

**The Future Rapid Response Force
(A Joint Formation That Can Get a Job Done)**

by

Gary H. Rice



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by Gary H. Rice

Colonel Gary H. Rice, Ret'd enlisted as a private soldier in the Canadian Army Active Force, Royal Canadian Army Medical Corps (R.C.A.M.C.) in 1953. Trained and qualified as a general military training Instructor, medical assistant, non commissioned officer and warrant officer, his first duty assignment was the RCAMC School, Camp Borden, Ontario, from 1954 to 1957. Succeeding duties included instructional assignments with Western Command Instructional Staff for the Militia in Calgary, Alberta; medical and operational staff work at Headquarters 1st Canadian Infantry Division, Camp Petawawa, Ontario and Camp Gagetown, New Brunswick; regimental, medical, operational and training duties with 1st Canadian Field Ambulance, 4th Canadian Infantry Brigade in Germany during the 1961 Berlin Crisis and 1962 Cuban Missile Crisis; command assignments with 3rd Experimental Brigade Service Battalion, Canadian Forces Base Gagetown, New Brunswick, Allied Command Europe (ACE) Mobile Force (Land), and the Canadian Air Sea Transportable Combat Group (CAST).

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This paper represents the opinions of the author and should not be taken to represent the views of GEHR Publishing,

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The Future Rapid Response Force (A Joint Formation That Can Get a Job Done)

INTRODUCTION

As we enter the eighth year since the tragic and epochal events of September 11, 2001, the needs of our armed forces remain unmet. In fact their ongoing and unfinished transition from Cold War to 21st Century configuration will most certainly require greater allocations of national resources. In this respect our national leadership in the Prime Minister's office and in Parliament ought recognize that in the future whenever they call upon our men and women in uniform to defend the nation's interests, at the operational or strategic levels of warfare, they will fight jointly.

The internationally embraced new strategic paradigm of 'jointness' involves sailors, soldiers, airmen, and special operations forces working together to do the nation's business at home and abroad. However, recognition of this imperative does not diminish the need for Canada to maintain a combat capable navy, army, and air force that is fully competent at the tactical level.

Nevertheless, real joint vision that drives future programmatic requirements remains somewhat new and may signal to traditionalists a potential major erosion of the customary prerogatives of the chiefs of the maritime, land and air staff to train, organize, and equip. To day, though, the fight - or prevention of the fight - is more of a joint effort than ever. Translated, "jointness" means getting our navy, army and air force to transcend orthodox rivalries and master the art of fighting together.

This paper reaffirms the political and military utility of robust, "ready-to-go," joint rapid reaction expeditionary forces, calls for their accelerated approval by government, and sketches a possible future force framework.

It envisages these forces' approval by government and the incremental development and realization by the year 2020 of a capability globally to deploy a politically purposeful and militarily capable sea, land and air, expeditionary force that can take on diplomatic, humanitarian, peacekeeping, and full spectrum¹ war fighting missions.

The envisioned joint force would be a balanced combat formation comprising maritime forces' surface and sub surface combatants and new fleet replenishment and amphibious ships; an airborne and seaborne land force; air force short-take-off-vertical-landing (STOVL) combat aircraft, tactical and strategic air-lifters and attack and transport helicopters; and as required, special operations forces elements and representatives of federal government departments and agencies.

GETTING IT RIGHT FROM THE 'GET GO'

On July 16, 2006, Canadians discovered how inadequately equipped and unsuitably organized their armed forces were, and how ill prepared their government was, to respond to the plight of some 30,000 of their fellow citizens who found themselves suddenly trapped in a combat zone in Lebanon and caught up in the cross-border fighting that had erupted between Israel and Hezbollah, and speedily to remove them to safety.

This was not so, however, for France, Italy, the United Kingdom, United States and several other nations who also found their countrymen facing the same dire situation. The very next day, on July 17, they began the systematic transfer of their citizens by air and sea from Beirut to havens on the island of Cyprus and in Turkey.

Two decisive factors favourably influenced the quick reaction of these states. The first was the proximity to the scene of the requisite enabling national air and maritime forces; second, was the existence within these resources of previously organized, practised, and superbly equipped military units including large capacity aircraft, helicopters, amphibious ships, and other smaller types of craft.

Stymied by its remoteness from the scene and the want of a standing response force with the military air and sea transport capacity to move many people to safety, Canada's government was compelled to meet the challenge of conducting the largest evacuation of its citizenry in its history by seeking, and gaining, the assistance of some of its allies in the region, calling on the Canadian Forces to assemble and deploy an ad hoc 100-person military assistance team (Joint Task Force Lebanon), and hurriedly chartering commercial aircraft and private passenger ships.

Four days after the crisis began, on July 20, the Blue Dawn, first of our government's seven hired ships, docked in Cyprus and disembarked 261 very weary but thankful Canadians. Two weeks after the emergency sprang up, on July 29, 2006, the last of the 14,000 citizens whom they ultimately moved to safety boarded Ottawa's chartered vessels and left behind them the terror still reigning in Beirut.

Reporting on Canada's response to the Lebanon crisis one year later the Senate Standing Committee on Foreign Affairs established that ". . . the logistical and resource challenges associated with conducting an evacuation effort of any number of Canadians from an international crisis zone are significant, whether that crisis is the product of a natural disaster such as the South Asia tsunami in December 2004, the result of a terrorist attack in another country, or the result of a deteriorating security situation in Lebanon in July-August 2006."

By late 2008, two years after the last of our citizens had been removed from Lebanon, and more than one year after the Senate Committee released its unfavourable finding, our nation's military had purchased four CC-177 Globe master III heavy lift aircraft. These acquisitions marginally increased the government's ability to carry out future noncombatant evacuation (NEO) missions, and respond to other humanitarian

crises. Nevertheless, still lacking a standing reaction force and other essential transportation platforms, such as medium lift helicopters and amphibious ships, it was evident that by itself the four new long range aircraft would not suffice to preclude a repeat of the nation's sluggish response in Lebanon.

Further aggravating this continuing precarious and nationally embarrassing situation is the unintended consequence of a ruling issued by the Chief of Defence Staff to the Commander of Canadian Forces Expeditionary Command's (CEFCOM) in April 2007. The directive ordered the stand down and curtailment of development of CEFCOM's Standing Contingency Task Force (SCTF), including its maritime amphibious unit.²

The upshot is that although Canada today now has some of the strategic air lifters it would need to meet a future contingency similar to the one in Lebanon, it has little else of what it would require in its armoury. Having set aside previous plans to field a SCTF as the nation's key enabling rapid response organization, and abandoning its intention to give this force essential materiel such as rotary wing air lift resources and an amphibious ship, Canada's political leadership ill-advisedly limited the nation's future response options.



3 R22eR soldiers come ashore
in East Timor - 1999

Measured against the sheer size of their accomplishments, and the orderliness and rapidity of the responses of the several other major nations involved, Canada's preparedness and speed of reaction to the human emergency brought on by the Israeli-Hezbollah clash in Lebanon that ultimately led to the emergency air and sea evacuation of many thousands of its citizens, as nationally gratifying as it was in the end, must be objectively graded as only second rate. Our rescue mission was impaired from its very outset by armed forces that were neither optimally structured nor adequately equipped and trained. This should not have been the case, especially when we knew that there had been at least fourteen occasions since 1949 when Canada had to plan evacuation operations involving the use of our military.³⁻⁴

The armed forces of the nations that were the most successful during the Lebanon crisis consisted of joint forces primarily organized, equipped, and trained for war fighting. However, these units also possessed the necessary organizational flexibility to allow them to be readily employed on NEO

and other national diplomatic and soft power missions. In addition, prudent and

foresightful national planning had also ensured that the units on the scene had transportation platforms and other equipment that might also be usefully employed in other than combat roles, and were staffed by personnel with the necessary prior training.

Canada's foreign policy, like that of most other western democracies, includes goals related to the timely relief of human suffering in the wake of domestic and foreign natural disasters such as earthquakes, floods, hurricanes, and tsunamis. To accomplish their aims the governments of other nations have taken great care to ensure that their armed forces are structured, manned and equipped in a way that allows them to pursue missions supporting them. Unfortunately, Canada's current government has yet to give any positive sign that it too intends to fully underwrite its foreign policy goals with armed forces that have a matching capability.

OUR EXPEDITIONARY HERITAGE

Canada's armed forces are no rank amateurs when it comes to the conduct of what we today call expeditionary operations - operations mounted overseas, often in austere environments, and employing various combinations of sea, land and air units. Excepting the 1885 North West Campaign, all of Canada's post Confederation war fighting operations have by definition been in reality expeditionary ones.

Among the more significant examples of Canadian expeditionary operations conducted since the 2nd (Special Service) Battalion sailed for Cape Town to fight in the South African War in October 1899 are the Great War's courageous Canadian Expeditionary Force in France and Belgium; the forlorn 1918-1919 expedition to Northern Russia; our foredoomed brigade overrun and forced into captivity in Hong Kong in 1941, and the almost forgotten Special Force that fought from 1950 to 1953 in Korea.

