

Coast Guard Cutters Munro and Alex Haley steam alongside while patrolling Gulf of Alaska, July 5, 2025 (U.S. Coast Guard/Samika Lewis)

U.S. Arctic Sea Lines of Communication

The Imperative for a Maritime Complex and Corridor in the Bering Region

By Samuel Krakower and Troy Bouffard

aritime activity has been a constant feature of the world's oceans since the development

of seafaring capabilities. Whether at peace or at war, nations use the oceans to achieve their national strategic objec-

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tives and expand their power projection to the world. The United States is no different, and in the years following World War II, America and its allies enjoyed and continue to enjoy unparalleled access to the maritime domain. Maritime vessels transport millions of tons of cargo daily across the world,

bolstering the global economy and commercial trade. This unprecedented access results not from international harmony but from sustained maritime security efforts. In a world of competition, global maritime security oversees this vital aspect of the world's trade. The maritime domain differs from the other domains in that aspect—the land, air, and space domains remain relatively dormant until activated by conflict and do not require the security needs that the maritime domain does to continue unimpeded activity.

In late 2023, the Red Sea became a focal point in global maritime security, with Houthi forces attacking shipping lanes in the area. The United States produced a swift response; the U.S. Navy launched Operation Prosperity Guardian, bringing together several nations to provide maritime security under Task Force 153's leadership.1 The coalition demonstrated sustained effectiveness throughout its control of the operation, with numerous adversary drones, missiles, and small boats destroyed, establishing protective coverage for commercial traffic to continue maritime commerce.² The operation's success depended significantly on established allied infrastructure in the region. Despite the distance from the United States, the U.S. Navy not only supported but also led the operation to secure continued freedom of navigation in the Red Sea and Gulf of Aden. This article argues that establishing a deep-draft port at Nome, Alaska, is now a strategic necessity for U.S. power projection and crisis response in the Arctic and therefore merits immediate joint action by the Department of War (DOW), the Department of Homeland Security, and Congress.

As Arctic sea ice continues to diminish, increased access will likely result in more presence and activity throughout the Arctic region.³ Such circumstances require proportionate operational capabilities to help manage numerous expected challenges, including emergency situations, disaster response, search and rescue, law enforcement issues, resupply and maintenance needs, and many others. The ability to engage with such issues

in the maritime environment depends greatly on—if not outright requires—proximity to infrastructure support, as the Red Sea crisis clearly shows. Presence, and the ability to be present quickly, in the maritime domain often determines operational success. Whether in port or steaming into an area of operation, distance matters, even more so in difficult maritime environments. For the Arctic, distances and current U.S. operational maritime surface capabilities continue to be a problem in proportion to increasing activity in the region.

The distance from Anchorage to Nome is 1,334 nautical miles, which translates to about 4 days of travel at 14 knots.⁴ The distance from Seattle to Anchorage is 1,428 nautical miles, about 4.25 days of travel at 14 knots. The distance from Seattle to Nome is 2,500 nautical miles, or about 7.5 days of travel at 14 knots.⁵ And Nome itself remains approximately 150 nautical miles south of the Arctic Circle. Anchorage as a sea line of communication (SLOC) remains a challenge given significant

daily tidal change, which requires effective timing, often extending delays to operational presence. While a deepwater port at Nome cannot replace the infrastructure role of homeports, its presence could change the ability to facilitate operational maritime presence. For U.S. Arctic-related national security interests, a deepwater port in Nome would change the Arctic maritime operational calculus by becoming an established SLOC.

