# U.S. Marines and NATO's Northern Flank

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#### **Abstract**

The U.S. Department of the Navy released A Strategic Blueprint for the Arctic on 5 January 2021. The Navy is focused on preparing for an Alaskan and "Blue" Arctic. Recognizing the changing landscape of the Arctic, the US Navy seeks to maintain a competitive edge, freedom of the seas, and deterrent effect. For the Marine Corps, both the 2021 document and the previous Advantage at Sea: Prevailing with Integrated All-Domain Naval Power, highlight the Marines' mission to assist the Navy in sea control and sea denial. These strategic documents reflect the direction both the Navy and Marine Corps are taking to better engage in the Arctic, and, therefore on NATO's northern flank and elsewhere in the world. The Marine Corps' new concept for warfighting, represented in The Tentative Manual for Expeditionary Advanced Base Operations (EABO) presumes that Marines are a "stand-in" force, i.e., they are already in areas within an adversary's weapon's engagement zone (WEZ). However, this is not the case on NATO's northern flank, where Marines conduct training with NATO and under bilateral agreements. In order to better understand how these new concepts and strategic documents influence the USMC's engagement on NATO's northern flank, it is important to relate them to the overall strategic context in this region, as well as the possible gaps that exist down to include operational and some tactical levels implications.

**Keywords:** EABO, US Arctic Strategy, USMC, NATO's Northern Flank, Force Design 2030

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In October and November 2018, the U.S. Marine Corps' 24th Marine Expeditionary Unit (MEU) participated in the NATO exercise Trident Juncture, the largest NATO exercise since 2002. Along with NATO allies, the Marines conducted an amphibious landing and air assault in Norway. At that time, Marines brought M1A1 Abrams tanks and a number of vehicles and equipment that they no longer have. Heavy tanks, while definitely having difficulties in cold weather operations, also have a distinct advantage. They can create roadways where there previously were not any. Tracked vehicles, crunching down and packing the snow, can traverse over thickly frozen lakes or terrain that the snow flattened out where it would be hillier and more difficult to negotiate in warmer weather. However, this traditional framework is no longer a reality for the Marine Corps. General David H. Berger, the 38th Commandant of the Marine Corps since 11 July 2019, has signed a new Force Design 2030 (FD 2030) and issued his Commandant's Planning Guidance (CPG). He is moving the Marine Corps away from being heavier, with tanks, toward "presenting a light posture, sustaining themselves in an austere setting, and protecting themselves from detection and targeting" with a "diminished reliance on fixed bases and easily targetable infrastructure." He envisions the Marine Corps becoming a lighter reconnaissance/counter reconnaissance force. Doing so has altered the Marines' capabilities and what NATO can expect of them on their northern flank. The Marine Corps' Force Design 2030 and Expeditionary Advanced Base Operations (EABO) concept are Indo-Pacific focused and, therefore, create some inconsistencies when evaluated alongside the strategic context of NATO's northern flank and US strategic documents. This in turn has operational and capability implications for how the Marine Corps will operate with NATO on their northern flank.2

Methodologically, for a study on the Marine Corps' shift toward a new concept and its implications for NATO's northern flank, it is vitally important that such a work evaluate the Service's new conceptual documents alongside the Department of the Navy's Arctic policy and the United States' other strategic texts. Additionally, it is valuable to understand not only the context of strategic competition and regional concerns that might draw the United States, specifically the Marine Corps, into a conflict on NATO's northern flank, but also the assumptions that these documents express for a possible intervention.<sup>3</sup> The current study applies a qualitative approach to these documents along with personal experience that some of the authors' gained from military exercises in Northern Norway. Since the focus is on the Marine Corps' concepts within a national strategic context and the possible implications therein, the current evaluation will naturally flow from the strategic level to operational, and even tactical, concerns. While the authors will focus on the Marine Corps and NATO's northern flank, the analysis will be put on the larger, strategic context of global great power competition. Additionally, the authors' intent is not to propose solutions to problems, but to highlight some important inconsistencies when a US

military service's operational concept for one region of the world is laid on top of an entirely different region.

## **Strategic Competition**

As a global power, the United States faces the challenge of preparing for competition and possible conflict all across the globe. This dilemma creates tensions within the American armed forces regarding how to create concepts, train, and equip themselves to meet the nation's needs across a range of military operations and geographic environments, Recently, the United States has acknowledged the importance of the Arctic, an area of American neglect for the past few decades. The U.S. Department of the Navy released A Strategic Blueprint for the Arctic on 5 January 2021. The Navy is focused on preparing for an Alaskan and "Blue Arctic." Recognizing the changing landscape of the Arctic, the US Navy seeks to maintain a competitive edge, freedom of the seas, and deterrent effect. For the Marine Corps, both the 2021 document and the previous Advantage at Sea: Prevailing with Integrated All-Domain Naval Power of December 2020, highlight the Marines' mission to assist the Navy in sea control and sea denial.<sup>5</sup> These strategic documents reflect the direction both the Navy and Marine Corps are taking to better engage in the Arctic, as well as elsewhere in the world. There is a disparity, however, in the national strategic recognition of the Arctic as a region of concern, which the two naval strategies highlight, along with a rising China and emerging Marine Corps concepts geared more toward the Indo-Pacific than NATO's northern flank.

