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SEABASING CONCEPT : ARE THE CANADIAN ARMED FORCES READY TO ADOPT IT?

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Exercise Solo Flight

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**SEABASING CONCEPT: ARE THE CANADIAN ARMED FORCES
READY TO ADOPT IT?**

By Lieutenant-Commander Jonathan Audy

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SEABASING CONCEPT: ARE THE CANADIAN ARMED FORCES READY TO ADOPT IT?

Introduction

Logistically supporting a naval vessel for operations has been a topic studied for centuries. Even for Ferdinand Magellan, who is the first one on record to have crossed an ocean in 1519 on his trip from Spain to South America, logistically supporting a ship and its crew has always been a challenge. Be it for point A to point B trips like Magellan's, or patrolling an ocean like many navies do today, the logistics of it is always a topic not to be overlooked. Livestock might not be brought onboard anymore to have food lasting longer period, but newer and faster modern vessels stop in various foreign ports to bring up stock levels. Ships are now required to complete replenishment at sea from oil tankers as they are not using sails as a propulsion mode anymore, but all this is to show that the Logistics of supporting a ship at sea is constantly evolving and new methods will come up as the technology advances.

One of the latest concepts is that of seabasing, or more simply explained, creating bases on the ocean wherever they might be needed. This concept is not completely new as the foundation is to support ships at sea so that there is no need to replenish from home or foreign port. This method really started with tanker ships that have been around for decades, with the first mass use being during World War II for the United States Navy (USN).¹ Oilers would not only transfer fuel, but also food and supplies required for a ship to remain at sea for extended period. That is the true origin of seabasing.

¹ John A Lukacs IV, "Century of replenishment at Sea." US Naval Institute, June 2018, Last accessed 10 April 2019 at <https://www.usni.org/magazines/naval-history-magazine/2018/june/century-replenishment-sea>.

But in the evolving world that we live in, replenishment from a tanker is now common for most first world navies and the concepts are moving forward yet again. With more conflicts around the globe, there are fewer areas where a ship could go to take on some supplies, but there are also fewer cities able to support war efforts on their shores. As a result, the theory of seabasing evolved once more and the USN is trying to move forward with a concept where the sustainment for Army operations could be done from the ocean, with massive sea bases that could not only insert ground forces, but also keep them replenished during their operations. The Royal Canadian Navy (RCN) is not at this stage yet, but is it something most major navies should move toward.

This essay will attempt to determine the level of seabasing the RCN should strive for. Should the RCN adhere to the full principle like the USN has done, and if so, does the RCN have the resources or the authority to move ahead with this concept. To answer this thesis, this essay will first attempt to define the word seabasing in order to compare it to the current model used by the RCN, as illustrated in ALP 4.1; our NATO doctrine.² It will then determine the level of seabasing that should be executed by the RCN, but also examine the resources we currently have to support such a concept, as well as possible authority that could be used to maintain that notion if we were to require more assets.

Seabasing

As mentioned earlier in this essay, if we use the most basic definition of seabasing, it really comes down to supporting a fleet from the sea, eliminating the need for ships to return to port or support bases. If we use this meaning, we could really say that the USN has been using

² NATO, "ALP-4.1, Multinational Maritime Force Logistics."

the concept since World War II when “auxiliaries, oilers, and supply ships replenished the combatant ships at sea [which] provided the U.S. battle fleet with such unprecedented range and freedom of action.”³ But as with any concept, it evolved over time and technological advancement created more opportunities. The modern day definition would refer to seabasing as the “rapid deployment, assembly, command, projection, reconstitution and re-employment of joint combat power from the sea, while providing continuous support, sustainment, and force protection to select expeditionary joint forces without reliance on land bases within the joint operations area.”⁴ The addition of support to ground forces is a major step forward as it requires not only fuel and food, but a whole new level of technical support, including vehicles, equipment and many other things which would never be thought of in a naval environment. It does not only require more expertise, it creates a need for much bigger vessels and platforms as well.