Sea Lines of Communication

Alfred Thayer Mahan argued that a nation's ability to project power and safeguard commerce ultimately hinges on assured access to SLOCs—whoever "holds the sea" can decide both the tempo and geography of conflict.⁶ Julian Corbett refined this insight, noting that maritime control is rarely absolute and therefore concentrates on focal areas—narrow passages and logistic nodes where fleeting command can yield decisive advantage.⁷ In the 21st-century Arctic, the Bering Strait and the chokepoint at 75° N along the

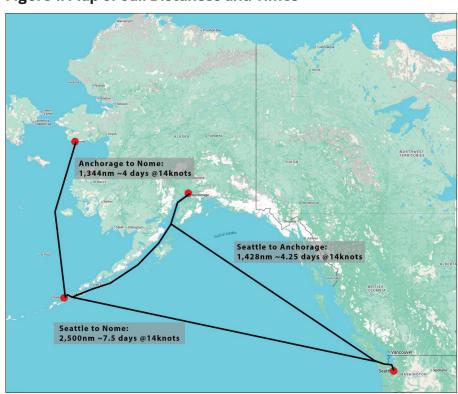


Figure 1. Map of Sail Distances and Times

Source: Authors modified from Google Maps

Northern Sea Route constitute precisely such focal areas: each funnels traffic through a corridor less than 55 nautical miles wide, easing both interdiction and rapid reinforcement. As seasonal ice recedes and Russian "bastion" patrols increase, sustaining American and allied freedom of movement will depend less on nominal blue-water superiority and more on the timely establishment of forward-support nodes that mitigate Arctic time-distance constraints. Taken together, Mahan's call for sustained SLOC access and Corbett's focus on focal-area control underscore that a deep-draft port in the Bering Region is indispensable to closing the Arctic response gap.

Geopolitically, SLOCs play a significant role in the success of nations through trade and freedom of the seas. In peacetime, SLOCs function as the main mode of transporting commerce, with 90 percent of trade moved by sea.8 Nicholas Spykman's America's Strategy in World Politics discusses the importance of SLOCs at length in the perspective of the United States. Written in 1942, the seminal work recognizes that one of the greatest U.S. aspirations in becoming a global superpower was securing control of all oceanic coastal routes and interior lines of communication between the Atlantic and Pacific.9 Achieving this control, the United States and its allies enjoyed significant freedom of navigation through major sea lanes, both commercial and military, in the 20th and 21st centuries, bolstering the global economy and ensuring the continued success of marine transportation. Now, with the Arctic opening, a new sea lane emerges. Changes in transportation routes, and the contests for them, can greatly shift both political and economic power. America now bears a responsibility to protect its new highway emerging in the Bering Strait.

America's History With SLOCs

American naval supremacy emerged definitively during World War II. The United States successfully operationalized Mahanian and Corbettian theories in the Pacific theater, demonstrating their strategic validity. Both the United States and Japan recognized the importance of SLOCs to achieve their strategic goals. Japan needed to sustain its war effort of Pacific expansion, while the United States sought to limit Japan's capability to do so.¹⁰ While major naval battles took place at the Coral Sea, Midway, Guadalcanal, and Leyte Gulf, the United States used its Pacific submarine fleet to effectively blockade Japan. With the relentless American attacks on mainland Japan and its commercial traffic, and the Japanese navy's overextension of its own SLOCs, the Japanese found themselves systematically isolated from their new resources in southeast Asia and with progressively diminishing operational capability to fight the war.11 The submarine campaign is credited with the sinking of 1,178 merchant vessels and 214 naval vessels, leading to over 5.6 million tons of sunk Japanese resources. 12 Japan's goal of a short war was thwarted, and its inability to maintain its overextended SLOCs led to eventual defeat. Thus, the importance of protecting SLOCs became increasingly clear to the United States as well as other countries for future maritime superiority.