On a national strategic level, President Joseph Biden released his *Interim National Security Strategic Guidance* in March 2021. Continuing with American global assessments from previous administrations, he identifies "a world of rising nationalism, receding democracy, growing rivalry with China, Russia, and other authoritarian states, and a technological revolution that is reshaping every aspect of our lives." Although he released his strategic guidance in March and the Navy published their documents on the Arctic in December and January, a thread of commonality is apparent in all of them. The United States perceives China as a major global threat. They have the economic reach and are continually growing their military power. Russia is also a threat, certainly with cyber intrusions, but also with military activity along its border regions in the Arctic as elsewhere. The Navy's *Advantage at Sea* commences: "Since the beginning of the 21st century, our three Sea Services have watched with alarm the growing naval power of the People's Republic of China and the increasingly aggressive behavior of the Russian Federation."

For the most part, though, America's focus is on China more than it is on Russia in the Arctic. This perception of China as the larger threat contextualizes American military concepts. In regards to China, *Advantage at Sea* decries China's "strategy

and revisionist approach that aims at the heart of the United States' maritime power. It seeks to corrode international maritime governance, deny access to traditional logistical hubs, inhibit freedom of the seas, control use of key chokepoints, deter our engagement in regional disputes, and displace the United States as the preferred partner in countries around the world." To achieve this, China relies upon a "multilayered fleet that includes the People's Liberation Army Navy, the China Coast Guard, and the People's Armed Forces Maritime Militia—naval auxiliaries disguised as civilian vessels—to subvert other nations' sovereignty and enforce unlawful claims." The US Navy perceives that this strategy, along with the fact that the American Navy is dispersed across the globe, puts China at a numerical advantage. "China is the only rival with the combined economic and military potential to present a long-term, comprehensive challenge to the United States." Thus, this focus on China influences why US strategic documents are usually more concerned with the Indo-Pacific than the Arctic.

Compounding the challenges that China poses, Russian capabilities create a defense of a multi-domain network coupled with possible threats of cyber or intercontinental ballistic missile strikes anywhere in the world. Just as importantly, Russia is the largest Arctic nation and views much of the Arctic as falling within their regional sphere of influence and control. Cognizant that the international community, especially other Arctic nations, disagrees with their ambitions to exert their influence, they have done so in non-military ways. Another major concern, though, is that it is assumed that China and Russia, in case of a "hot war," "(would) likely attempt to seize territory before the United States and its allies can mount an effective response—leading to a *fait accompli*." All of these assumptions raise questions about how the US Navy and, specifically, the Marine Corps will work with NATO on their northern flank to counter potential hostile aggression. <sup>13</sup>

American military personnel might be quick to see a Chinese-Russian "alliance" in the Arctic, since they might have overlapping interests in opposing the democratic West. This represents one the greatest threats: two adversaries joining together against the US. Yet, their fears of such a possibility should not override a more likely complicated relationship between the two.<sup>14</sup> It is easy for the military, in seeking to identify future threats and prepare for them, to see linkages between China and Russia as two nations that have more aggressively worked to undermine the unipolar status-quo of the United States in the 21<sup>st</sup> century. However, military leaders and policy makers should remain wary of simplified narratives that put these two nations in tandem with each other, as Cold War thinkers in the West did prior to their recognition of a Sino-Soviet split in the 1960s. Both nations currently seek to undermine US influence to the benefit of their own, however, the benefits they pursue are for their own national interests, even at the expense of the other. The two are wary of each other's ambitions.<sup>15</sup>

Regardless, the United States does view both Russia and China as the two most likely to create conflict in the future. Thus, to assist the United States with both

deterring China and Russia while also assuring allies and partners, as it pertains specifically to the Arctic, the Strategic Blueprint for the Arctic states that "without sustained American presence and partnerships in the Arctic Region, peace and prosperity will be increasingly challenged by Russia and China, whose interests and values differ dramatically from ours." <sup>16</sup>

We cannot cede influence in areas of emerging day-to-day competition, including U.S. regional waters and the Arctic. The coming decades will bring changes to the Arctic region that will have a significant impact on the global economy, given its abundance of natural resources and strategic location. China views this region as a critical link in their One Belt One Road initiative. Arctic nations are reopening old bases, moving forces, and reinvigorating regional exercises. These trends will persist in the decades ahead. We must continue to operate forward and posture our forces appropriately.<sup>17</sup>

Yet, "Arctic military operations in thrall to geopolitical competition are attended by risks of accidental close encounters, misinterpretations of intentions, and miscalculations in responses to perceived provocation." Arctic nations are not only concerned about their own national interests and competition among their neighbors, but that rising Great Power competition that declined after the Cold War will once again complicate their pursuits for a middle, less confrontational path. Thus, it is important to better understand the interplay of strategic competition that exists on NATO's northern flank, as well as how all of this external competition among the US, China, and Russia could influence and create a disconnect in military strategy and emerging concepts for a region of the globe that the US Marine Corps may need to engage with. <sup>19</sup>

Arctic scholar P. Whitney Lackenbauer argues that security concerns "in" the Arctic are separate from threats from outside "to" the Arctic or where Great Powers use the Arctic as a way "through" to adversaries. 20 Lackenbauer raises an important distinction that applies to how the United States' policies, which influence the Department of the Navy's strategic documents, fit within the regional Arctic context.21 The U.S. Department of the Navy's Blue Arctic strategy has emerged to counter Russia's resurging military presence within its national borders in the Arctic. Deterrence, Lackenbauer explains, is an international aspect to and through the Arctic, not necessarily originating in the Arctic.<sup>22</sup> Certainly, with the melting ice opening up new transit routes through the Arctic, as well as making resources more accessible, there will be competition and interstate tensions, however, that does not immediately translate into threats of conventional war, as issues of sovereignty are almost completely solved, and the UN Convention of the Law of the Sea is generally accepted, and adhered to, as a regulatory framework at sea. In this sense, and Ernie Regehr agrees, most Arctic states do not foresee such state-on-state violence erupting anytime soon. However, the strategic competition that is emerging elsewhere can influence the Arctic.