It is worth noting that ground forces cannot transition quickly from being entirely sustained by land bases to completely sea base supported. It is a concept that will have to expand over time and see how far this new process can go. The ultimate objective is for the sea base to become a replacement for the regional land bases, not simply a supplement.⁵

The applicability of seabasing can also be expanded to non-combat mission. Disaster relief for example, is not a primary military function, but naval forces can often be called to support such operations. Organizations working such scenarios, like the Red Cross for example, use seabasing concepts to bring relief goods to affected areas, but are counting on military ships to bring the first surge of equipment and personnel to the area for the start-up of goods distribution and security. Hence why, once the humanitarian organization sea base has arrived,

³ Sam Tangredi, “*Sea Basing: Concept, issues, and recommendations.*” Naval War College Review, Autumn 2011, p.29.

⁴ C.H. Douglass, “*Future Seabasing Technology Analysis: Logistics Command and Control.*” Alexandria, VA, p.3.

⁵ Sam Tangredi, “*Sea Basing: Concept, issues, and recommendations.*” 31.

the need for military ship quickly disappears as the load capacity is minimal in comparison to a cargo ship. It can therefore be said that the seabasing concept does not only apply to military operations, but warships are not the tool of choice for such missions.⁶

To conclude this section, it could be said that sea bases are present not only to reduce the need for ships to go back to port and remain on station for longer period, but the full implementation of seabasing would see ground operations also supported by those bases established at sea.

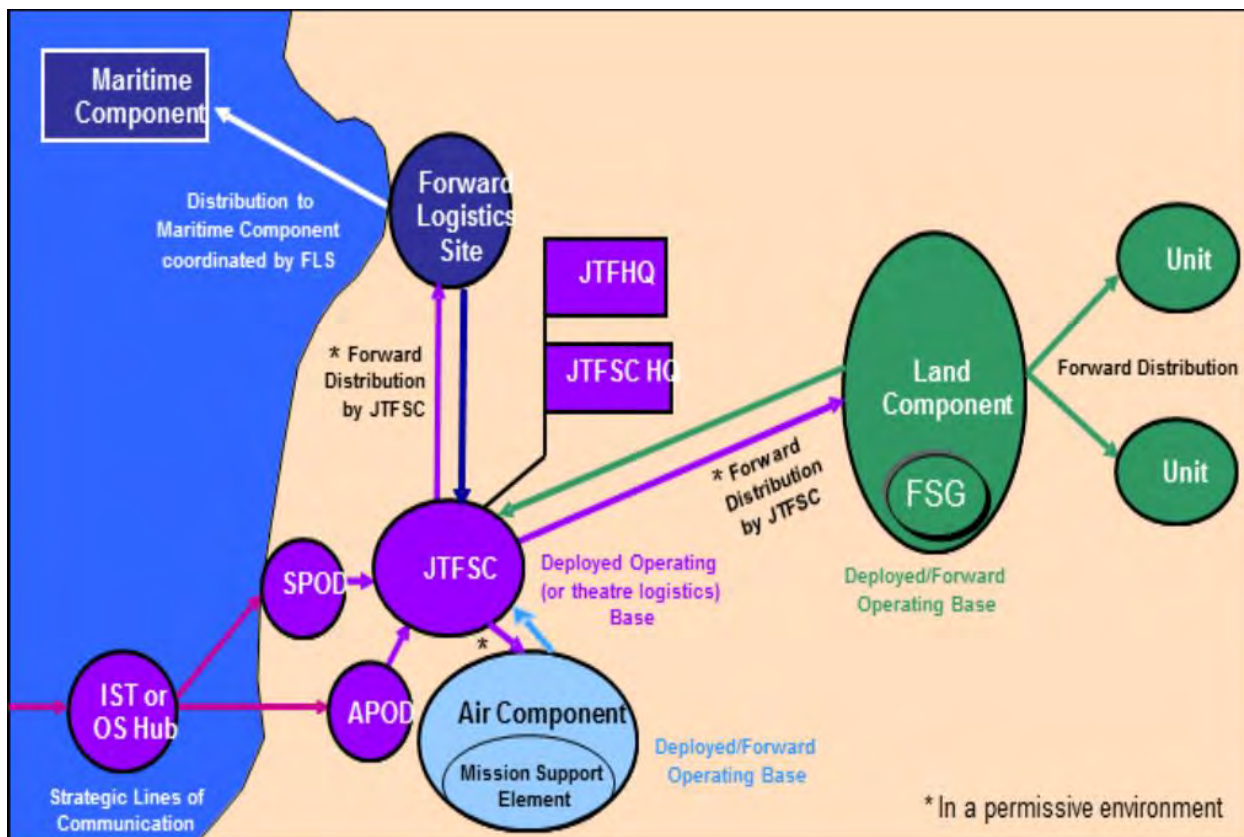
How does Canada support its Fleet and Army Operations?