The Cold War proved an opportunity for the United States to defend its own SLOCs and attempt to deter the Soviet Union's use of its own. The Cold War's strategic mission on sea control appeared simple in this context—the United States needed to move its own military as well as humanitarian and economic supplies through its respective SLOCs while denying such access to the Soviet Union.13 How the Navy saw this happening changed from start to finish. The United States initially and incorrectly assumed the Soviet Union wanted a third Battle of the Atlantic and to attack America's SLOCs; however, the Soviet Navy instead chose to defend its homeland and its capabilities rather than pursue the offensive.14 While the Soviet Union willingly chose not to attack American SLOCs and to play the defensive, the United States nevertheless bolstered its own SLOC defense in the North Atlantic with the Navy's 2nd Fleet on

patrol to deal with any anti-SLOC risk from the Soviet Union. ¹⁵ Fleet effectiveness metrics remain contested as the 2nd Fleet never saw action against its SLOC defense and the Cold War remained mostly cold until the collapse of the Soviet Union in 1991. Nevertheless, the powerful U.S. Navy, and its presence in the region, defended America's SLOCs to Europe and guaranteed the safety of allied maritime transit.

Today, SLOCs remain ever critical for the United States and its allies as a major factor in U.S. Navy and North Atlantic Treaty Organization (NATO) strategy. The mission of NATO's Joint Force Command–Norfolk explicitly states that the command will "defend the Strategic Lines of Communications across all domains between Europe and North America."16 The 2nd Fleet was initially disbanded in 2011 but then recommissioned in 2018 following concerns about Russia's resurgence. Partially due to the 2nd Fleet's presence, the North Atlantic SLOCs remain comfortably secure. The 2nd Fleet can easily access its SLOC nodes and receive maintenance, supplies, and additional support as required for its operations, with major allied ports across its area of operations. The same cannot be said of the North Pacific and Arctic oceans, which until recently were not SLOCs worthy of significant consideration. Now, however, is the time to focus on these oceans, which show significant Russian and Chinese presence and increased maritime traffic but do not retain a U.S. Navy or Coast Guard fleet.

Expanded Purpose of SLOCs

To defend a SLOC, as previously mentioned, requires points to provide relief for operators in its area and providing its defense. Both the military and commercial operators seek reprieve in heavy or unexpected weather, in emergencies, and in the face of aggression from adversaries. Furthermore, these points serve an expanded purpose—the support through various other services, such as air support and seabasing assistance, and supporting other national security objectives—and allow greater SLOC defense.



East Coast-based Naval Special Warfare Operator and Norwegian naval special operations commandos test ice thickness next to Los Angelesclass attack submarine USS Hampton to establish landing zone for MH-47G Chinook helicopter assigned to 160th Special Operations Aviation Regiment (Airborne) during integration exercise, March 9, 2024, as part of Arctic Edge 24, Arctic Ocean (U.S. Navy/Jeff Atherton)

Expeditionary operations require the creation of forward-operating bases to forward-deploy military units via land, sea, or air. Over the last century, American military success has depended on the ability to send and support expeditionary forces in the defense of security and economic interests.¹⁷ This is vital to the success of an objective in antiaccess warfare, such as SLOC defense. A force that can maneuver over long distances, transition to offense, and fight in difficult conditions gains a significant tactical advantage over adversaries. To do requires a "jumping-off point" from which to coordinate its defense. Nearby SLOC nodes provide perfect locations for forward-operating bases, given their

infrastructure and logistical support network. This includes the capacity for increased air forces for both manned and unmanned aircraft if an airfield is available. As a joint network, expeditionary operations support will be successful depending on coordinated and reinforced land, air, and sea forces. 18 This is most easily completed through sea control and SLOC defense.

Seabasing follows a similar route of success with the creation of a nearby SLOC node. Seabasing can be defined as the ability of the United States to use the maritime domain in a similar way as other U.S. forces use overseas land bases. which include deterrence, cooperative security, allied support, forward operations, and power projection.¹⁹ Seabasing also requires sea control, which then requires successful SLOC defense. Seabasing thus further extends sea control into the actual maritime domain and becomes crucial in remote environments such as the Arctic Region. Seabasing creates a forward presence and produces a deterrent effect that cannot be achieved from other domains.20 The closest SLOC node, then, becomes the point from which maintenance, supplies, and other forces will support the seabase from shore.