US/NATO Barents Sea patrols to hold Russian submarines carrying strategic-range nuclear-armed missiles (SSBNs) at risk, while gaining no military advantage from threatening second-strike deterrent forces, prompt Russia to intensify its defence of the Barents Sea bastion. That in turn leads the US and NATO to interpret those bolstered defences as adding to Russia's capacity to project power into the North Atlantic, generating the inevitable push back – an arms race. <sup>23</sup>

It is a classic security dilemma. Mathieu Boulègue, research fellow with the Russia and Eurasia Programme at Chatham House in the UK, states that for Russia, "it would aim to push any conflict away from the region toward SLOC (Sea Line of Communication) in the North Atlantic and towards the Baltic Sea. The goal would be to [...] establish perimeter control for protection of the Kola Peninsula."24 However, some scholars argue that Arctic states, so far, have found ways to cooperate and largely avoid tit-for-tat escalations in response to Russian moves in Crimea and Ukraine. The biggest issue for security cooperation was the decision of NATO allies to discontinue the Northern Chiefs of Defence Conference and the Arctic Security Forces Roundtable after Russian moves to annex Crimea in 2014.<sup>25</sup> However, other initiatives, including the Arctic Council, which does not address specific security concerns, remain. Plus, states like Norway, continue to find ways to cooperate with Russia while also condemning that state's actions in Ukraine and elsewhere.<sup>26</sup> This shows that options still remain available for cooperation among strategic competitors even while there is an ongoing discussion about how to discourage unacceptable behavior.27

Yet, outside observers, especially those within the national security realm, also see Russia reviving its Cold War Arctic military bases, as well as building new ones. American withdrawals, such as "the departure of US troops from the Keflavik Naval Air Station in Iceland in 2006," and lower engagement in the region, especially as the US focuses more on the Indo-Pacific, has created opportunities for Russia, which sees itself in a position of strength in the Arctic, for the time being. Additionally, the old Cold War scenario of Russian SSBNs disappearing into the Arctic, along with the renewed Russian threat to conduct a sea denial campaign in the Greenland, Iceland, United Kingdom gap (GIUK), which is the vital sea lane between North America, Britain, and Northern Europe have created concerns among NATO and Arctic nations. This is the strategic context of NATO's northern flank that the US Navy and Marine Corps are preparing to engage in. Regardless of whether strategic competition is interfering with status-quo Arctic relationships, NATO members' and partners' militaries on their northern flank are legitimately concerned about being prepared for all possible scenarios where military power might come into play. Even though the U.S. Marine Corps is specifically concerned about its role in the Indo-Pacific, its concepts for operating in that region will also comprise the foundation for the Marines' activity elsewhere, such as on NATO's northern flank.<sup>28</sup>

#### **Service Concept and Operations**

The Marine Corps' new concept for warfighting is presented in the *Tentative Manual* for Expeditionary Advanced Base Operations (EABO) that they issued in February 2021. The manual defines EABO as "a form of expeditionary warfare that involves the employment of mobile, low-signature, persistent, and relatively easy to maintain and sustain naval expeditionary forces from a series of austere, temporary locations ashore or inshore within a contested or potentially contested maritime area in order to conduct sea denial, support sea control, or enable fleet sustainment." Much like the Marine Corps after the First World War, as the Tentative Manual acknowledges, the Marine Corps is attempting to move away from acting like another land army and get back to its "naval roots." However, EABO also recognizes that in modern wars of the 21st century, high-tech adversaries have capabilities to identify targets through cyber and space assets. Thus, to remain survivable on the modern battlefield means that it is beneficial to maintain a low-signature. The EABO concept also encourages the disbursing of small Marine units, in distributed operations, among the hundreds of islands in the Western Pacific, within China's weapon engagement zone (WEZ), where there is little to no infrastructure. Hence, the concept's focus on "austere" environments. The idea is that these smaller, lighter Marine units will hop around the various islands in the Pacific, making it more difficult for an adversary to spot them and target their positions, while they, in turn, threaten the weapons systems that would potentially stop US and coalition forces from entering the region. In this way, the Marines that are already stationed and operating within China's WEZ will act as a "stand-in" force.29

One of the issues with the direction that EABO is taking the Marine Corps is that it is geared heavily toward the Indo-Pacific theater of operations. As the Tentative Manual expresses, "Rather than a force designed to fight its way into a contested area, the Marine Corps is building a force capable of persisting and operating forward as a critical component of a naval campaign." This presumes that Marines are already acting as a "stand-in" force, i.e. they are already in areas within an adversary's WEZ. Part of the EABO concept is that having these low-signature units conducting distributed operations, disbursed and constantly in motion, within an adversary's engagement zone would influence that adversary's thinking. These units could help deter them from using their own military capabilities to coerce an American ally or partner. However, there are some areas of the world where Marines are not annually stationed or constantly moving within, such as in the Arctic. While US Marines participate in NATO exercises in and around Norway, they are not permanently stationed there. Geographically, there is much less space among the many islands and land masses in the Arctic for Marines to remain undetected. Odds are more likely that the US would have to respond to an adversary, like Russia, in the Arctic rather than already be within their WEZ. If anything, NATO allies are the stand-in forces, while the US would be traversing the GIUK gap to come to their aid. Such a scenario not only raises the Cold War specter of Russia's bastion defense, it also brings into question the utility of EABO's applicability in the Arctic. Russia's stand-off capabilities, those weapon systems that have a long range, will make it difficult for the US to reach allies who reside within Russia's weapons engagement zone and where there are no preexisting Marine units already conducting EABO.<sup>30</sup>