The other forms of expeditionary operations in which all-Canadian forces have also had significant experience are amphibious assaults, attacks mounted from the sea against a hostile shore. These include the failed Dieppe Raid of 1942; the successful invasion of Sicily in 1943; and our participation in the largest amphibious attack ever undertaken in the history of warfare - Operation Overlord - the historic assault landing on Juno Beach during the Allied invasion of Normandy in June 1944.

Just as significant as our past amphibious actions are the expeditionary airborne assault operations conducted in 1944 and 1945 by the 1st Canadian Parachute Battalion in Normandy and across the River Rhine, and by the "North Americans," the renowned, combined Canada-United States First Special Service Force ('The Devil's Brigade') which went ashore in 1943 during the Aleutian Campaign, and again at Anzio, Italy in May 1944, and in September 1944 on France's Mediterranean littoral.

More recently, in 1999, Canada engaged in Operation Toucan and deployed a joint expeditionary force to East Timor as part of the Australian-led International Force East Timor (INTERFET) A joint and combined operation it comprised infantrymen from the Royal 22nd Regiment, the supply ship HMCS Protecteur, and an air detachment of two C-130 Hercules aircraft.

Since 2002, we have seen the routine cyclical rotation by air of our 2,500 strong Afghanistan contingent that is fighting with the United Nations sanctioned North Atlantic Treaty Organization's International Security Assistance Force.

GLOBAL REVIVAL OF AMPHIBIOUS CAPABILITY

During the Cold War the emphasis on amphibious operations declined as many maritime nations focussed on antisubmarine warfare. They built ships to detect and eliminate underwater threats such as mines and sub-surface vessels. Nevertheless, since the Iron Curtain fell, key members of the North Atlantic Treaty Organization have been refocusing on power projection in their maritime assets. In Europe the Spanish and Italians are each building LHD-class amphibious assault vessels; so too in the Asia-Pacific region are the Japanese, South Koreans and the Australians.⁵

Existing and planned amphibious ships can carry hundreds, even thousands of persons and troops, and a wide range of aircraft types, combat vehicles, heavy engineering equipment, and landing craft. These versatile craft can quickly deliver military personnel and supplies ashore by air and sea to provide compassionate assistance and relief. In many respects, an amphibious ship is a small city that provides a range of services. Among other things, it makes and delivers fresh water, produces and distributes electrical power, maintains a 24-hour-per-day restaurant, operates a television and radio station, provides hospital and dental care, delivers mail, and runs a barbershop. These floating cities are crewed by technologically sophisticated men and women who possess a variety of maritime, engineering, aeronautic, electrical, medical, logistical, and war fighting talents. The ship's capabilities are designed to support the crew, but they may also employ them to provide relief in all types of non combat crises, as the 2006 emergency in Lebanon illustrated. These sizeable abilities are why so many world decision makers choose the amphibious ship as their preferred tool in times of crisis.

Recognizing our government's and our military's shortcomings during the Lebanon mission, Canada's political leadership should have been quick to grasp what so many other nations involved readily acknowledged - joint, rapid reaction expeditionary forces including amphibious ships have a key role to play in our nation's defence that cannot be accomplished by lessor organizations or smaller naval craft. The other countries that are now engaged in constructing and putting amphibious ships to sea have seen what the future holds and are currently pushing ahead with plans to provide their forces with more long range, large capacity aircraft, medium lift helicopters, improved amphibious craft,⁶ and a variety of highly capable sea-shore connectors.



July 10 2008. The "Red Devils" of A Co., 1st Battalion Princess Patricia's Canadian Light Infantry, board the amphibious ship USS Bonhomme Richard at Pearl Harbor to participate in the Rim of the Pacific (RIMPAC) maritime exercise. US Navy photo by Mass Communication Specialist First Class Michael Moriatis (Released)

According to Robert Work, a naval analyst with the United States Center for Strategic and Budgetary Assessments, "There's a renaissance in amphibious warfare capability going on worldwide." Captain John Funk, the executive officer of the USS Bonhomme Richard, *pictured above*, said: "They [small ships] don't have the room on board to be able to bring that hospital, or dental capability, or logistics support that we can provide from the big deck amphib. Future multinational amphibious operations will include not only disaster relief and humanitarian assistance missions, but also NEO similar to the crisis that arose in Lebanon, when Hezbollah attacked Israel. French and US amphibious ships helped in evacuating civilians from the area." ⁷⁻⁸

Amphibious ships have long been tied to images of soldiers fighting their way ashore in World War II. That legacy is undeniable, but the employment of such vessels and troops in today's conflicts has evolved. Captain Rodney Clark, Commodore of the US Navy's Amphibious Squadron 7 put it this way: "A lot of countries no longer see the amphibious ships as purely an over-the-beach assault, World War II, old-style type of force. They see the USS Iwo Jima, an amphibious assault ship of the landing helicopter dock, or LHD, class pulling up into New Orleans after Hurricane Katrina and becoming headquarters for relief operations."

Captain Neil Parrott, commanding officer of the USS Bonhomme Richard, which in July of this year embarked soldiers of the 1st Battalion Princess Patricia's Canadian Light Infantry for participation in the 2008 Rim of the Pacific (RIMPAC) maritime exercise, was equally explicit; he observed: "Yes, we go to war. We can do that. But our real money is in the prevention of war. The ability to go out in a global environment and show that we're here to help as needed — whether it's providing diapers for kids, or providing bullets for the Marines — it's all part of our mission."

THE AUSSIE ANSWER

Australia's argument in support of its decision to get new amphibious ships is instructive.⁹ Much of it is relevant to Canada's situation today. "Amphibious ships capitalize on all of the attributes of maritime forces. Without the need to negotiate basing and overflight rights with other countries, warships are often the only choice available to government to respond to a developing situation and the LHDs will provide unique response options. They will carry a substantial quantity of equipment, stores and personnel and will be fully operational as they enter an area of operations. They do not need any external support or approval to deploy and can physically operate wherever there is enough water to float.



Artist's Concept Drawing of Australia's Canberra Class LHD

"The LHDs will be flexible and able to undertake a large range of tasks while exploiting the attributes of Reach, Access, Flexibility, Poise and Persistence. One key role of maritime forces is power projection. In high-end combat operations, they usually visualise power projection as ordnance fired against land targets - naval gunfire support, land attack missiles and the like. Land forces projected from ships have the advantage of being able to deploy, operate, and be extracted and redeployed once their job is done.

“The ability to base and deploy land forces from the sea brings considerable advantages to operations. For example, sea basing reduces the logistics, command and administrative footprint ashore, and consequently the risk of attack against personnel and their equipment and the need for additional force protection personnel and equipment.

“At the other end of the operational spectrum - such as when providing disaster relief - sea basing means those deployed do not become a burden on an already damaged and fragile infrastructure. A good example of this was the deployment of a naval task group, led by the aircraft carrier HMAS Melbourne, to Darwin after Cyclone Tracy in 1974. The sailors deployed ashore provided critical assistance to the city, without drawing on Darwin's very limited relief supplies. The sailors' own needs, such as food and accommodation, were provided by their ships. For similar reasons, many nations sent predominantly maritime forces to help countries in South East Asia after the Boxing Day 2004 tsunami. Maritime forces are often the only option to reach affected areas when land based infrastructure is destroyed.

“While the LPDs will be useful across the full spectrum of operations, their utility derives from the capabilities necessary to conduct combat related amphibious operations. An ability to move forces by sea means that any adversary defending against a possible amphibious operation must spread their resources across their entire coast or concentrate on certain areas, leaving others undefended. The initiative is thus with the maritime-based force that can easily manoeuvre to where the opposition is least.”

UTILITY OF EXPEDITIONARY FORCES

Canada today is far different from the democratic nation that cheered so loudly when the Cold War ended with the fall of the Iron Curtain in 1989. In 2009 Canada remains an aspiring, wealthy, and talented middle power whose 33-million citizens repeatedly tell pollsters that they want their government to play a more significant and meaningful role in the world. The one hundred and seven Canadian soldiers, one diplomat and two aid workers killed since the Canadian military deployed to Afghanistan in early 2002 bear witness to this belief.

When a decision must be taken by government to commit troops and other citizens abroad in pursuit of Canada's interests, or to go to the aid of Canadians in their own back yards, our values as a sovereign nation are seen to best be advanced when we are not obliged to incur unnecessary delays while we assemble and prepare the required contingent and gather supporting resources. To obviate such occurrences government should, perforce, have at hand a properly equipped and trained high readiness standing force that can carry out the nation's business at home and abroad through the application of soft and hard power. As recent events throughout the world have demonstrated, the nature of conflict is changing. Canada is no longer an unassailable sanctuary. Moreover, with our defence budget coming under increasing scrutiny, policymakers at all levels are under pressure to fully exploit all available military resources and minimize any prospect that they will be idled or under utilized.