The importance of other nonmilitary factors due to enhanced SLOCs and SLOC nodes in austere environments. is also worth consideration. For commercial activities, such as maritime trade

or tourism, safe harbors provide welcome shelter from storms; maintenance and repair opportunities; and resupply. For vessels sailing the Transpolar Sea Route or Northwest Passage, no major noncontinental U.S. port exists on the North Pacific side of North America other than Seattle or Anchorage. On the other side of the continent, there is Nuuk, Greenland, or Nanisivik, Canada which, at present, remains incomplete and technically only for use by the Royal Canadian Navy. This great distance between ports is critical not only for repair purposes but also for search-and-rescue and environmental response capabilities. The Northern Sea Route invites closer ports in the Arctic Ocean, but under the auspices of the Russian Federation. A NATO-aligned Arctic Ocean SLOC node, either supported jointly by Canada and the United States or separately by either nation and shared by allies, would

provide a strong safety net for vessels transiting the Arctic Ocean by improving proximity and capability.

The Current State of Arctic SLOC Defense

Analysis of Arctic requirements and the chokepoints requiring SLOC defense demonstrates that the "points" Mahan covered remain fundamental. Mahan specifically notes that distant regions require secure ports for vessels, both commercial and military, to secure the line of communication.²¹ As noted, Alaska does maintain deepwater ports used as SLOC nodes for the North Pacific and Arctic regions. These include Anchorage, Dutch Harbor, and Kodiak. Depending on the size and capabilities of ships, even Seattle is a key SLOC point for the Bering Strait. These facilities contribute to regional operations and help establish a line of communication to the Arctic. The critical deficiency involves SLOC support for operations in the Arctic Ocean itself. The closest American deepwater port to the Arctic Ocean is the Port of Dutch Harbor, over 700 nautical miles south of Nome. For a situation requiring immediate action in the North Bering or Chukchi seas, deployment and response from further south risks operational failure.

The Don Young Port of Alaska in Anchorage is Alaska's largest port. Owned by the Municipality of Anchorage, the port handles approximately half of all Alaska-inbound freight and enjoys a strong intermodal transit network connecting Alaska's primary road, rail, pipeline, marine, and air systems.²² Additionally, the port maintains Commercial Strategic Seaport status from the Department of Transportation's Maritime Administration, making Anchorage 1 of only 18 port cities in the United States designed for force deployment during contingencies and national defense emergencies. The secure port operates year-round and maintains seven berths dredged to 35 feet, supporting commercial and military ships.²³ The port positions itself as America's premier facility for supporting Arctic shipping routes—a claim that, while currently accurate, obscures significant operational limitations.²⁴ This assertion requires qualification, given the port's location approximately 1,500 nautical miles from the Arctic Circle.

Another significant concern is the tidal range for Anchorage. The average tidal range in Anchorage is among the most extreme in the United States, with a mean tidal range of over 26 feet.²⁵ This significant tidal variation is mostly due to the shape of Cook Inlet, which intensifies tidal movements as water flows into the narrower portions near Anchorage. The highest tides can exceed 35 feet at peak times, and the lowest ebb tides can drop to just a few feet below base level. This wide range is extremely important for vessels transiting into and out of the port, requiring careful scheduling and adaptation to the tidal cycle. In cases of emergency, hours could easily be lost waiting on the tide to allow vessel movement.

Why Now? Arctic SLOCs Under Pressure (2023–25)