If we consider the definition above, we can see that Canada has done some basic seabasing since the 1960s when the RCN procured replenishment oilers which were primarily acquired to replenish fuel underway, but also provide goods and supplies required for other ships of the fleet.⁷ However, before moving further into seabasing, a review of the current sustainment plan for the fleet and ground operation of the Canadian Armed Forces (CAF) is important.

As a member of the North Atlantic Treaty Organization (NATO), we rely heavily on the sustainment model identified in ALP 4.1; the main Logistics document for the association, while a Canadian flavor is added to certain aspects. The picture below will be used to describe the main concepts of logistics support in a NATO environment, which is what is used for the naval operations, but also for multi components deployments.

⁶ Peter Tatham, Gyongyi Kovacs, and Alain Vaillancourt. “*Evaluating the Applicability of Sea Basing to Support the Preparation for, and Response to, Rapid Onset Disasters*” IEEE Transactions on Engineering Management, February 2016, p.69.

⁷ Author unknown. “Milestones in Canadian Naval history.” Canadian Naval Review, Spring 2010, p.31.



This image is a depiction of the support concept for a major deployment, including a land, air and maritime component. The main logistics section in this scenario is the Joint Task Force Support Component (JTFSC), which acts as the logistic supporting unit for all elements of the force. They process all shipments in and out of theater with their significant team of technical and movement personnel. It processes not only major items at the beginning and end of a deployment such as trucks and housing equipment, but also process the daily back and forward flows of parts required to sustain the force. Once the material has been received, it is distributed to the components via air or ground lines of communications.

For the naval aspect, the process is a bit more complex due to the location of ships. For this reason, a Forward Logistics site (FLS) is present; not only to receive material on behalf of the ships, but to ensure onward processing to the vessels for all parts received, but this group of

personnel also arranges shore visits for the warships. The parts could be transferred to the ship on arrival at the next port of call, or could be flown, depending on the situation and urgency of the requirement.⁸

This concept requires the FLS to move from port to port in preparation for the ships arrival in various cities. If a Task Group (TG) is in operation with a replenishment ship, it reduces the requirement for the combatant vessels to return to port, enabling them to stay on station, while the support vessel returns to a safe location to embark goods for the entire TG and execute a basic level of seabasing. If a replenishment vessel is not available, frigates and destroyers need to come ashore more often for sustainment, while leaving their operational station.

If a ship or TG is deployed without a ground or air force component close by, the JTFSC will not be present, but the ships will still be serviced by an FLS, which would be in charge of receiving parts and supply directly from the support base back in Canada, including the custom clearance process. The FLS team may or may not be increased from 3-4 personnel, up to 6-8 personnel to accomplish the tasks that would normally be completed by the JTFSC.⁹

It can therefore be said that the RCN has accomplished some basic seabasing practices when the PROTECTEUR class replenishment ships were in the Fleet, and still practices it today with the addition of Motor Vessel (MV) ASTERIX, but the capacity to support ground operations from the sea is not something the RCN has done. Seabasing definitely has some advantages that cannot be discarded, such as limiting the number of port visits required and

⁸ Canadian Fleet Pacific (CFP) Fleet Logistics Officer (F4 Log), Fleet Standing Operation Procedures Chapter 11, DWAN webpage last accessed 16 Mar 2019.