The military utility of a joint seaborne and airborne expeditionary force is obvious. Employing the appropriate sea and air platform, commanders can quickly move ground troops, air, and special operations forces and their equipment, including helicopters, STOVL aircraft, armoured vehicles, and their supporting resources, to distant areas of operations and scenes of natural disasters. An amphibious force can advantageously deploy in international waters and remain on assignment for lengthy periods without having to obtain prior airspace and port clearances, or unnecessarily engage in negotiations with other nations. With embarked STOVL aircraft, helicopters, and unmanned aerial vehicles; large open and covered spaces, significant personnel resources, and their massive electrical-power generation capabilities, amphibious ships represent a substantial and highly visible national military resource that may be deployed in non military ways. In the future, it is expected that strategic air lifters and amphibious ships, which are among a nation's most costly military platforms, will continue to be very much in demand and frequently called upon by all governments to help shoulder a wide variety of non combat assignments.

For more than four decades the need for Canada's military to be able to quickly marshal and move its troops and equipment overseas, and to sustain them thereafter, has been repeatedly studied within government, defence, and academic circles. Numerous proposals, for and against, the establishment of joint, rapid reaction expeditionary forces of various kinds have come and gone. None have ever produced any concrete results. The obvious question is why? A most plausible explanation is advanced by Commander (Ret'd) Peter T. Haydon, a Senior Research Fellow with the Centre for Foreign Policy Studies at Dalhousie University. He astutely reasons that because past recommendations were not unquestionably responsive to Canadian foreign policy objectives they were not politically supported.¹⁰

Nevertheless, the unavoidable fact remains that in the absence of a standing, joint rapid reaction force with strategic airlift and long sea legs Canada's military leadership will be obliged to continue cobbling together ad hoc solutions that unduly rely on private commercial companies and the good will of our allies in order to comply with their political direction. The numerous studies conducted since the end of the Cold War are replete with examples of the adverse effects that such a deficiency has on the nation's image abroad and its injurious impact on the morale of our men and women in uniform.

The lack of strategic transport hindered Canada's role in the 1999 Kosovo bombing campaign, and resulted in significant expense to taxpayers. During the same campaign, intervention by Canadian diplomats was necessary before Canada's Italian ally would allow privately hired aircraft, including the Russian's large Antonov transport, to land at its airbase in Aviano. In the summer of 2000, Canada's reliance on commercial ships led to a dispute when a large quantity of vital Canadian Forces equipment was held on board a commercially hired ship, the GTS Katie, as a bargaining chip in a messy financial dispute between two companies, and required our armed forces ultimately to forcibly seize the ship to get its military stores back. Also in 2002, Canada was obliged to again rely on others to supplement the available Canadian Forces' transport aircraft – on this occasion, to move just one under strength infantry battalion group to fight in Afghanistan. In 2005, lacking the wherewithal, we were obliged to hire Russian Antonov

aircraft to transport our 200-person Disaster Assistance Response Team (DART) to Sri Lanka.

Contrast today's state of affairs with Canada's first peace keeping mission in 1956, when the Royal Canadian Navy's second aircraft carrier, the 14,224 ton Majestic class CVL-21 HMCS Magnificent, was able to be speedily re configured, convey, and support Canada's contribution to the world's first United Nations' Emergency Force in Port Said, Egypt. Today, the use of private firms and a lack of naval amphibious ships to transport equipment and personnel represents a continuing major political and security risk for both the nation and our Armed Forces.

Simply put, the continued absence on the Canadian Force order of battle of a joint, standing, rapid reaction expeditionary force than can be counted on by government to do the nation's business in time of emergency at home or abroad exposes a critical national security vulnerability. Most significantly, it inhibits decision making at the highest levels by unnecessarily limiting Parliament's, the Prime Minister's, and the military leadership's range of alternatives when faced with the always urgent challenge of effectively responding to an urgent national emergency or gathering international crisis.

The political and military utility of joint, rapid reaction expeditionary forces also lies in the fact that when required they can be used by governments and armed forces as an early coercive presence to help promote conflict prevention through deterrence, and as flexible and rapidly deployable offshore national bases when foreign airfields and ports are unavailable or their use has been denied, or while shore facilities are being negotiated..

Expeditionary operations traditionally emphasize the use of the air and sea as high-speed avenues to quickly get ground troops to potential hot spots in order to rapidly build up combat power. But they are also politically useful for the execution of urgent domestic and aid to the civil power missions to mitigate the effects of annually occurring natural disasters in Canada and elsewhere in the world, and to conduct humanitarian, peacekeeping, and peace enforcement missions abroad.

Today, we have come full circle, from a time more than half a century ago when our military had the wherewithal to successfully intervene in Suez, and forty years ago, when government decided to commit a Canadian Air/ Sea Transportable (CAST) Combat Brigade in support of the defence of Norway on NATO's northern flank. The diminished armed forces of today lack the manpower and the hardware necessary to be similarly employed as an instrument of national policy. The navy has been obliged to set aside its onetime intention to construct the amphibious ship that would allow a meaningful land forces to be deployed abroad; our air force has no plans on its drawing board to purchase the attack helicopters necessary for the support of our soldiers in combat; and the army remains overstretched, and undersized for its ongoing and anticipated future mission load.

To address these shortcomings the time has arrived for government to do what past administrations have said must be done, but failed to accomplish, and back the

development of a joint, rapid reaction expeditionary force. We earnestly believe that our nation's vital interests and our government's goals in the spheres of international diplomacy, development and defence may best be achieved through a defence strategy underpinned by a credible military capability centred on the availability and employment of such a force.

THE ALPHA POLITICO-MILITARY INSTRUMENT

For many Standing Contingency Task Force (SCTF) exponents the government's decision in 2007 obliging the former Chief of Defence Staff, General Rick Hillier, to shelve its further development was quite upsetting.¹¹ Nevertheless, the unforeseen opportunity it now presents is the possibility for our government and military leaders to revisit and recast their previous plans. There is little doubt that the dynamic and unpredictable nature of the world in which we find ourselves dictates a more flexible and adaptive response capability than was required in the past. Consequently, our political and military leaders should welcome the opportunity to reassess the requirement for a joint, rapid reaction expeditionary capability, and the need to resume planning for the development of a war fighting organization that can also carry out soft power tasks, and in the longer term be more cost efficient, militarily capable, and overall better able to serve our nation's domestic and international diplomatic and security interests.

Perhaps one of the more significant but less evident benefits that arise from the possession of a dedicated joint expeditionary force with integral strategic sea and air lift resources and a mobile land force is that it would provide Parliament, Prime Ministers and military commanders with a much greater range of policy alternatives. Furthermore, our government's diplomacy and international development and humanitarian initiatives would be better facilitated, while our nation's influence in the world would commensurately expand with its ability, when required, to act unilaterally and globally in defence of its own interests.

The availability of a standing joint expeditionary capability would allow our government and armed forces quickly to respond to domestic situations as varied as a tsunami or earthquake occurring on Vancouver's Lower Mainland, a fully loaded jumbo passenger jet that has been accidentally downed inside the Arctic Circle, or an ice-storm that has knocked out the power grid serving millions of citizens in central Canada, Quebec or the Maritime provinces. A Parliament and a Prime Minister, knowing they have at hand the required national expeditionary resources would have vastly greater freedom of action whenever they wished to act. Governments, no matter their political stripe, would be better able to accomplish their intended future diplomatic and development goals, and soft power diplomacy and development initiatives would be fully supported by the military capabilities that may be necessary to back them up.

Lastly, in time of international crisis, should Parliament and a Prime Minister decide to act unilaterally or in concert with others they would have the full confidence of knowing that they might choose "where," "when," and "how" Canada might respond. However, the flexibility of decision making afforded by the availability of an increased range of choices can be realized only via a government decision that authorises the

armed forces to stand up a successor organization to the now dissolved SCTF. That new organization will, perforce, require balanced maritime, land and air force formations and units equipped with dedicated strategic and tactical air lifters, and ships that are specifically designed to deliver our ground troops wherever and whenever we need them, and to support them in place.

GOOD INTENTIONS GONE AWRY

In May 2005, our nation's government and its military leadership were on the face of it of one mind on the need to develop a 21st century joint expeditionary force.¹² Elaborating on the government of the day's "Defence Policy Statement" (DPS)¹³ formally announcing its intention to field a SCTF, Vice Admiral MB MacLean, then Canada's Chief of the Maritime Staff, candidly observed: "While the Navy does not expect to conduct traditional amphibious operations against heavily fortified and defended beaches, the focus of future (Canadian Forces) CF expeditionary operations demands a basic level of amphibious capability. In responding to the challenges posed by the future security environment - particularly in failed and failing states - the CF will need the capability rapidly to deploy a high readiness joint force consisting of the appropriate mix of maritime, land, air, and special forces elements, organized under a single integrated command structure, to any region of the world where we need them."¹⁴

Six months later, we learned from Navy Captain Peter Ellis, then the director of Maritime Requirements (Sea), some details about how they would evolve the nation's emerging strategy:¹⁵ "... the CF are planning for the addition of an amphibious ship, to support the SCTF described in the Defence Policy Statement. The new vessel would be designed to get ground forces ashore quickly. This amphibious ship is really designed to project the Land Forces from sea to shore ...to get that critical mass of people and their equipment to shore in relatively short order, to be able to carry on with their operations immediately.