With EABO's focus on "sea denial, sea control, and fleet sustainment," the Marine Corps is back to emphasizing their requirement to enable the Navy to maneuver and succeed at its maritime mission. The Department of the Navy recognizes that "While US forces remain dominant in open oceans, the A2AD (anti-access/area denial) systems credibly threaten vessels in close and confined seas relatively near to adversary territory." Thus, the Marine Corps' EABO concept argues that the battle space on the coasts, straits, littorals, and areas characterized by confined spaces for naval ships to maneuver requires an integrated operational approach. The idea is that the lighter, faster, less easily detectable Marine Corps will conduct "expeditionary warfare." They will insert themselves under an adversary's WEZ and open their own A2AD umbrella to clear a space where naval ships and follow-on forces can transit. 32



Ranges of US and Russian combat aircraft in the Arctic.33

Force Design 2030 expounds upon the concepts that EABO introduces. General Berger released Force Design 2030 in March 2020. In it, he argues that the Marine Corps' force design has remained unchanged since the 1950s. General Berger lays out his plans to create a lighter, more agile Marine Corps. To do so, he initiated the "divestment" or removal of three infantry battalions, tanks, three heavy helicopter squadrons, three medium-lift tiltrotor squadrons, two light attack helicopter squadrons, two anti-aircraft companies, three law enforcement battalions, the Marine Wing Support Groups, three bridging companies, and more. All of this was to make space in the Marine Corps budget for adding additional rocket artillery batteries, unmanned aerial systems (UAS), redesigning the infantry battalions and Marine Expeditionary Unit (MEU), increasing light armored reconnaissance, and more. All of these efforts are geared toward realizing a lighter Marine Corps that can not only disrupt an adversary's A2AD, but also provide vital support for command, control, computers, communications, cyber, intelligence, surveillance, and reconnaissance (C5ISR), and counter C5ISR along with naval support. 35

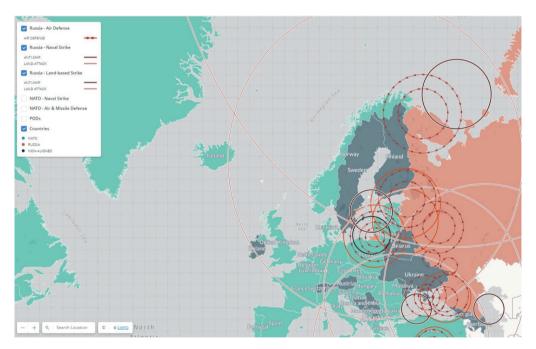
General Berger outlined one of the ways he sees *Force Design 2030* influencing how the Marine Corps can assist the Navy on NATO's northern flank and elsewhere in "Marines Will Help Fight Submarines." As the title suggests, Berger states that "the undersea fight will be so critical in the High North and the western Pacific that the Marine Corps must be part of it." He argues that

With the requisite investments, EABs (expeditionary advanced bases) in Norway could extend ASW coverage into the North, Norwegian, and Barents seas. They could operate unmanned air vehicles equipped with ASW sensors and sonobuoys and deploy and operate passive and active acoustic arrays in adjacent littoral waters. In the event of hostilities, when cued by these organic sensors or other joint ISR capabilities, EABs could harass and potentially neutralize Russian submarines with ground-launched ASW missiles or light torpedoes from Marine aircraft. From operating areas in Norway, Iceland, and Greenland, EABs could support an ASW fence across the Greenland–Iceland–United Kingdom (GIUK) gap, bottling Russian submarines in the Norwegian Sea and keeping them out of the North Atlantic.<sup>37</sup>

This mission fits well within the Commandant of the Marine Corps' vision of how a small, light force consisting of an all-encompassing spectrum of C5ISR capabilities could extend an anti-submarine warfare (ASW) net throughout NATO's northern flank. The assumption here is that Marines will already be in Norway or other portions of the "High North" acting as a stand-in force. If they are not, then they still need to find a way into an adversary's activated WEZ to conduct this anti-submarine mission; hopefully, doing so before those submarines have disbursed under the Polar ice, which was the concern during the Cold War between the US and Soviet Union, as well.<sup>38</sup>