⁹ Ibid.

keeping the ships at sea on station for longer periods, but the JTFSC concept also has some positives. For example, it is much easier to replenish a ship during a port visit rather than at sea during an underway replenishment or from the air with multiple helicopter deliveries. Stopovers in foreign ports are also important for sailors' morale and to get some well-deserved rest. It can therefore be said that both methods have their advantages, but certain missions might call for one or the other, as well as the level of risk in the surrounding ports.

USN seabasing situation

The USN has seen complete seabasing as an objective for quite a while now, the early 1990s to be more exact, but the Department of Defence (DoD) still has a definition of the concept that not all authorities agree is complete or correct. The current explanation is set as “the deployment, assembly, command projection, reconstitution, and reemployment of joint power from the sea without reliance on land bases within the operational area.”¹⁰ But it is important to mention that this definition is followed by a note that states “See also amphibious operations (JP 3-02)”¹¹, which infers that this concept does not only fall to the USN to manage. It is implied from this note that seabasing to the USN means amphibious operations and support to ground operations. This portion of the essay will therefore analyze the efforts and successes from the USN, but will be followed by an analysis from the United States Marine Corps (USMC) perspective, the component of the force mostly involved in amphibious operations.

One of the important things to mention is the motivation behind deciding to invest in seabasing. It was mostly based on the uncertainty to use foreign countries airports and seaports to bring troops to their areas of operations, but also use facilities in country for long term logistical

¹⁰ Sam Tangredi, “*Sea Basing: Concept, issues, and recommendations.*” 29.

¹¹ Ibid.

support of operations.¹² Such a lack of shore support could be critical on the outcome of future conflict. Creating a sea base would ensure the US operations could be sustained anywhere in the world, regardless of foreign country support, such as their current base in Kuwait for example, which supported Operation Iraqi Freedom.

As the concept is ultimately based on providing support to the US Army operations overseas, the Army has been heavily involved in the acquisition process. The first ship built in support of seabasing is the “Joint High Speed Vessel (JHSV), a ferry-based logistics catamaran ... which is not considered combat survivable, but designed for high-speed insertion of troops.”¹³ This ship could not only bring troops to the battlefield, but also support them logistically from the sea. The US Army not wanting to step on the USMC toes with amphibious type operations, ownership of the JHSV was transferred to the Navy in May 2011.¹⁴

The USN sees seabasing mostly as a base in support of ground operations already underway, but this would assume that the forces were able to be inserted from traditional method, such as air or ground transportation, but the USMC also perceives seabasing differently. The assumptions for the Marines is that the forces will need to be inserted, then supported, which is more in line with the concept of the JHSV already acquired. The USMC therefore tried to take a more hands on approach to seabasing and trying to guide decisions directly through the Secretary of Defence, pushing for more acquisitions and exercises of the insertion and support concept of operations.¹⁵

¹² C.H. Douglass, “*Future Seabasing Technology Analysis: Logistics Command and Control.*” 15.

¹³ Sam Tangredi, “*Sea Basing: Concept, issues, and recommendations.*” 36.

¹⁴ Ibid.

¹⁵ Ibid, 34.

But even with all this push since 2011, the progress is not where the USMC would like to see it.¹⁶ Acquisitions were made, doctrine was modified, but practicing the actual insertion and seabasing is not moving along as it should be. Some exercises were planned over the years, but once come time to execute, the leadership of both the USN and USMC see significant risks in these operations and often postpone the training serial, reduce the scale of the exercise, or cancel the activity altogether. The doctrine state that these operations could be executed in an environment of up to mid sea state three¹⁷, but many exercises are cancelled if the sea state is not at level 1, or even zero in some cases. As a result, seabasing and insertion practices with the newly acquired equipment are rarely executed.¹⁸

It can therefore be said that even with all the proper equipment and doctrine in place, even a first class navy such as the USN cannot completely support seabasing. They would probably do it should they be required to, but as this concept is fairly new and not well practiced, commanders are reluctant to use this capacity to the fullest extent.