"At sea, the amphibious ship would require the support of a replenishment ship like the JSS (Joint Support Ship). This team could be used in many situations requiring CF support, including disaster relief or evacuations. If we were tasked to extract nationals or embassy staff from a country that was in turmoil ...that type of platform would show its utility. The JSS and amphibious ship serve different purposes with complementary functions. The amphibious ship would be the front-line fighter: delivering its 'weapons system' and ground forces, ashore. The JSS provides fuel, supplies, food and ammunition to support the ship and the Naval Task Group's escorting ships.

"SCTF planning is in the embryonic stages. The requirements for the amphibious ship, and its design have yet to be laid out. The Navy's proposal aims to see this ship in service anywhere between 2012 and 2017, and the cost has not yet been determined. JSS are estimated to join the fleet in 2012."

In August 2006 they officially stood up the SCTF headquarters and constructed a building to house it at Shearwater, NS. November 2006 saw the launch of a three-week

Integrated Tactical Effects Experiment (ITEE) to accelerate ongoing concept development and prove the SCTF commander and headquarters staffs' ability to carry out operations. Helped by the United States Navy's Whidbey Island class dock landing ship, LSD-44 USS Gunston Hall, the exercise participants sailed from CFB Halifax to Camp Lejeune off the coast of North Carolina where more than 1,000 personnel concluded the successful joint experiment.

Described as one of the Chief of the Defence Staff's top priorities, they saw the ITEE to be a reflection of a global reality: the need potentially to project CF assets and personnel on foreign shores. Commodore Paul Maddison, then Commander, SCTF, explained: ". . . about 75 percent of the areas that might require a CF response are littoral. Not only that, there's also often a large urban population which lacks the infrastructure to support a "deliberate arrival" of deployed forces." When the experiment concluded in late-November, Maddison told the press: "The SCF concept has a real, integrating power to it. It's not a maritime force, not a land force. It's truly a joint force. To that end, the three elements are learning from one another in the truest sense of the CF vision of a single effect."¹⁶

Less than a year later, however, in April 2007, policy makers at the highest level executed a quixotic about face that was clearly motivated by a shift in political thinking and influenced by the unforeseen casualty rate and the ballooning cost of the war in Afghanistan. Also worrying was the unplanned growth in the capital cost of planned new equipment, unforeseen funding demands for the purchase of ammunition, necessary improved weaponry and armoured vehicles, and to replace, repair and rebuild materiel destroyed by enemy action and prematurely worn out in the harsh Kandahar region, and the need to redirect increasingly scarce military resources to support the 2010 Vancouver Winter Olympics.

The outcome was our military's unavoidable decision to reassign the cadre of the nascent SCTF, set aside plans to stand up the force, and shelve the notion of one day getting an enabling amphibious ship. All the same, the armed forces' leadership continued to acknowledge a need to in some way carry on development of integrated sea-land-air effects concepts. To this end, they assigned responsibility for this important function to the Chief of the Maritime Staff and Chief of Force Development.¹⁷ Subsequently, in October 2007, they stood up a Rapid Effects Projection Concept Development and Experimentation Team that is to report to them through the Maritime Warfare Centre in Halifax, NS.¹⁸

CONTINUED VOICES FOR CHANGE

As unpalatable as it was, the decision to halt further development of the SCTF did not quieten the concerned voices that continue to champion the maturation of such an indispensable national resource. For nearly a decade, a handful of serving and retired members of Canada's profession of arms has been coming to the conclusion that defending our nation's geo political interests require a standing, militarily credible, joint, rapid reaction expeditionary force. Included among these advocates' works are publications written by the author;¹⁹ "Sea Horses for a Canadian BOFIB (Basic old-

fashioned Infantry Brigade),²⁰ articles appearing in the fall 2005 edition of the Canadian Army Journal,²¹ and those expressing the viewpoints of the former commander of our Pacific Fleet, Rear Admiral (Ret'd) Roger Girouard, and Canada's former Commander in the Middle East during the 1990 Gulf War, Rear Admiral (Ret'd) Ken Summers.²²

All these insightful and objective assessments reinforce the essential need for Canada to be able to readily deploy and support its forces in the world's littorals from bases in Canada. Adapted to reflect Canada's geopolitical, security, and defence interests, these works, for the most part, reflect proven contemporary NATO, US Marine Corps, and Royal Navy Marine Commando doctrine.

Beyond military circles there is also a small community of concerned national level politicians and academicians who continue to raise their voices in support of joint expeditionary forces. Among the more widely known politicians is Honourary Navy Captain and Conservative Senator, Hugh D. Segal. In a speech delivered at the April 29, 2008 Navy Summit, he advocated the addition of an entirely new and global maritime capability in the form of amphibious ships and said, "we need to be able to have it in more than one theatre at a time."

His address echoed the finding of his colleague, Senator Colin Kenny, whose June 2006 Interim Report of the Senate Standing Committee on National Security and Defence concluded that the Canadian Forces will require additional units to fulfill a variety of roles, including: two Standing Contingency Task Forces - one on the east coast and one on the west coast; a strategic sea lift capability to transport and support overseas deployments; strategic airlift capability; and a combined arms unit with airborne capabilities.

Responding to Senator Segal's suggestion the esteemed military historian, Jack Granatstein, observed, "Our sailors must be able to transport and support Canadian troops operating overseas, sometimes perhaps on a hostile shore. The presently planned three Joint Support Ships can't do this; four might be able to manage, but six would be better, along with what General Rick Hillier called 'big honking ship' that could transport four to six helicopters and a battalion-sized expeditionary force. Such ships can also do humanitarian work - in tsunami-hit Indonesia, for example - that we can scarcely tackle today."

Among the most foresightful Canadian thinkers and writers on this topic is David J. Bercuson, Director of the University of Calgary's Centre for Military and Strategic Studies. Writing in 2002 on Canada's need for joint, rapid reaction, expeditionary force²³ Bercuson perceptively observed: ". . .The war in Afghanistan surely points to one of those new circumstances: the urgent need to expedite the process of creating true operational "jointness" in the Canadian Forces as a prerequisite for rapid power projection. . . if there is one key lesson to be learned from the war on terror, it is that a true joining is absolutely necessary for military forces to possess the flexibility to respond quickly, virtually any time, and at any place. What can Canada do to help achieve that objective? It can be ready next time not simply to send a navy to a conflict in a landlocked nation but to deploy a combat-ready joint strike/reaction force in numbers

large enough to make a significant contribution to any forward-defence operation which our Allies might mount.

“Such a joint strike/reaction force will also need the means for rapid deployment at long distances. Air mobility is best but limited in that it would take a large number of dedicated transport aircraft to move a battalion and all the necessary support elements that go with it from Canada to, say, some Central Asian nation in as short a time span as possible. Sea transport is slower but more flexible. It also offers the opportunity to deploy tactical helicopters or even Harrier-type jets such as the recently announced US Naval and Marine Corps versions of the Joint Strike Fighter.

“Whatever the physical shape of such a force, it will not work unless those elements of the air force, navy and army assigned to it develop a true mentality of working together, with "purple" thinking not just at the logistical or planning level, but at the most basic levels of communications, intelligence sharing, and small-unit operations in actual combat situations. For now, any such thoughts are science fiction, but so were thoughts of passenger jets filled with people crashing into the World Trade Centre prior to Sept. 11.

“We ought soon to face the fact that the traditional roles that our military was designed to fulfil are not enough. Canada, alongside its allies, must develop the means to quickly project power into any area from which a threat to our well-being arises. This task is not beyond our capabilities; up to now, it has proven to be beyond our imagination.”

RENEWING THE VISION

Conceptual change invariably arouses opposition. The 21st Century joint Canadian expeditionary force that we visualize here, however, is not new. It has roots in a war fighting doctrine as old as Canada itself. Its utility was justified in January 1759 when they issued orders in London for the British expedition to take Quebec. Then, Britain's naval supremacy and its navy's adoption and mastery of amphibious techniques gave the British Army an importance and striking power wholly disproportionate to the later capture of Quebec in September 1759. The key to the success was the close co-operation between the navy and the army.

The basis for evolving a new national airborne and amphibious expeditionary capability is founded on the idea that the mobility and access afforded by the speed of air movement and the politically neutral and free environment of the sea offers the best possible combination of means for advancing and defending Canada's interests and projecting the nation's diplomatic power and economic influence around the globe and in response to unforeseen circumstances. Two geopolitical imperatives point up the requirement for a standing airborne and amphibious capability. The first stems from our strategic position as a lightly populated continental nation bordered by three oceans whose continued prosperity depends on the uninterrupted two-way flow of commerce by sea and air. The second is the reality that more than 95 per cent of the world's cities and populations are in the littoral zone - that foreshore area susceptible to influence or

support from the land, and that area of the land susceptible to influence or support from the sea.