- August 2023: China's *Xue Long 2* Sails Through Bering Sea: The expedition was organized by the Chinese Ministry of Natural Resources together with Beijing's Polar Institute.
- September 2023: Russia Conducts Exercise Finval-2023: A few days after the U.S. Coast Guard Cutter (USCGC) *Healy* sailed into the Chukchi Sea, the Russian Pacific Fleet launched a major exercise in the area.
- **July 2024**: Canada Warship Tracks Chinese Icebreaker Through Bering Strait: HMCS *Regina* "interacted safely and professionally" with the *Xue Long 2*, China's first indigenous polar research vessel.
- September 2024: USCG Encounters Russian Naval Vessels Near Alaska: USCGC Stratton (WMSL-752) observed the Russian Federation Navy vessels transiting southeast along Alaska in U.S. Arctic waters to avoid sea ice.
- September 2024: China Conducts Arctic Shipping Voyages: A week after a Panamax container ship became the first vessel of its size to successfully transit the Arctic, another Chinese shipping operator dispatched a second Panamax box carrier.
- October 2024: USCG Encounters Joint Chinese and Russian State Vessel
 Patrol in Bering Sea: HC-130J Super Hercules airplane crew from Coast Guard
 Air Station Kodiak observed two Russian Border Guard ships and two Chinese
 Coast Guard ships approximately 440 miles southwest of St. Lawrence Island.

Taken together, these events compress the decision timeline: forward infrastructure in the Bering Region is no longer optional; it is now the pacing requirement for U.S. Arctic presence.



Coast Guard Cutter Stratton transits Glacier Bay, Alaska, August 1, 2024 (U.S. Coast Guard)

As Alaska's main port of operations, the port cannot always directly provide ready-service fuel for vessels. This includes an instance in which an Arleigh Burke-class destroyer needed its fuel requirement to be met via fuel trucks rather than through the port's pipeline. A struggle to get marine-grade diesel also added to delays to the destroyer's operational schedule. Anchorage remains an unequivocally strong port for the Gulf of Alaska and remains a key component of the U.S. North Pacific SLOC, but the port is too far away to support the region as the primary port for Arctic SLOC defense.

Approximately 1,000 nautical miles to the southwest of Anchorage, the Amaxnax Island (also known as

Amaknak) is home to the closest U.S. deepwater port to the Arctic Ocean, Dutch Harbor, which is a vital port and SLOC point, hosting major vessels on the Unangam Tanangin (Aleutian Islands). A U.S. Coast Guard favorite for vessels operating in the Bering Sea and beyond, the port hosts six docks ranging in depth from 19 to 50 feet.26 Time-distance calculations, however, reveal Dutch Harbor's limitations as an Arctic SLOC node. Dutch Harbor lies approximately 700 nautical miles south of Nome and an additional 150 nautical miles south of the Arctic Circle, making the trip a 2-day transit at 15 knots to the northern Bering and Chukchi seas. Additionally, while Dutch Harbor remains the closest deepwater port, as an island the port does not possess the capacity to expand its multimodal functions, locked into marine and air modes of transit.

Both Anchorage and Dutch Harbor are vital to the chain of SLOC defense, but in the case of the capacity to respond effectively and quickly to emergencies in the Arctic Ocean, distance and capabilities—and, in the case of Anchorage, its environment—limit support. Pointedly, there is a significant need for an Arctic deepwater port as a SLOC node. The American Society of Civil Engineers' most recent Alaska Infrastructure Report Card includes a lengthy discussion of the need for a deepwater Arctic port to accommodate Arctic and sub-Arctic shipping and resource extraction. The report states that an Arctic deepwater port would provide

economic development opportunities; decrease the cost of goods; offer safe harbor and protection for vessels in the area; provide vessel repair and maintenance support as well as emergency response facilities; and most important, provide logistical support to vessels operating in the Arctic while raising awareness of the United States as an Arctic nation.²⁷

Although the U.S. National Strategy for the Arctic Region, released in 2022, does not outright mention SLOCs, it seems to agree on the need for additional presence and SLOC defense in the region. The first pillar, "Security: Develop Capabilities for Expanded Arctic Activity," noted as the highest priority, discusses the need to enhance and expand civilian and military capabilities in the Arctic to deter threats and respond to human-made and natural emergencies.²⁸ This includes the strategic objective to advance American military presence in the region, specifically in support of "homeland defense . . . power projection, and deterrence goals."29 Perhaps most significant, the strategy specifically states that the White House would "support development of a deep draft harbor in Nome" to assist in emergency response times and recovery.³⁰ As previously stated, the current lack of a deepwater port and coastal infrastructure in the region limits the U.S. ability to sustain power projection and support forward-deployed sea and air assets.31 The evidence is clear: the United States requires a SLOC node in the Arctic Region.