What has Canada done toward Seabasing?

As mentioned earlier in this essay, the RCN has done some basic seabasing techniques since the 1960s when they acquired the PROTECTEUR class oil tanker ships. These vessels were used mostly for fuel replenishment underway, as well as foods and supply transfers to combatant ships as required within a TG, but there is no history within Canada of logistically supporting combat ground operations from the sea. The only exception to supporting shore mission is when the RCN is called to support areas affected by natural disaster, such as when Her

¹⁶ Robert A. Fairley. "Seabasing Integration." Marine Corps Gazette, August 2018, p.73.

¹⁷ Sea state is a commonly referred to scale indicating the general condition of the sea surface. Sea state 3 for example represent winds of 7-10 knots with wakes between 0.5-1 meter. Sea state 1 would see winds of 1-3 knots with wakes between 0-0.2m. Sea state 0 would have winds less than 1 knot and no wakes.

¹⁸ Robert A. Fairley. "Seabasing Integration", 73.

Majesty Canadian Ship (HMCS) Halifax and Athabaskan were quickly dispatched out of Halifax to support Haiti when the island was devastated by a massive earthquake in 2010.¹⁹ These ships acted as a sea base for the mission, delivering goods and supply to the citizens of Haiti by utilizing the Sea King helicopter to complete transfers from the ships. Unfortunately, these two vessels are combatants and were not able to carry a lot of relief goods onboard, making it a fairly weak sea base, but the intent and methodology was present.

With the decommissioning of HMCS PROTECTEUR and PRESERVER in 2015²⁰ and 2016²¹ respectively, the RCN capability to even accomplish small scale seabasing has been significantly reduced. When required to do long transits, Canadian ships had to rely on foreign navy refueling capabilities, or simply plan enough port visits along the way to replenish fuel and supplies as required. This situation has been somewhat mitigated with the implementation of Project Resolve in 2015, which saw Federal Fleet Services signing a contract to provide a replenishment vessel to support the RCN Fleet, partly crewed with civilian personnel, to cover the gap created between the decommissioning of the PROTECTEUR class vessel and the arrival of the new Joint Support Ship (JSS).²² MV ASTERIX, the vessel provided through this contract, can definitely help the RCN support some seabasing, but as it is only contract based for the moment, it cannot be counted on as a future sea base of the Canadian Fleet.

Even though this history shows only basic seabasing practices, this essay will now try to demonstrate if the Canadian doctrine has been preparing the RCN for a future which could

¹⁹Campbell Clark and Gloria Galloway, "Canada rushes aid to Haiti." Last accessed 18 April 2019 at <https://www.theglobeandmail.com/news/politics/canada-rushes-aid-to-haiti/article4303301/>.

²⁰ Canada, Department of National Defence, "HMCS PROTECTEUR." Last accessed 18 April 2019 at <https://www.canada.ca/en/navy/services/history/ships-histories/protecteur.html>.

²¹ Canada, Department of National Defence, "HMCS PRESERVER." Last accessed 18 April 2019 at <https://www.canada.ca/en/navy/services/history/ships-histories/preserver.html>.

²² Joetey Attariwala, "MV ASTERIX." Last accessed 18 April 2019 at http://www.canadiandefencereview.com/Featured_content?blog/126.

include seabasing as a new practice. The analysis will start with the last 2 Canadian Defence policies, followed by an examination of the latest RCN long range vision included in the document entitled Leadmark 2050.

If we look at the second latest Canadian Defence policy, titled “Canada First Defence Strategy”, released in 2008, there was no mention whatsoever about anything remotely close to seabasing. It mentions about naval operations, but there was no real detail into the specificities of naval operations.²³ To be fair, that policy was only 22 pages long, in comparison to the latest policy which is 113 pages long.