Given permissive entry and the availability of a forward operating base or host-nation support, the speediest way to get troops and materials to the scene of a natural disaster is by airlift. On the other hand, unimpeded by political restrictions and able to lie over the horizon in international waters, a seemingly slow amphibious force can choose the time and place to secure entry and land and support a balanced military force on a friendly coast where reception facilities are absent. Most significantly, in situations where reception facilities are not available, or where larger forces requiring heavy equipments are needed, a mix of maritime and air transported assets can build up a balanced military force faster than by air alone.

The idea of an airborne and seaborne expeditionary force incorporating long range air lifters and amphibious ships supported by air combat aircraft, helicopters, and maritime surface and sub surface assets is extremely well suited to Canada's needs. Characterized by the synergism of a light airborne vanguard force that can speedily deploy by parachute and air landing, and a heavier, follow-on seaborne main body that can freely travel across international waters without reliance on forward bases, host nation support, port clearances or overflight permissions, this capability provides Parliament, Prime Ministers, and military commanders with the otherwise unavailable alternative of extending the nation's influence in the world and standing up for its interests in a way that other means cannot match.

The recent acquisitions of four CC-177 Globe master III strategic, long range air lifters, and CC-150T (Tanker) Polaris aircraft, when combined with the forthcoming purchase of C-130J Super Hercules tactical, medium range aircraft, will ultimately provide the essential means for the air transport and support of a meaningful land and air expeditionary force. Still, so long as our navy's existing and planned future ships remain limited in their ability to move and support our ground forces, they unnecessarily restrict Parliament, the Prime Minister, and the Chief of the Defence Staff in their options for dealing with domestic and international crises.

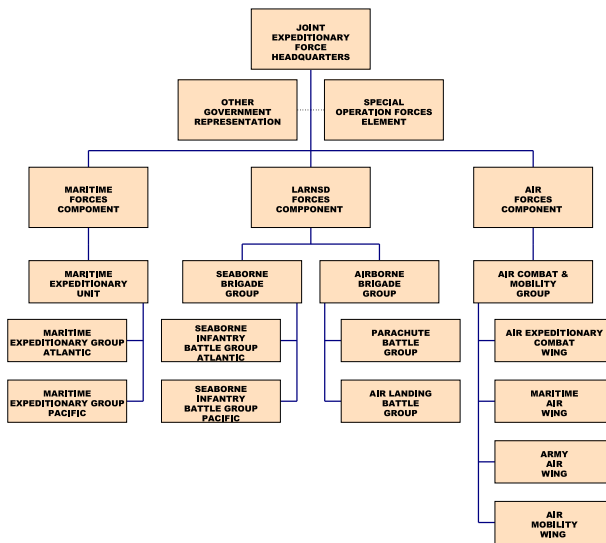
This deficiency points out the need for our navy's future fleet to include ships that can transport many troops, and include the enabling sea and air connectors that are so essential in combat and non combat situations, such as disaster relief and NEO missions. Much of the materials and stores needed for disaster relief, such as bulldozers, heavy engineering equipment, and the like, cannot be expeditiously air lifted in the quantities required. Also, when weather conditions prevent the continued movement of aircraft, an amphibious lift capability can ordinarily put ashore the required numbers of personnel and their heavy machines and other necessary stores.

We cannot accomplish the fielding of a joint, rapid reaction expeditionary capability, however, without the support and endorsement of Parliament and the Prime Minister of the day. Given their approval, though, it would be possible by about 2020 for Canada to have accomplished its current plans to acquire a new class of fleet replenishment ships, and to commission one or more amphibious ships similar to, say, the recently launched Spanish Juan Carlos 1; the model for the new Australian Canberra

Class LHD.²⁴ CEFCOM could then be assigned in rotation the required sea, land and air force components and equipments from within resources available at the time. These would then be transformed into the fully manned, equipped and trained joint, rapid reaction airborne and seaborne expeditionary force that is described in the rest of this essay.

THE FUTURE EXPEDITIONARY FORCE

Representing the spearhead of Canada's military capability and formed as a standing joint (sea, land, air) formation under command of Commander CEFCOM, the future Joint Expeditionary Force (JEF) would consist of a maritime expeditionary unit including amphibious task groups, maritime task groups, landing forces, maritime air elements, a rapid reaction airborne brigade composed of parachute and air landing battle groups, and an air combat and mobility group.



The Future Joint Expeditionary Force

It would also include, as required, special operations forces elements and government of Canada representatives. Its force transformation character will lie in how it alters the way our army assembles and projects its overseas forces and the way our navy and air force supports and sustains them.

Among the JEFs most important ships and aircraft would be a new class of purpose built fleet replenishment and amphibious ships, strategic, long range CC-117 Globe master III air lifters, tactical, medium range CC-130-J Super Hercules aircraft, conventional take off and landing (CTOL) and STOVL variants of the F-35 Lightning II Joint Strike Fighter, CC-150T (Tanker) Polaris aircraft, attack, and medium lift CH-47-F Chinook and CH-148 Cyclone helicopters.

The role of the JEF would be to support Canada's foreign policy and defence strategy by militarily backing up related domestic and international diplomatic, development and security initiatives, including the conduct of full spectrum war fighting and non combat contingency operations.

LAND FORCES COMPONENT

The land force component of the JEF would include C4ISR, combat, combat support, and combat service support elements necessary for carrying out full spectrum war fighting operations and other less demanding non combat and contingency tasks.

Subject to mission requirements, a deployed land force could range in strength from a single company/battalion size battle group of 200-850 troops, to up to two 2,500 person brigade groups.

The JEF's assigned land force component would be constituted in two brigade groups, each with two battalion battle groups. One brigade would be designated seaborne (S), the other, airborne (A). Both brigades would include the same generic organization elements:

Command. Commanded by a colonel a brigade headquarters and communications squadron would be robust enough for 24/7 operations, capable of independent operations, and able to temporarily serve as the nucleus of a larger joint force headquarters. Its staffing level would enable it to provide rapid and continuous staff planning and oversight processes. Built-in C4ISR assets would include unmanned ground vehicles, unmanned aerial vehicles, and unattended ground sensors.

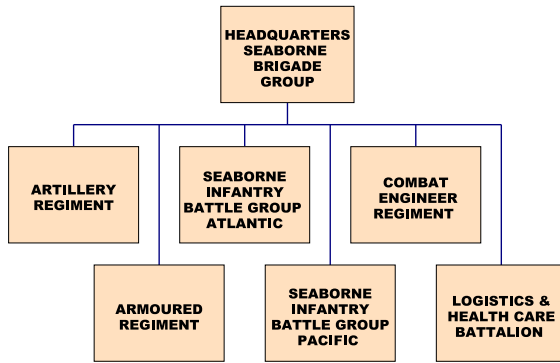
Ground combat. To support rotating forward deployments and reflect the manpower required to conduct stability operations, deal with humanitarian crises, and wage urban combat a brigade would include two, 750-850 member infantry battalions. Each battalion would comprise a unit headquarters, four rifle companies, combat support and combat service support companies.

Combat support (CS). A brigade's CS would be made up of mobile mounted and dismounted line-of-sight, and non-line-of-site weapons, i.e., direct fire, indirect fire under local commanders' control, and supporting indirect fire weapons, forward observers, snipers, reconnaissance, surveillance and target acquisition assets, and counterfire radars. Military intelligence, engineer, communications, air defence, and antitank components would round out the brigade's CS resources.

Combat service support (CSS). A brigade CSS unit will provide CSS, including transportation, maintenance, supply, and NATO Role 2+ health care capabilities.²⁵

Seaborne Brigade Group and Seaborne Battle Groups

We would organize, equip and train the seaborne brigade group (SBG) for deployment by sea, the projection of offensive combat power ashore, and the conduct of land operations supported from the sea.



Seaborne Brigade Group

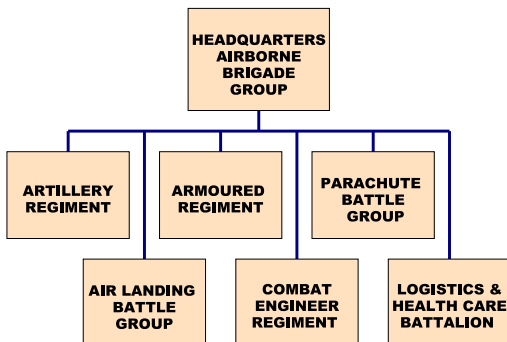
The formation would consist of a brigade group headquarters and communications squadron that can operate ashore and from an afloat base, two seaborne infantry battalion battle groups (SIBG), an artillery regiment, an armoured regiment equipped with Leopard 2 tanks, a combat engineer regiment, and a logistics and health care support battalion that can operate both ashore and from an afloat base. A SIBG would be "task organized" to the requirements of a specific mission.