The Commandant recognizes this risk of an adversary's ability, specifically Russia, to disburse submarines into the North Atlantic thereby threatening maritime

movement between Europe and North America. He makes the case that Russia has shown its desire to conduct itself in the gray zone that includes potentially military actions that are difficult to attribute to a state actor and under the threshold of declared war. In this scenario, a politically palatable option may be to establish Marine expeditionary advanced bases in Norway and Iceland, which are "key maritime terrain," to deter and counter Russian decisions to mobilize their submarine fleet out of the Kola Peninsula. There is much to recommend itself with this option, if escalation is slow and Norway, Iceland, or NATO are willing to invite US Marines into their countries, presumably hopping around so the Russians could not easily target them, while tensions with their Russian neighbor increase. However, this option is highly unlikely, at least in Norway. The Norwegian government has had a policy of not hosting foreign military bases on their soil since their decision to join NATO as a founding member in 1949 unless they have "been attacked or subjected to threats of attack." Therefore, it is unlikely that this option would materialize with enough warning prior to a military conflict. Thus, it begs the question: if the US Marines had to enter into an adversary's active WEZ, how would they do so?<sup>39</sup>



Map of Russia's A2AD ranges.40

In the likely event that the Marine Corps is not a stand-in force on NATO's northern flank, they would need to insert themselves under an adversary's active weapons engagement zone. They might do so through a bounding forward approach from North America across the GIUK gap, possibly jumping off from Greenland, pending Denmark's approval. Alternately skipping multi-domain capabilities along the eastern seaboard of North America would be relatively easier, than making the cross Atlantic move right away. An adversary's submarines would threaten any transatlantic movement. However, if Marines were working off the eastern coast of Greenland, they could employ one of the ASW/ASUW Hunter Killer/Pouncer Teams<sup>41</sup> to hold one element of the multi-domain threat at bay. This capability would require the fires control system, Common Weapons Control System (CWCS) for Shore/Ship Based Anti-Surface Warfare (ASuW) & Digital Naval Surface Fire Support (NSFS) Fires, which would link the overall sensor to shooter connection.<sup>42</sup> This close to North America, it is likely that US and Canadian air and surface to air assets would interdict any possible adversary's intrusion into the air space between Greenland, Iceland, and the UK, thus, opening the way for the US Navy and Marine Corps to move forward. Since this area is closer to North America, this scenario assumes that there is a high likelihood that an adversary would be less successful at activating a bastion defense that reaches into the GIUK gap.

An area where difficulties might emerge is between the UK and Norway, depending on how well their own ASW and anti-air capabilities are at countering adversarial moves into the North Atlantic, North Sea, Norwegian Sea, and beyond. Russian A2/AD capabilities extend over parts of Norway and the Norwegian Sea. While Norway has high end capabilities, like its F-35 fighter jets, compared to the Russians, Norway is at a distinct numerical disadvantage. Besides, Norway would be focused on holding off any threat long enough for NATO support to arrive. This would give any aggressor an advantage to extend their A2/AD capabilities, thus threatening NATO forces that would surge to assist Norway. Additionally, this scenario also assumes that there are no threats elsewhere in Europe that would fix or draw NATO assets away from the northern flank. Regardless, how the US Navy and Marine Corps would surge into an active bastion defense on NATO's northern flank, where the multi-domain spaces are contested, requires more study and active exercising. 43

Similarly, if US forces were not present during such a crisis, it would be of paramount importance that US command and control systems, both technically and functionally, are interoperable with their allies' systems to ensure smooth transfer of sensor targeting data to US and other allies' fires systems. The challenge is getting the functional systems to interoperate. Users can negotiate technical alignment, but functionality requires continued integrated systems' development and continued exercises on NATO's northern flank to rehearse this interoperability. The *Tentative Manual for Expeditionary Advanced Base Operations (TM EABO)* states, "Campaigning across the competition continuum also demands more effective and complete naval integration," and later expresses, "an understanding of allied and partner nation goals, capabilities, and capacities plays an integral role in planning for long-term campaigning.<sup>44</sup> Taken together in this context, the 'complete naval

integration' would be larger than just the US Joint force. It is required across allies and partners as well. To make this potential future a reality, future NATO exercises should focus on these capabilities.

Additionally, the US Navy has yet to operationalize their Arctic presence. In an article on West Point's *Modern War Institute*'s website, Ryan Burk and Cameron Carlson, two Arctic scholars, lamented that "the Navy insists that it will 'maintain enhanced presence' in the Arctic. But to maintain presence, let alone an enhanced one, the Navy has to actually *be in the Arctic.*" Rarely does a carrier strike group venture into the Barents Sea. Similarly, the Marine Corps' presence in the Arctic, though much more frequent, is not a permanent one.<sup>45</sup>

### **Operational and Tactical Considerations**

Putting aside questions of how and when US Marines would engage an adversary on NATO's northern flank, operationally, there are two main problems. The first problem is a littoral one. "The U.S. military defines the littoral as consisting of two segments of the 'operational' environment: seaward (the area from the open ocean to the shore that must be controlled to support operations ashore) and landward (the area inland from the shore that can be supported and defended directly from the sea)."46 The Norwegian landward littoral, specifically, creates both opportunities and challenges. This is due to the fact that the terrain further inland from the coast into Norway, especially further south from Finnmark, is mountainous and, along with the fjords, creates several enclosed and semi-enclosed seas that could prove difficult for a littoral force to control. The other problem is the islands that dot the Scandinavian Coast, including Bear Island and the rest of the Svalbard Island archipelago. There are over 250,000 islands, most of which are undeveloped. The USMC Force Design 2030, though focused on the Indo-Pacific, has some applicability for both problems on NATO's northern flank. It conceptualizes a Marine Corps that can deploy to the High North and function in several different ways, though the USMC has not acquired all of the equipment to make this a reality as of vet.