The Next Arctic SLOC Node: Nome, Alaska

The city of Nome (also known as Sitŋasuaq) on the southern tip of the Seward Peninsula is home to approximately 4,000 Alaskans. Once the most populated city in Alaska, Nome is famous for the 1898 gold rush as well as the annual Iditarod Trail Sled Dog Race. Nome represents America's most viable option for establishing an Arctic SLOC node. The Port of Nome has seen remarkable growth in the last decade, with increased numbers of private and commercial vessels transiting the Bering Strait using Nome as a resupply port.³²

The port accommodates significant cruise ship traffic, supports 450 regional seafood harvesters, and averaged 7.5 million gallons of petroleum products a year over the past decade.33 The port's current depth is around 22 feet in the outer basin, safely accommodating vessels with a draft of 18 feet or less due to tidal variations.³⁴ This significantly inhibits major commercial and military traffic, with larger vessels forced to anchor in the harbor or ignore the port entirely and make way for Dutch Harbor. Nome maintains a regional airport and a significant surrounding road network, but the roads do not access major Alaska road systems.35 The city, its people, and its leadership, which includes the Bering Straits Native Corporation and Sitnasuak Native Corporation, maintain an effective regional logistics center supporting approximately 50 communities in western and northern Alaska. Port expansion would fundamentally transform America's Arctic SLOC defense capabilities.

The Water Resources Development Act of 2007 authorized a feasibility study into a project to modify the depth of Nome Harbor.³⁶ The final report, released in 2020, recommended a plan to improve navigation access to the port, which included, among other suggestions, a new deepwater basin to a depth of approximately 40 feet at Mean Lower Low Water.³⁷ The report found the expanded port could "improve the viability of numerous Alaska native communities, strengthen the resiliency of the region, and serve as a critical outpost for national security."38 Since the Army Corps' report, the expansion discussion has been a controversial topic, with many recognizing the economic, national strategic, and resiliency positives, while also acknowledging the massive alteration to the lives of the people of Nome should the project be completed. Nevertheless, significant positive changes would result from port development. Primarily, larger vessels such as the U.S. Coast Guard's icebreakers and U.S. Navy destroyers and submarines could moor at the outer basin pier, providing a significant, albeit limited logistics hub in an austere and

remote environment. The deep-draft port would enable sustained logistical support to these vessels and provide shore-based maintenance, logistics, and training required for SLOC defense and Arctic operations.39 As shown throughout the report, a vessel departing from Nome at standard transit speed of 14 knots could be in the Chukchi Sea in less than half a day to respond to emergencies or defense operations in the Arctic Region. Given Nome's proximity to the Bering Strait, an infrastructure hub supporting these major assets greatly enhances timely response to national security, environmental, and marine traffic crises.

Additional roles Nome could play are as a forward-deploying base for alternative forces aside from the maritime domain to support SLOC defense among them, manned and unmanned air support and expeditionary forces—and as a jumping-off point for seabasing farther north into the Arctic Ocean. Infrastructure investments would need to go well beyond expanding the port depth to make Nome a successful SLOC node. Having coastal infrastructure in a remote area of operations enhances multidomain capabilities in the region. To do this would require full Federal, state, tribal, and local government support to transform the city of just under 4,000 into a logistical hub for not only the U.S. military's increased presence but also an increased commercial presence. This would also likely require further road infrastructure to connect Nome and its surrounding communities to Alaska's major highways. The Nome community has split opinions on the port expansion, with some advocating for the economic benefit and national strategic importance of the port and the infrastructure buildup, while others believe concerns with chronic social problems in the region, such as housing shortages and substance abuse, take priority and prefer the port to stay as it is.⁴⁰ To make the national strategic objective of Nome as a permanent SLOC node a lasting success, the U.S. Government will need to work closely with stakeholders during the buildup and into its operational period to ensure its longevity.