We would station one SIBG in Atlantic Canada, the other on the Pacific Coast. Designated Seaborne Battle Group Atlantic and Pacific (SIBG (A) and SIBG (P), each would typically comprise a SBG Headquarters C4ISR detachment, a SIBG, and attached CS and CSS elements. The SBG Headquarters would be co located with SBG (A).

On ten days notice a SIBG could embark in one amphibious ship with thirty days worth of supplies for deployment anywhere in the world.

Airborne Brigade Group and Airborne Battle Groups

We would organize, equip and train the airborne brigade group (ABG) for rapid deployment by a combination of parachute and air landing, and the conduct of land operations supported by air.



Airborne Brigade Group

The formation would comprise a brigade group headquarters and communications squadron, parachute battalion battle group (PBG), air landing battalion battle group (ALBG), artillery regiment, armoured regiment with air transportable, tracked light-armoured vehicles such as the Puma, combat engineer regiment, and logistics and health care support battalion. The PBG and ALBG would be "task organized" to the requirements of a specific mission.

The PBG consisting of an ABG headquarters C4ISR detachment, and attached CS and CSS elements would be based in Central Canada. The ALBG, containing an ABG headquarters C4ISR detachment, and attached CS and CSS elements would be based in Western Canada. The ABG Headquarters would be co located with the ALBG.

The PBG could emplane on 48-hours notice with five days worth of combat supplies for deployment by parachute anywhere in the world. On 96-hours notice the ALBG would be capable of emplaning with seven days worth of combat supplies for deployment by air landing to reinforce PBG. The remainder of the ABG headquarters would be capable of deployment on five days notice.²⁶

MARITIME FORCES COMPONENT

Military strategists and historians often point out that the essential purpose of a nation's sea power is to settle or influence, and sometimes resolve, matters upon the land. The highly respected British naval historian, Sir Julian Corbett, succinctly observed that because "people live on land, they can only conclude decisive results on land." When addressing the utility of amphibious forces the influential military strategist, Sir Basil Henry Liddell Hart, aptly described such a force as "the best kind of fire-extinguisher because of its flexibility, reliability, logistic simplicity and relative economy."

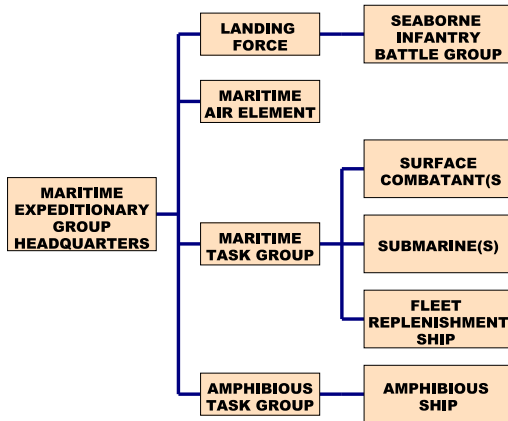
Amphibious forces have an unique strategic capability that we may advantageously employ for national political and diplomatic purposes. They can locate in international waters without seeming to intervene in another nation's affairs, yet remain able to act quickly when required. They enshrine freedom of navigation in the Law of the Sea. Amphibious operations provide an unequalled capability for a maritime nation such as Canada to take advantage of the global maritime and littoral environment and attain uncomparable freedom of diplomatic and military manoeuvre.

The role of the maritime force component assigned to the JEF would be the embarkation, transportation, landing and support of its landing forces by employing surface, sub-surface, amphibious and fleet replenishment ships, and embarked air element. Among the more likely non combat tasks are: noncombatant evacuation operations, humanitarian assistance and disaster response.

Maritime Expeditionary Unit and Maritime Expeditionary Groups

We would form the maritime force component of the JEF as a Maritime Expeditionary Unit (MEU) comprising a headquarters and two Maritime Expeditionary Groups (MEG): MEG Atlantic and MEG Pacific. The MEU Headquarters and MEG Atlantic would be co-located at Shearwater, NS. An MEU headquarters C4ISR detachment would be co-located with MEG Pacific on the west coast.

A MEG would typically consist of an amphibious ship, a fleet replenishment ship, one or more destroyers, frigates and submarines, an embarked MEU headquarters C4ISR detachment, SIBG, and air element.



Maritime Expeditionary Group

A MEG would be capable of responding to a variety of combat and non combat situations. For deployed operations they would accommodate the MEU headquarters C4ISR detachment, SIBG, and air element in one amphibious ship.

The weaponry of the MEGs air element and assigned surface and sub-surface combatants afford the ability to strike land targets from long range with missiles, provide essential air defence for the afloat force, and close air support for the landing force deployed ashore.

A MEG would be "task organized" to the requirements of a specific mission. We would maintain a MEG on each coast on ten days notice to call up its assigned surface and sub surface combatants and board its designated MEU headquarters C4ISR detachment, SIBG, air element, and thirty days worth of supplies, for deployment anywhere in the world.

Determining Required Amphibious Lift

A convenient method of expressing the lift capability of a ship is that used by the United States Navy. It specified a ship's ability in five categories, called "fingerprints of lift," namely, the number of troops the ship can accommodate; its vehicle storage area in thousands of square feet (vehicle square); its cargo storage area in thousands of cubic feet (cargo cube); the number of deck "spots" for parking helicopters; and the number of well-deck "spots" for transporting landing craft. The required amphibious lift capability of the MEGs amphibious ship is one SIBG, a MEU headquarters C4ISR detachment, and an air element, including their personnel, weaponry, ammunition, vehicles, POL, and combat stores.

Amphibious Ship Alternatives

Although professional opinions will vary, considering Canada's geography and taking in to account technological advances, contemporary construction techniques, and streamlined maintenance and refit schedules, we would require two amphibious ships.²⁷ Their primary mission would be to give embarked commanders command and control capabilities for sea-based manoeuvre and landing operations and deploying a balanced all- arms landing force with a combination of helicopters and landing craft. The vessels would have a projected fifty-year in-service life and possess the future potential also to serve when required as a small deck, STOVL aircraft or helicopter carrier.

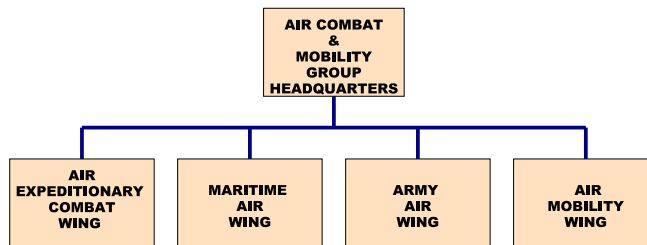
Among the several more promising ship designs that would seem able to provide our required amphibious lift capability is the Spanish Navy's Navantia-Tenix designed strategic projection ship (Buque de Proyeccion Estrategica). They launched Spain's first

ship, the 27,563 tonne Juan Carlos 1, on March 10, 2008. She will carry a ship's crew of 247 men and 107 officers, twenty-three landing-crew members, 172 air group personnel, a land task force of 890, and the capacity also to embark up to 1,000 civilians. The ship will have a seawater desalination plant and electric generators capable of meeting the needs of a population of 5,000 in a devastated area. She also has the capacity to carry 170 vehicles, and fifty containers, which they can unload in harbours not equipped with handling systems. The ship can handle the simultaneous operation of six NH-90s, and AV-8B Bravo Plus, F-35 JSF, V-22 Osprey, and CH-47 helicopters can operate on its flight deck.²⁸

Designated as the Canberra Class, this is the ship that is now under construction for the Royal Australian Navy. The Australians expect the first ship to be completed in 2013. The second is due in 2016. The 'fingerprints of lift' of one Canberra Class ship are: troop accommodation - about 1,000; 'vehicle square,' 830 lane metres (3290 m²); six helicopter spots; four LCM well-deck 'spots;' besides a fully equipped hospital with two operating theatres.²⁹

AIR FORCES COMPONENT

We would form the JEFs air force component as an Air Combat and Mobility Group (ACMG) and four air wings. It would be responsible for the provision of overall air support for the JEF, including air combat, close air support of deployed units, and the transportation, air drop, air landing air support, and air supply of the PBG and ALBG.



Air Combat and Mobility Group

Air Combat and Mobility Group

The ACMG would include a group headquarters, and we would equip its air wings with CTOL and STOVL fighter aircraft, tactical and strategic air transport, aerial tankers, and attack, reconnaissance, and cargo helicopters.

Air Expeditionary Combat Wing

The role of the Air Expeditionary Combat Wing (AECW) would be to provide air combat capability and close air support for all deployed JEF forces. It would include a wing headquarters squadron and two squadrons of CTOL F-35A fighter aircraft.

One squadron would be on 48-hours notice to deploy. The balance of the AECW could reinforce the lead squadron in 96-hours.

Maritime Air Wing

The role of the Maritime Air Wing (MAW) would be to support the MEU by providing air combat capability, close air, and air logistics support, using STOVL fighter aircraft, attack, and medium lift helicopters, for all afloat, embarked and ashore forces.