The latest Defence policy, titled “Strong, Secure, Engaged” (SSE), being a much more detailed document, provides some guidance to the RCN. It first states the needs to be able to sustain and operate concurrently 2 TG composed of up to four combatant ships and a JSS.²⁴ In other words, the RCN needs to have the ability to operate 2 small basic sea bases at all times, which is a step ahead of what we have been able to do in the past. The last time the RCN was able to deploy a TG supported by a JSS on a major deployment was in 2008, in support of OP ALTAIR, when HMCS PROTECTEUR, CALGARY and IROQUOIS were deployed in the Persian Gulf, and it did not support any ground forces, only the naval aspect.²⁵

SSE also states the need to support various types of missions, including “rapid provision of humanitarian assistance and disaster relief to those in need.”²⁶ As discussed earlier in this

²³ Canada, Department of National Defence, “Canada First Defence Strategy.” Last accessed 19 April 2019 at <https://www.canada.ca/en/department-national-defence/corporate/policies-standards/canada-first-defence-strategy-complete-document.html>.

²⁴ Canada, Department of National Defence, “Strong, Secure, Engaged.” 2017. Ottawa, Ontario: Minister of National Defence: 34.

²⁵ Canada, Department of National Defence, “Operation Altair.” Last accessed 19 April 2019 at <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/operation-altair.html>.

²⁶ Department of National Defence, “Strong, Secure, Engaged.” 34.

essay, these types of deployments require the establishment of at least one small sea base to be able to transfer goods and supplies required to the affected communities. It can be done with a frigate and destroyer as it was proven during OP HESTIA in Haiti²⁷, but would be much more successful with a proper sea base, such as a JSS.

The most important citation from this policy regarding seabasing is the following: “Canada’s naval forces will also be positioned to contribute meaningfully to joint action ashore and support the sustainment of joint operations from sea, while preserving the ability to defend its own freedom of action through naval combat operations.”²⁸ This is the first and only location found where the RCN was given the task to support and sustain shore operations from the sea, the true definition of seabasing. It is also stated on the following page of the policy that the Canadian Army needs to be ready to operate in collaboration with the RCN, but there are not enough details to see the level of cooperation expected between the two elements of the Canadian Armed Forces.

So even though there is a clear guidance to support shore operations from the sea, there are not enough details for the RCN and the Canadian Army to start moving ahead with exercises that could prepare them for this eventuality. The other issue is the lack of assets at the moment. SSE specifies that two JSS will be acquired²⁹, but there is no detail as to the effective date of this procurement, or the full capabilities of those vessels in support of seabasing.

The next policy that will be analyzed is more specific to the RCN, titled “Canada in a New Maritime World: Leadmark 2050,” and aim at providing a vision for the future of the

²⁷ Canada, Department of National Defence, “Operation HESTIA.” Last accessed 19 April 2019 at <https://www.canada.ca/en/department-national-defence/services/operations/military-operations/recently-completed/operation-hestia.html>.

²⁸ Department of National Defence, “Strong, Secure, Engaged.” 35.

²⁹ Ibid.

RCN.³⁰ It is important to note that this document was produced and released by the RCN, for the RCN. It does not control the procurement aspect through Treasury Board, nor does it control sustainment doctrine for the Canadian Army or the Royal Canadian Air Force. As a result, some notions might be great concepts for the RCN, but ultimately unachievable for years to come if the procurement process of major vessels is not completed, or if ground operations are not adapting their sustainment process to align with the RCN vision.

The first major section of this policy is titled “Projecting National Power” and is subdivided into multiple categories. One of those is named “Maritime Actions from the Sea,” and aims at providing guidance on support to Canadian Army and Special Operations Forces on their ground mission, being combat or humanitarian relief tasks.³¹ It can therefore be inferred that the RCN is fully dedicated to moving ahead with total seabasing in the future.

The only issue here is the fact that even though it highlights quite a bit of details of how these missions need to be supported, it does not take into account the fact that the vessels to support such level of sustainment are not currently available in the RCN arsenal. The document later discusses the acquisition of the Queenston-class JSS, but there is no exact date as to when this future asset will be acquired. It is also not clearly identified if that would be the vessel that is intended to support full seabasing in the future, but most readers would be able to make this assumption.