Since the Marine Corps would not likely be present if an adversary were to make a militarily aggressive move on NATO's northern flank, regional partners and allies would comprise the 'stand-in' force while the US Navy and Marine Corps would attempt to either respond quickly or slowly chip away at an active bastion defence to reach the threatened NATO allies. Eventually, they would deploy into the theater of operations the same way they have exercised and responded during any other deployment for training (DFT), theater security cooperation (TSC), contingency plan, or crisis. The actions that such a formation would take would depend on the nature of the crisis or exercise deployed for, which part of the Marine Air Ground Task Force (MAGTF) was deploying and where the MAGTF could enter the theater.<sup>47</sup>

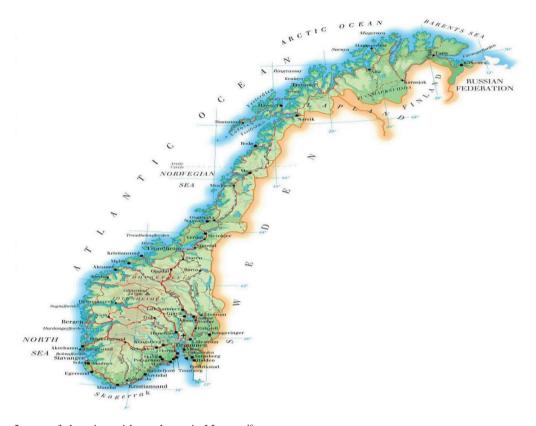


Image of elevation with roadways in Norway<sup>48</sup>

The unique terrain of the Arctic also creates challenges for the USMC and how they would deploy to support NATO's northern flank, as well as the geographic challenges that any force in Norway would confront. Trondheim Fjord is a natural power projecting staging area, even though it is located further south than Norway's Arctic regions. As such, NATO will need to prioritize its protection to enable coalition forces to mass. There are a few key lines of communication (LOCs) entering into Trondheim, including those that allow land forces access to close with an adversary's land-based capabilities to the north. European Route E6 (E6) is the primary south-north LOC, running from western Sweden, through Norway, and ending at Kirkenes, which is very close to the Russian border. This two-lane highway goes through several towns and cities without many bypasses and has several bridges and ferries that link the LOC along its entirety. There are several routes that cross the E6 as it advances north and the Norwegians will likely guard these routes to maintain access to Sweden and Finland.<sup>49</sup>

However, the problems facing Norway and her NATO allies today are not unlike those that existed during the Cold War. Finnmark, the northernmost region of Norway nearest to Russia, is largely open space with little vegetation and, therefore, less cover, offering advantages to echelons of massed Russian forces that could potentially pour over the Norwegian border. In the event this occurred, Norwegians would conduct delaying actions and solidify their main defensive lines further south around the canalizing terrain in the Troms region, adjoining Finnmark to the southwest. During the Cold War "the main area of the defense (of Norway) was made to be Troms (then a county in Northern Norway) where there was much stronger (tougher) terrain south and west of Lyngen Fjord which gave the numerically inferior Norwegian military greater possibility to make a stand until the allies reinforcements could be brought in." <sup>51</sup>

The effects that the terrain in Troms would have on operations is that there are only a few parallel bypass axes of advance that would enable ground forces to conduct operational envelopments or turning movements against an enemy. These terrain related influences are compounded with the Marine Corps Force Design 2030 decision to divest the organization of tracked vehicles. Wheeled vehicles might perform better in the Indo-Pacific, whereas in the Arctic tracked vehicles are a better option for the heavy, hard packed snowy areas. Tracked vehicles are not restricted to roadways. Instead, frozen lakes, wet lands and otherwise obstructive terrain in the summer and spring can become maneuverable opportunities for tracked vehicles. On the one hand, lighter wheeled vehicles alleviate some of the logistical strain that the Marine Corps would have to deal with, which runs counter to EABO and FD 2030. On the other hand, it creates limitations that do not otherwise match-up with the Marine Corps' maneuver warfare ethos.<sup>52</sup> Additionally, the snow is a point of friction that slows down any human progress regarding both mobility and maneuverability. The type of vehicle that a military relies upon both to fight and to logistically sustain itself will influence the tactical and operational situation in regions like the High North.<sup>53</sup>

Since the USMC will be dependent upon a host nation's logistical capacity in the High North, these limitations require that the Marines coordinate with NATO and adjacent nations. Besides the restraints on maneuverability, e.g., if landing with a large force component in the Trondheim Fjord area, the narrowness of E6 restricts the Marines to a single brigade-front for moving along that axis of advance<sup>54</sup> until bypasses or other avenues of approach become available. Another option is for Marine units to bound through Sweden and Finland for large turning maneuvers, however, such a scenario is dependent upon the political and military context of any hostile scenario. Lastly, there is the possibility of using sea-based maneuver, airborne envelopment,<sup>55</sup> turning movement,<sup>56</sup> or fjords as a maneuver space. All of these options, though, would require that naval assets either already exist in the theater of operations or can enter into an active WEZ to do so.

For Norway and NATO, chances are good that they will be defending against an adversary's aggression, rather than the other way around. Thus, NATO forces should be arrayed to defend along the primary LOCs mentioned above, but they should pay special attention to opportunities to deny over snow or land approaches to key positions of advantage, as well as air assaults to seize those positions that dominate cross-compartment danger areas (XCDAs). These light, rapidly moving defensive forces need access to Service, Joint, and Coalition fires required to attrite adversary formations that are attempting to bypass heavily defended areas, thus allowing land forces to dominate the XCDA with long range, strategic level fires. Here, the canalizing effect of the terrain could be an advantage to the defender.