Its capabilities would include a STOVL F-35B fighter squadron, wing headquarters squadron, maritime attack helicopter squadron, maritime medium lift helicopter squadron, and a squadron with necessary air control, air defence assets, and unmanned aerial vehicles.

Army Air Wing

The role of the Army Air Wing (AAW) would be to support the ABG by providing close air and air logistics support, with attack and medium lift helicopter support for all deployed ABG units.

Its capabilities would consist of a wing headquarters squadron, attack helicopter squadron, medium cargo helicopter squadron, armed reconnaissance helicopter squadron, and a squadron with necessary air control and air defence assets, unmanned aerial vehicles.

Air Mobility Wing

The role of the Air Mobility Wing (AMW) would be to provide air transport and aeromedical evacuation support for the JEF. Its capabilities would include a wing headquarters squadron, CC-177 squadron, C-130-J squadron, and CC-150T air-to-air refuelling aircraft.

CONCLUSIONS

Strategic systems remain central to long-term national security. While most national security policy debates are focussing on the threat of terrorism, more traditional state-based threats still exist and cannot be ignored by our defence strategy. We conclude that the war on terrorism should influence, but not drive Canada's long-term decision making. Our future CF should be prepared for all of its potential 21st century missions, and the war on terrorism is just one.

Our defence strategy and its supporting structure and capabilities should, therefore, maintain the emphasis on defending Canada and its land, sea, and air approaches. It is also essential to safeguard our nation's way of life, its political institutions, and the sources of its capacity to project its military forces overseas to deter or confront threats to Canada's interest, and when necessary to act in concert with its allies.

In turn, the ability to project military power also helps to mitigate the after effects of disasters occurring at home, deter gathering threats to Canada from abroad, and when necessary, disrupt, deny, or destroy hostile entities well away from our shores. Acknowledging that Canada is a middle power with important geopolitical and geo economic interests, our future force structure should be interoperable with our allies, rapidly deployable, task-tailored, combat capable, and able to meet unforeseen crises at home, lend support to our allies abroad, counter coercion and terrorism, and deter aggression against Canada.

One can count on the fact that the threats to Canada's security are going to change. There are however, certain facts that will not change. Canada is a growing middle power with a globally dependent economy. It is also a continental, maritime nation with worldwide maritime interests. Accepting responsibility for these global interests requires a national security strategy, policy, and supporting capabilities that can promote and protect them. What is not so obvious, is what type of armed forces are best suited to protect these interests?

In the coming decades Canada will continue to increase its population numbers and benefit from the riches of its natural resources. However, our future level of prosperity and influence overseas will be greatly influenced by the ability to maintain control of the nation's surrounding coastal waters, help our allies secure and maintain the trans-ocean shipping lanes that connect us to the rest of the world, and above all, to help sustain the commerce flows that link us and other North Americans to the burgeoning world markets of India, China and beyond.

With the Atlantic Ocean secure and the nations of a united Europe no longer under any immediate threat from the east, rising states such as China and India, with a seemingly insatiable demand for our raw materials to fuel their exploding economies and satisfy their peoples' aspirations for a better life will take on greater national importance. When we combine these factors with North Americans' increasing reliance on manufactured goods from the other nations of the Asia Pacific Region, our own security will become an increasing concern and take on greater importance in our daily life.

We are never again going to have another Normandy invasion. Canadians will not be replaying their bloody and costly assault landing on Juno Beach. Nevertheless, we can envision many, many scenarios in which we will have to be ready to send off armed forces to defend our interests on some foreign shore. There may be a need for our forces to rescue endangered fellow citizens, or to help an ally seize an airfield or a port, for example. They would not land into the teeth of formidable defences, as they had to do in World War Two by sea at Dieppe and Sicily, and by sea and by parachute in Normandy, but away from the enemy and then manoeuvre towards them; that will be the likely future nature of airborne and amphibious assault.

While, the leaders of the main stream political parties frequently cite opinion polls that say most Canadians want government to play a greater role in helping to prevent conflicts from happening in the first place by carrying out more diplomatic missions and rendering timely humanitarian assistance and disaster relief, it ultimately falls to

Parliament, Prime Ministers, and governments to muster the political will to provide the means. The as yet unanswered question is: are they up to the challenge?

Without a doubt Canadians shall always have to be able to help a friend or an alliance member to kick a door in. However, it is much more likely that in the future government will more often require our armed forces to go to the aid of a distressed community in our own backyard or in some distant foreign land; wherever people have incurred the anger of mother nature. To tackle effectively such challenging tasks, however, will call for the existence on our nation's order of battle of a standing, joint expeditionary, rapid response force that can get a job done.

APPENDIX A - TABLES

TABLE 1 - COMPARATIVE EXAMPLES OF SHIP'S FINGERPRINTS OF LIFT

Note (1)

NO.	TYPE & CLASS OF SHIP	TONS (2)	CREW	TROOP ACCOMMODATION	VEHICLE SQUARE	CARGO CUBE	HEL SPOTS	LCAC SPOTS (3)
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(j)
1	CANADA AOR (Protecteur)	24.7	365		13.1 (4)	17.3	2	
2	CANADA JSS (Future planned) (5)	28	165	(6)	48.5 (7)	32.2	2	
3	AUSTRALIA LPH (Canberra)	27.851	243	1,000	830	?	6	4 LCM
5	UNITED KINGDOM LPD (Albion)	16.98	325	650	?	3	8	
6	UNITED STATES LHD (Wasp)	40.5	1,150	1,686	20.9	125	45	3

NOTES

(1) A ship's amphibious lift capability is measured by five categories, or "fingerprints," of amphibious lift, i.e., the number of troops the ship can carry; its vehicle storage area, measured in thousands of square feet (or vehicle square); its cargo storage area, measured in thousands of cubic feet (or cargo cube); the number of spots for parking vertical takeoff and landing aircraft (expressed as CH-46 helicopter equivalents); and the number of spots for accommodating air-cushion landing craft (known as LCACs).

(2) Displacement at full load (including all of the things the ship normally carries).

(3) Landing Craft Air Cushion (LCAC).

(4) Expressed in lane metres, the ship's vehicle capacity is 400 lane metres.

(5) JSS Intended roles: Underway fleet and task group support; Surge sea lift; Afloat support to forces ashore.

(6) JSS Accommodation space will provide for 210 personnel. These could, for example, be comprised of the staff of a Joint Force HQ, cargo handlers, troops working ashore who have come aboard for rest and recreation, or the staff and patients in an expanded 60-bed ship's sick bay.

(7) Expressed in lane metres, the ship's vehicle capacity is: 2,500 lane metres (covered-1,500, uncovered -1,000)

TABLE 2
JEF - MARITIME FORCES COMPONENT - SHIPS

NO.	CAPABILITY	CURRENT FLEET SHIPS	REQUIRED BY MARITIME EXPEDITIONARY UNIT
(a)	(b)	(c)	(d)
1	DDG Destroyer - Tribal class	4	2
2	FFH Frigate - Halifax class	12	2
3	SSK Submarine - Victoria class	4	2
4	AOR Auxiliary Oiler Replenishment Protecteur class	2	2
5	Amphibious ship - LHD Class		2

TABLE 3
JEF - LAND FORCES COMPONENT - REGIMENTS & BATTALIONS

NO.	CAPABILITY	CURRENT REGULAR FORCE BATTALIONS & REGIMENTS	REQUIRED BY SEABORNE BRIGADE GROUP	REQUIRED BY AIRBORNE BRIGADE GROUP	TOTAL REGULAR FORCE BATTALIONS & REGIMENTS REQUIRED
(a)	(b)	(c)	(d)	(e)	(f)
1	Infantry Battalion	9	2	2	4
2	Armoured Regiment	3	1	1	2
3	Artillery Regiment	3	1	1	2
4	Combat Engineer Regiment	3	1	1	2
5	Logistics & Health Care Battalion	3	1	1	2

TABLE 4
JEF - AIR FORCES COMPONENT - AIRCRAFT CAPABILITY

NO.	CAPABILITY	AIRCRAFT CAPABILITY REQUIRED BY AIR COMBAT AND MOBILITY GROUP			
		AIR COMBAT WING	MARITIME AIR WING	ARMY AIR WING	AIR MOBILITY WING
(a)	(b)	(d)	(e)	(f)	(g)
1	CTOL air combat and close air support, e.g. F-35A Lightning II .	✓			
2	STOVL, air combat and close air support, e.g. F-35B Lightning II		✓		
3	Helicopter medium/heavy lift, cargo, troop movement, medevac, e. g. CH-47F Chinook, CH-128 Cyclone		✓	✓	
4	Tactical arlift, cargo, troops, medevac, e.g. C-130J Hercules				✓
5	Strategic airlift, cargo, troops, medevac, e.g. C-117 Globemaster III				✓
6	Aerial refuelling, e.g. CC-150T Polaris				✓
7	Attack helicopter, e.g. AH- 64D Apache, AH-1W Super Cobra, CH-146 Griffon Plus		✓	✓	
8	Armed reconnaissance helicopter, e.g. OH-58D Kiowa		✓	✓	
9	Unmanned aerial vehicle (UAV), Reconnaissance, surveillance, targeting acquisition		✓	✓	