It can therefore be assumed after reviewing SSE and Leadmark 2050 that the Department of National Defence (DND), more specifically the RCN, are willing to move forward and capitalize on the advantages of seabasing. There is still a long way to go before a ground

³⁰ Canada, Department of National Defence, “Canada in a New Maritime World: Leadmark 2050.” 2016. Ottawa, Ontario: Commander Royal Canadian Navy.

³¹ Ibid, 31-32.

operation is completely supported by the RCN from the sea, to include the time it will take to acquire new JSS, but it remains an objective to work toward.

How can the RCN support seabasing operations?

The previous section of this essay just highlighted that Canada and the DND would like to move forward with ground operations supported from a sea base. It might not become the norm for every mission, but this option needs to be available. On the other hand, we currently have a fleet being revitalized with Arctic Offshore Patrol Ships (AOPS) just starting to come into service and JSS at the beginning stage of production. This following section will therefore see how much seabasing could be done, from now until all new ships are introduced into the Fleet.

If we were to start seabasing tomorrow, the only vessel we have available is the MV ASTERIX, which is not a warship, but still provide a definite replenishment capacity. It proved that it can support naval operations, as was demonstrated during RIMPAC 2018, but it could also support a potential ground operation. With space for a maximum of 38 sea containers, including up to 20 which could be refrigerated and 18 which could carry hazardous goods, such as ammunitions. There are also spaces on the ship that can carry vehicles such as LAVs trucks and other light vehicles.³²

It could therefore definitely sustain ground operations with all this space and capabilities, but there are still some limiting factors that could impact that support. The first of those restrictions is that it is a commercial ship adapted for RCN use, it is not a warship. As a result, it cannot go into war zone; it needs to stay a certain distance away from conflict area, which would have to be determined on a case by case basis. The other restriction is the aircraft holding

³² Joetey Attariwala, "MV ASTERIX." Last accessed 18 April 2019 at http://www.canadiandefencereview.com/Featured_content?blog/126.

capability. At the moment, the only helicopters that have landed on this vessel are cyclone and other small helicopter from other nations. Chinook are supposed to be able to land on ASTERIX flight deck, but it has not been certified yet and such an aircraft would be required to be able to carry LAVs and other heavy items to the battlefield.³³

Last but not least, there is only one ASTERIX to support the entire fleet. The capacity is therefore pretty limited, and the RCN can definitely not support two TG concurrently as per SSE's requirements. It can therefore be stated that if required, we could support seabasing to the fullest extent, but there are many restrictions and the RCN would need a lot of time to get all assets in place due to the availability of only one replenishment ship.

The next ship in line to join the Fleet is the AOPS, with Harry DeWolf already in the water for sea trials.³⁴ Even though not built as a future sea base platform, it definitely has some capacities that could be used for small scale seabasing. The vessel has a landing craft, as well as vehicle bays that have been built to carry pickup trucks, ATVs and snowmobiles³⁵, all items the army operators could need to support their mission. Not only can it carry this equipment, it also has accommodations for army troops to come onboard and storage for up to 6 sea cans.³⁶

So even though those ships are being built for Arctic operations, they could really support operations anywhere around the world, including acting as a small sea base to provide goods to some deployments ashore. It could also be used as a small sea base in the Arctic to support other

³³ Ibid.

³⁴ Canada, Department of National Defence, "Future HMCS Harry DeWolf launches." Last accessed 19 April 2019 at <http://www.navy-marine.forces.gc.ca/en/news-operations/news-view.page?doc=future-hmcs-harry-dewolf-launches/jmc3wpez>.

³⁵ Canada, Department of National Defence, "Arctic and offshore Patrol ship project." Last accessed 19 April 2019 at <http://www.navy-marine.forces.gc.ca/en/fleet-units/aops-home.page>.

³⁶ Darlene Blakeley, "New ships prepare RCN for expanded Arctic Operations." Last accessed 19 April 2019 at <http://www.navy-marine.forces.gc.ca/en/news-crowsnest/crowsnest-view.page?doc=new-ships-prepare-rcn-for-expanded-arctic-operations/iubr9v8>.

vessels that could be operating in the North as there are no port for RCN vessels to resupply at the moment. This vessel will therefore become another sea base option shortly.