In the offense, to assist with regaining an ally's or partner's national sovereignty, USMC forces organized along the new FD 2030 formations could conduct a rapid advance along the military crests of large XCDA to achieve positions of overwatch for bounding fires capable elements that could destroy the enemy assault formations.<sup>57</sup> The positions of advantage in mountainous warfare are those locations that allow observation of a XCDA without exposing the friendly formation to overt observation as well. In the counter-attack, coalition forces should focus on XCDAs that enclose a Line of Communication (LOC), provide access to a LOC, or house enemy formations that need to be neutralized or destroyed. To achieve a position of advantage on these XCDAs, platoons, companies, and battalions must infiltrate or conduct bounding/traveling overwatch in order to gain high ground that allows them to provide destructive fires throughout the XCDA. 58 As with the military crest, the 'high ground' is relative to the vegetation. Once a unit gains elevation, the tree line fades and concealment is lost. So, the ultimate high ground is ground which offers an increase in observation and the advantage of plunging fire, while allowing those firing the ability to stay low enough using the available vegetation to maintain concealment. However, if the XCDA does not have any vegetation, then speed is of the utmost importance to achieve the high ground, dominate the XCDA with fires, and then flood the area with ground units to overwhelm any enemy remaining in the XCDA or those that may still be influencing it. All of this creates a problem for the Marine Corps, however.<sup>59</sup>

Once they reach the high ground, they must have the long-range firepower capable of dominating that draw or valley and any concentration of forces must be prepared to quickly disperse. Currently, the weapons range within a US Marine battalion does not offer many capabilities for suppressing fires (medium and heavy machine guns with some support from 81mm mortars) and only enables limited killing capability (anti-tank missiles like the Javelin and SABER) that is organic<sup>60</sup> within an infantry battalion. Many valleys in this part of Norway require that a Marine formation get to within five to seven kilometers to observe and destroy enemy targets. When a unit does not organically have the capability to achieve this range, they have to find ways to disaggregate, infiltrate, assemble on positions of advantage (high ground that dominated the XCDA), and then mass their destructive assets within range of the enemy's main battle tanks and infantry fighting vehicles while remaining undetected by sUAS/UAS/armor with visual and thermal optics.<sup>61</sup>

Movement of small groups along multiple dismounted axes, is the primary technique to achieve positions of advantage over an enemy. Those "small groups" must be small enough not to trigger the engagement criteria for the enemy's main battle tanks (MBTs) and artillery units. There must be enough small units that possess anti-tank missiles, which are the longest range weapons in the battalion, as well as Marines/Sailors qualified to call for ground and aviation fires. These small organizations should mass only when required to protect against local counter-attacks or to resupply. Also, EABO conceptualizes how Marine units will be resilient in an austere environment and maintain a low signature. This not only includes Marines relying on low technology usage that an adversary's sensors could pick up, but also counting upon the host nation's infrastructure and support to reduce their dependence on "external sustainment." Doing so will mitigate the need for these small units to mass in order to recuperate and resupply, thus reducing a target of opportunity for the enemy.

General David Berger's updated *Force Design 2030* establishes some guidelines to facilitate these sorts of small group actions. The Commandant seeks to "develop smaller but better-connected formations that organically possess a complete kill chain appropriate to echelon, and that can prevail in a contested operating environment." Even though *FD 2030* is geared toward the Indo-Pacific, the same threats apply to NATO's northern flank. For instance, in a recent exercise in 2021 in Norway, US Marines stealthily occupied key terrain to observe a notional adversary. They then relayed their adversary movements to a Norwegian submarine attempting to navigate the fjords. In this sense, *FD 2030* offers some applicability to the USMC operating in the Arctic. Thus, if the USMC masters the concepts that *FD 2030* proposes, they potentially have a vital mission to fulfill on NATO's northern flank as well.<sup>64</sup>

Additionally, according to *FD 2030*, when Marines deploy forward, it "is about recon and counter-recon executed at the tactical level, with an operational context, with the ability to achieve operational and strategic effects." Thus, the *FD 2030* concepts should facilitate the ability of MAGTF formations to transition between movement, concealment, and fires.<sup>65</sup> Other actions would include seizing Forward Air Refueling Points (FARPs), expeditionary airfields, emplacement and protection of firing platform locations that will assist in the sea denial task of the fleet. Similarly, the recent 2021 exercise in Norway could just as easily have had Marines conducting sea denial, while they simultaneously assisted an Allied submarine. This is one of the ways that General Berger would like the Marine Corps to assist the joint, multi-national forces in a future fight. He envisions Marines operating more stealthily under an enemy's WEZ to not only disrupt their A2/AD, but also to gather and relay vital information.<sup>66</sup>

Along the many westward and northern fjords of northern Norway are many protected seaports that can act as staging areas for operational maneuver 'end runs' along the coast. Because these maneuvers are operational or even tactical in nature,

their reliance on US and NATO dominance of other domains, such as air, land, and cyber, is required. Force Design 2030 conceptualizes how Marine forces would need to have the capability for fires and maneuver so they could conduct an operation such as bounding down the northern coast of Norway. One portion of the design, yet to be realized though, is the Light Amphibious Warship (LAW). From the TM EABO the USMC describes the LAW as "the principal littoral maneuver vessel of the littoral force[...] The range, endurance, and austere access of LAWs enable the littoral force to deliver personnel, equipment, and sustainment across a widely distributed area." The LAW is a much smaller vessel than the traditional amphibious vessels that the USMC currently uses. This vessel would allow the Marine Corps to maintain a reduced signature that will significantly increase the adversary's dilemma of identifying targets.

