement options of a more permanent solution. Finally, it would also allow the leadership of the Canadian Forces some time to appraise the government on the costs associated with implementing an expeditionary capability, including an amphibious element within the Forces. The government will need to allocate to the Canadian Forces the necessary resources to implement their expeditionary vision.

[46] DPS, Message from the Minister, The Honourable Bill Graham, page 1.
[47] Ibid.

Following the promulgation of the Defence Policy Statement, the Canadian Forces have also embarked in a review of the current force composition. The present force's structure is not based upon the establishment of a Standing Contingency Task Force and the amphibious component of the Task Force. Other priorities promulgated in the Defence Policy Statement will force the leadership of the Canadian Forces to review additional basic assumptions. The Chief of Defence Staff in his recent SITREP to the Canadian Forces on transformation measures indicated that present capabilities would be reviewed with the objective of identifying those capabilities that no longer contribute to the current operational model. These capabilities would no longer be supported.[48] In doing so, the leadership will be sending two clear messages. One is to the government, indicating that the Canadian Forces are prepared to take the necessary measures to implement the new Defence Policy. The other message is aimed at the internal organisation, setting clear guidelines on the future composition of the Forces. This will reaffirm the importance of the Standing Contingency Task Force and the essential amphibious capability in the future structure.

Conclusion

An amphibious force is a flexible and versatile instrument of maritime power, which allows a nation to project, or threatens to project, power ashore, whenever and wherever politically appropriate. Its cost effectiveness in terms of flexibility and utility is well

[48] CDS Transformation SITREP 02/05- September 2005.

proven.[49] In early 1963 Lieutenant General Simonds suggested that Canada considered a force structure similar to the United States Marine Corps, the world's largest amphibious force when he appeared in front of the Special Committee on Defence. The world today is witnessing a renewed interest in any form of amphibious capability. In Canada alone, although our capability does not currently include an amphibious force, we can deduce that if an amphibious capability were part of our structure, it would have been seriously considered and likely utilized on several occasions.

The mandate given by the Canadian Government to the leadership of the Canadian Forces is clear: "…they (the Canadian Forces) must be effective, relevant and responsive, with the ability to address threats both at home and overseas – whether in the remote regions of our North or in failed states half a world away."[50] The implementation of an expeditious capability, including an amphibious element, will ensure that the Forces can meet this requirement.

Canada cannot afford to stand-up a force structure comparable to the US Marine Corps or the British Amphibious Forces. Our national objectives are significantly different and the role envisaged for the Canadian Forces amphibious element will not encompass some of the missions both amphibious forces have conducted in the past or are capable of conducting today. However, Canada is not the only country trying to define their requirement. Australia is also trying to identify the concept of operations and the

[49] The Future of Amphibious Warfare, Colonel RS Tailyour, RM, *Based on a presentation to the institute on 30 October 1990 by Colonel Tailyour, Director Royal Marines Operations*, RUSI Journal Spring 1991, Volume 136.
[50] DPS, page 32.

structure that would best meet their aim. Several of the ideas expressed by participants in this forum offer some sound assumptions that the Canadian Forces should consider. Although the Australian context is different than Canada, it will certainly give Canadian Forces planner a valuable point of departure as we weigh the various options available.

The infrastructure selected to implement this new force structure will be expensive initially, both in direct cost such as capital acquisition and personnel, and also in the level of skills required to achieve an operational capability. "Maritime power allows the projection of forces to be carried out at minimum risk, reducing financial and diplomatic cost and concentrating and easing the protection problem."[51] Although the costs at the initial stage are important, the benefits in the longer term are also significant. The Canadian Government will need to maintain its financial commitment to allow the leadership of the Canadian Forces to implement their direction. In the same vein, the Canadian Forces needs to review the present structure to identify savings that can be transfer to the new forces required. Internal sacrifices are required, but a solution is achievable.

"The Australian Defence Force must shift from a 'lift and lodge' philosophy, where army units are deposited on a foreign shore for autonomous land operations, to a true manoeuvre warfare philosophy, using joint forces to exert influence in an uncertain littoral security environment."[52] The Canadian Government directed that Canada also adopt this expeditionary approach and provide an option for them to use Canadian Forces

[51] British Maritime Doctrine, BR 1806, Second Edition, page 170.
[52] Sea Power Centre – Australia, 'The New Maritime Security Environment', Semaphore, Issue 13, November 2003.

to influence and intervene in situations abroad. The amphibious component of the Standing Contingency Task Force is a key operational enabler necessary to implement this strategic direction stipulated in the 2005 Defence Policy Statement.

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