The last ships to join the fleet that can support seabasing is the Queenston-class JSS. The primary purpose of this ship is “core replenishment, limited sealift capabilities, and support to operations ashore,”³⁷ so it will become the main seabasing asset for the RCN when it is brought to service as one of its main capabilities is support to shore missions, something no other Canadian warship was ever built for. Even though it is providing this new capability, the same article later stated that it will only be “capable of delivering a limited amount of cargo ashore,”³⁸ but it still is more than what the RCN was ever able to do in the past.

These two new vessels will be able to support the concurrency of operations requested from SSE, by sustaining two TG, while possibly supporting a ground mission somewhere around the world with their ability to carry up to 32 sea containers and a helicopter embarked for delivery of the goods.^{39,40} Again, this would not be replacing the entire shore support, but could be a great supplement to the JTFSC concept.

Additional platforms would be required to support full scale seabasing, but the National Ship building strategy does not have this type of platform in the foreseeable future, with more than enough projects to manage at the moment. Even when the Commander of the Royal Canadian Navy was asked about the platforms to be procured following the new JSS, the answer was simply that the RCN need to enjoy these new platforms as this is a future project that we are

³⁷ Canada, Department of National Defence, “Joint Support Ships.” Last accessed 20 April 2019 at <http://www.navy-marine.forces.gc.ca/en/fleet-units/jss-home.page>

³⁸ Ibid.

³⁹ Verdict Media Ltd, “Berlin Class Vessel Auxiliary Fleet,” Last accessed 20 April 2019 at <https://www.naval-technology.com/projects/berlin-class-fleet-auxiliary-vessels/>.

⁴⁰ This latest reference was used to find the sea containers capacity onboard this class of vessel as the Canadian reference material does not specify that capacity yet. This is the ship plan the RCN have agreed to build.

not ready to tackle yet.⁴¹ It therefore confirms that seabasing ships are not in the navy of tomorrow for Canada.

This section of the essay therefore demonstrated that the RCN, once they took delivery of all their new ships could support seabasing to the full extent, but with limited sustainability. The number of ships and their cargo capability will be of concern. Supporting a TG will be more than plausible, but completely sustaining a ground mission seems near impossible. There is always the option of asking for help from the USN JHSV, but this is not a guarantee and it has been illustrated that their program is not working seamlessly yet either.

As a result, this essay can only establish that the RCN can support basic seabasing for naval TG, possibly even concurrently depending on the availability of platforms, but supporting ground operations is a stretch that probably can't be reached.

Conclusion

Seabasing is a great concept if a country fears they will not have options for setting a shore base to support their overseas operations. It is a model that can work really well, but it requires a significant financial investment and modifications to the doctrine.

The USN has moved ahead with seabasing, but even with the acquired new platforms and modified doctrine, they are still not using sea bases to their full potential, shown during exercises.

The DND started including seabasing in their policy as this is where some other countries are going, especially our biggest allies to the South. Unfortunately, these small inclusions to the

⁴¹ RAdm R. Lloyd, "Your Royal Canadian Navy Today." Presented at Canadian Forces College 11 April 2019.

Canadian policies do not come with the financial authorities to procure more adapted seabasing platforms to get the CAF to the point where they could completely sustain a ground combat operation from the sea alone, but simply a TG at sea.

The JTFSC concept from shore is currently effective for the CAF's missions. Canada's relations with countries around the areas of the world where they were involved in conflict are willing to support and let them utilize shore infrastructure to support their forces. As a result, Canada's minimal involvement in seabasing is currently acceptable and they can keep relying on the JTFSC concept, based on the NATO doctrine.

If the CAF decides to move further ahead with seabasing, future research project would need to be completed to investigate where the doctrine should go and if the future planned conflict could require this concept or not, avoiding a lot of expense for the government if we don't see a need for it in future conflicts.

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