Other assets would continue to frustrate adversary targeting and with the Service/Joint/Coalition enabled fires that *FD 2030* conceptualizes, they could become even smaller to further frustrate those targeting cycles.<sup>68</sup> One way to continue to shrink and disperse the amphibious maneuver forces through the fjords or enable fjord hopping is through the procurement of Swedish CB90Hs, which are fast-moving assault craft. In 2016, the Navy Expeditionary Combat Command tested and procured six CB90Hs. The US Navy used them inside the Riverine Squadrons One, Two, and Three.<sup>69</sup> Currently, Marine Corps Ospreys, which is a tilt-rotor, vertical take-off aircraft or MV-22, could insert a company of Marines with multi-domain fires. Doing so would extend the protective anti-air umbrella that EABO envisions to assist in peeling back an adversary's weapon's engagement zone.

After acquiring and maintaining control of the air, the coalition forces could bring larger anti-ship capabilities forward. They could then support sea control or sea denial operations, which would then have a strategic impact on the adversary, denying the opportunity of accomplishing a fait accompli, while also creating a space within the enemy's WEZ for further US and NATO advancement. This is a joint and multi-national effort. No single nation or US military service has adequate resources to accomplish this task alone. The potential military scenario that could unfold in the Arctic would have such a high tempo that simplified approaches designating supporting and supported units would require flexibility. The situation would likely change on a daily basis, if not faster, which would create opportunities for NATO forces to create a dilemma for any potential adversary. The USMC envisions utilizing high speed craft that could insert one or two landing forces to provide a platoon sized element that could then continue their infiltration to a key piece of terrain. In this way, the series of fjords, islands, and peninsulas could become a supporting axis of advance that complement the other land forces defending or counter-attacking along the primary LOC, the E6. All of this would add up to operational successes that would achieve the overall strategic objective of rolling back an adversary's potential aggressive advances on NATO's northern flank.

#### Conclusion

While the USMC is currently testing and refining both EABO and FD 2030, there remains a lot of room for improvement. One the one hand, the USMC is moving toward their joint mission with the US Navy to ensure that ships have maneuver space within a highly contested environment with faster, more devastating anti-ship capabilities. In conjunction, since the majority of US aid and supporting requirements still transit via the ocean, Allies, Partners, and the other US Services will be reliant upon the Navy's ability to maintain open shipping lanes. This leads to the Marine Corps' focus on doing just that. On the other hand, much of how the USMC conceptualizes future warfare is set in the context of the Indo-Pacific. Thus, applying EABO to the Arctic certainly presents challenges.

EABO does align with the context of the Arctic in several ways. There are plenty of geographic areas of NATO's northern flank that qualify as austere environments with minimal infrastructure. Additionally, the USMC will need to not only be resilient and survivable, but also maintain a low signature within an adversary's active WEZ. The LAW and potentially the CB90H make the USMC more mobile, enabling them to hop fjords within a theater of operation to frustrate an adversary's ability to target them. Additionally, EABO emphasizes that the USMC is part of a joint Navy-Marine Corps team. Allies and partners in the Arctic will be of the utmost importance, since both Services will rely heavily upon the host nation's support. However, this is also where EABO does not yet account well for some of the realities of how the USMC will potentially operate in the High North.

Since US Marines are not permanently stationed on NATO's northern flank, the odds of them acting as the stand-in force are unlikely. If an adversary can avoid it, they will very likely not take military action while US units are temporarily in the High North. It is more logical for them to plan against the smaller regional forces where they might have better success, probably utilizing surprise, to push their A2/AD capabilities further west to extend it further into the Atlantic. Doing so will allow them to better deter and attrite Allies from the Western Hemisphere coming to the aid of those the adversary moved against. In this scenario, the Navy-Marine Corps team will rely heavily upon those nations, like Norway, to act as the stand-in force to counter those A2/AD capabilities that might forestall US forces from coming to their aid. Additionally, since the GIUK gap offers the most reliable avenue of approach from the US to NATO's northern flank, any adversary can plan accordingly. Also, NATO's northern flank is much more compact than the Indo-Pacific, which makes it more difficult for Marine units to hop around remaining undetected. Regardless, the US Department of the Navy's strategic documents and the Marine Corps' EABO and FD 2030 clearly have strategic, operational, and capability implications for NATO's northern flank.

#### **NOTES**

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- 54. Axis of advance A line of advance assigned for purposes of control; often a road or a group of roads, or a designated series of locations, extending in the direction of the enemy. Found in US Department of Defense, Department of Defense Dictionary of Military and Associated Terms, JP 1-02 (Washington, DC: US Department of Defense, 8 November 2010 (As amended 16 July 2013)), 24.
- 55. Envelopment is an offensive maneuver in which the main attacking force passes around or over the enemy's principal defensive positions to secure objectives in the enemy's rear. During the execution of a single envelopment ..., the enemy's defensive positions may be bypassed using ground, waterborne, or vertical envelopment, compelling the defender to fight on the ground of the attacker's choosing. Found in Headquarters, US Marine Corps, Operations, MCDP 1-0 (Washington, DC: US Marine Corps, 9 August 2011), 9–11.
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