ENDNOTES

1. The term "full spectrum, means a capability to conduct conventional and irregular warfare operations.
2. Canadian Armed Forces, Integrated Sea-land-air Effects Concept Development and Experimentation, Chief of Defence Staff, Message, CANFORGEN 059/07, National Defence Headquarters, Ottawa.
3. Department of National Defence. Canadian Maritime Operations, 1945–2000. Leadmark: The Navy's Strategy for 2020, Annex C. Ottawa, 2001.
4. Sean Maloney. Never Say Never: Non-Alliance Operations in the Canadian Context. Canadian Army Journal Fall 2005.29–34.
5. The Australians expect their first new amphibious assault ship to be completed in 2013. The second is due in 2016.
6. This term includes ships specifically procured and employed to disembark troops and their equipment onto unprepared beachheads by means such as landing craft, helicopters or hovercraft, or directly supporting amphibious operations.
7. RIMPAC is the world's largest multinational exercise and is scheduled biennially by the US Pacific Fleet. Participants include the US, Australia, Canada, Chile, Japan, the Netherlands, Peru, Republic of Korea, Singapore, and the United Kingdom.
8. Grace V. Jean, "Naval Forces See Greater Demand for Large Amphibious Ships," National Defense Industrial Association Magazine, October 2008.
9. Newsletter of the Sea Power Centre Australia - Issue 14, October 2007.
10. Peter Haydon, Canadian Amphibious Capabilities: Been there, Done it, Got the T-shirt! The Navy League of Canada Discussion Paper, Ottawa, April 2004.
11. Canadian Forces, Chief of Defence Staff Message: CANFORGEN 059/07 Integrated Sea-land-air Effects Concept Development and Experimentation, Ottawa, National Defence Headquarters.
12. A Joint Expeditionary Force (JEF) is defined as an armed force comprised of sea, land and air forces whose essential role is to carry out specified missions outside of Canada. The term "combined operations" was introduced by the British War Office in World War II to denote multi-service activities which involved air, land or naval forces acting together. However, given US usage of the word 'joint' for such activities, the British usage faded relatively quickly.
13. Canadian Government. Canada's International Policy Statement – A Role of Pride and Influence in the World – Defence. Defence Policy Statement (DPS). Ottawa, 2005.
14. Department of National Defence. Charting The Course From Leadmark. (Supplement to "Leadmark," the navy's key transformation strategy document). National Defence Headquarters, Chief of the Maritime Staff, Ottawa, May, 2005.

15. Sarah Gilmour, JSS and Amphibious Ships Working Together: the Navy Plans for Future Additions. Canadian Forces Newsletter, The Maple Leaf, November, 16, 2005.

16. Kristina Davis, Amphibious Assault Capability Tested Off Eastern Seaboard. Canadian Forces Newsletter, The Maple Leaf, December, 6, 2006.

17. Canadian Armed Forces, Integrated Sea-land-air Effects Concept Development and Experimentation, Chief of Defence Staff Message, CANFORGEN 059/07, National Defence Headquarters, Ottawa,

18. Peter G. MacKay, Personal letter to the author, Ministry of National Defence, Ottawa, December 1 2008.

19. Gary H. Rice, The Defence of Canada After 9/11 (A Proposed Outline for a Defence White Paper for the Beginning of the 21st Century," August 29, 2002; ISBN 0-9681696-5-1 Securing Our Sovereignty (A Green Paper on Canada's Future Defence), 2005, GEHR Publishing, Carleton Place, ON; Making Canadian Forces Amphibiosity a Reality. <http://www.cda-cdai.ca/pdf/SCTFALR.pdf>. et al..

20. John C. Eggenberger, Ralph E. Fisher, Richard H. Gimblett, Lewis MacKenzie, SeaHorses for a Canadian BOFIB (Basic Old Fashioned Infantry Brigade), <http://www.rusiviccda.org/opinion/opin-09.html>, June, 2004.

21. Lee John Hammond, Joint Amphibious Capabilities—Past Lessons, Future Options; Les R. Mader, Avoiding a Future Dieppe: Improving Canadian Army Amphibious Operations Planning; Robert D. Bradford, The Army Landing Force and Standing Contingency Task Force Design. Canadian Army Journal, fall 2005 edition.

22. Roger Girouard, Ken Summers, Canadian Defence Requirements Asia-Pacific Theatre Joint Force Requirements - Expeditionary Command. 2008 Vimy Paper, Conference of Defence Associations Institute, Ottawa, 2008.

23. David Bercuson, Eye On Defence: Needed: A New White Paper," Legion Magazine, January/February 2002 edition.

24. Newsletter of the Sea Power Centre Australia. "Specifications for the Canberra class LHD. Issue 14, October 2007. *Complement* -243 (36 additional); *Embarked Forces* -978 (146 additional); *Accommodation* -1403; *Length overall* -230.8 metres; *Maximum beam* -32 metres; *Full load displacement* -27851 tonnes; *Full load* -7.18 metres; *Maximum speed* -20.5 knots; *Range* -8000 NM at 15 kt, 9250 NM at 12 kt; *Propulsion type* - Electric drive; *Pods* - 2 x 11 MW; *Power source* - Combined diesel and gas turbine (CODAG); *Gas turbines* -1 x GE LM 2500 (17.4 MW); *Diesel engines* -2 x 7.2 MW diesels; *Vehicle capacity* -830 lane metres (3290 m²); *Heavy vehicle deck* -1410 m²; *Light vehicle deck* - 1889 m²; *Helicopter capacity* - 990 m²; *Can conduct landing craft operations in Sea State 4*; *Aviation* -8 x MRH90/Tiger ARH; *Can operate Chinook Helicopters*; *Medical Capacity* -2 operating theatres high/medium/low dependency.

Each of the Canberra class will be able to *transport and support up to 1000 embarked forces*, some of which can be *landed ashore via a mix of embarked water craft and aircraft*, to conduct operations. Others will remain onboard the LHD providing *command, aviation, medical and logistic support*. The mix of those deployed ashore and remaining onboard will vary, depending on the circumstances.

Each ship will carry *landing craft* that are transported in a *well-dock*, which can be flooded when they are required. The ship ballasts down to flood the well-dock, allowing the water craft to float and extract from the dock. This can be done while underway and in conditions up to *Sea State 4* - a significant increase on the RAN's current capability.

The LHDs will also have *six helicopter spots* on a large flight deck that can *support a range of helicopters*. The ability to base aviation facilities afloat is a particular benefit, as it removes the need for maintenance, support facilities and personnel ashore, and allows the airbase to move to wherever it is required.

25. Role 2+. Role 2 medical support includes evacuation from Role/Echelon 1 facilities, triage and resuscitation, treatment and holding of patients until they can be returned to duty or evacuated, and emergency dental treatment. In the JEF this level will be augmented with the capabilities to perform emergency surgery and essential post-operative management. NATO Logistics Handbook, October 1997, Chapter 16: Medical Support.

26. Alternatively, Parliament should consider the mutual benefits that might accrue were it to actively promote greater Canada-United States defence cooperation and initiate a proposal to jointly "stand up" an EB(A) as a combined Canada-United States formation, with alternating national commanders, and in a manner similar to the 1st Special Service Force, that was jointly fielded by Canada and the United States during the Second World War.

27. Michael Whitby. Fouled Deck: The Pursuit of the Second Aircraft Carrier in the Royal Canadian Navy, 1945-64. Chief of History, Department of National Defence, Ottawa. "Running a navy with just one of any type of platform is a precarious proposition. There is simply no redundancy. This is especially true with aircraft carriers as all aviation assets rely upon that platform to operate at sea. If it is sunk or damaged, or requires a long refit or even routine maintenance, flying squadrons are left without a base, and the flexibility and mobility inherent in naval aviation disappear until the carrier is replaced or returns to sea. Even simply maintaining proficiency requires the carrier since flying from an air base is significantly different than flying from the restricted, pitching deck of a carrier. Naval planners generally calculate on an assumption that ships can be operational about a third of the time, thus three becomes the magic number in generating force requirements."

28. Eric H. Biass, Juan Carlos I Launch. Armada International, 3/2008, pp. 81.

29. The Canberra Class LHDs will be amongst the largest ships to serve in the RAN and will be the biggest warships ever built by Australian industry. While some media commentators have focussed on their size, the reality is that size brings flexibility - and flexibility is the key benefit that the ships will provide to an Australian government. In times of increased strategic uncertainty, the LHDs will be able to respond to a wide variety of situations across the span of maritime operations. They will form the core of Australia's response to natural disasters, humanitarian aid, evacuation operations, peacekeeping tasks and, where necessary, the projection of combat force ashore.