Seaman Sarah Treacy stands watch on navigation bridge of Coast Guard Cutter Healy as cutter transits Chukchi Sea, June 30, 2025 (U.S. Coast Guard/Steve Strohmaier)

Counterarguments and **Comparative Analysis**

While the strategic imperative for Arctic infrastructure is clear, legitimate concerns about environmental impact, economic feasibility, and alternative sites merit serious consideration. A rigorous assessment strengthens rather than weakens the case for Nome as America's Arctic SLOC node.

The Port of Nome expansion project has been stalled by a fundamental mismatch between government cost estimates and actual contractor bids, with the Army Corps of Engineers forced to cancel the initial \$662 million solicitation in October 2024 when pricing exceeded statutory procurement limits,41 leading to a scaled-down Phase 1A approach that reduces scope from 3,500 to 1,200 feet

of causeway extension and armor stone from 22 to 18 tons. 42 The core problem stems from underestimating the true costs of Arctic construction logistics, weather delays, and material transport to remote Alaska locations, compounded by rigid Federal acquisition regulations that prohibit accepting bids more than 25 percent above government estimates, creating a cycle where realistic project costs cannot be legally awarded despite secured funding of \$425 million from Federal and state sources.

Environmental assessments identify potential impacts on the Bering Strait region, which hosts critical habitats for sea birds and marine mammals.43 Increased vessel traffic could disrupt subsistence hunting patterns, while dredging operations risk disturbing

contaminated sediments from gold rush-era mining. However, the environmental risks of inaction may exceed those of controlled development. Without adequate port infrastructure, vessels anchor offshore in unprotected waters, increasing pollution risk.

Costs continue to cause concern for the project, which is not uncommon for U.S. Arctic infrastructure debates. However, comparative analysis strengthens the economic case for an improved port in Nome. Canada's Port of Churchill generates \$100 million annually despite serving a smaller population.44 Iceland's Akureyri added a new pier in 2019, which continues to help bolster economic opportunities.⁴⁵ Similar effects at Nome would generate significant jobs and revenue, eventually producing positive returns within 8 to 10 years. Notably, Kotzebue and Utgiagvik (formerly Barrow) advocate leveraging their proximity to Arctic waters as well. However, cost comparisons demonstrate Nome's decisive advantages. Kotzebue would require \$1.2 billion in dredging costs—double Nome's requirements—plus massive breakwater construction. Utgiagvik faces 300-percent higher construction costs and ice conditions, limiting navigation to 60 to 90 days annually versus Nome's 150-plus days. Nome's existing jet-capable airport, fuel storage, and regional networks provide irreplaceable advantages. Rail extension to Nome would cost \$2.1 billion compared to \$3.8 billion for Kotzebue. While Utqiagvik remains economically unfeasible, Kotzebue feasibility studies were discontinued because of coastal erosion rates alone.46

The greatest risk lies in continued inaction. Each year allows Russia to consolidate Northern Sea Route control while China maps underwater terrain through "research" voyages. Arctic contingencies without infrastructure upgrades could force disadvantages involving territorial disputes or navigation restrictions. The above analysis suggests that controlled development at Nome could reduce environmental risk while generating positive economic returns. Moreover, alternative sites face insurmountable obstacles that make them unsuitable for timely SLOC development. Most critical, the strategic risks of inaction far exceed manageable development risks. The question is not whether America needs Arctic infrastructure—but whether it will act before competitors make that choice irrelevant.

Policy Recommendations

The October 2024 joint Chinese-Russian patrol in U.S. Arctic waters indicated intent to demonstrate presence where the United States is lacking, representing objectives that facilitate and enable operational capabilities and further strategic competition. The following recommendations provide urgent actions required within 24 months to establish Nome as a critical maritime infrastructure hub.

DOW must designate Nome as a Strategic Arctic Port under the National Port Readiness Network (NPRN), unlocking priority funding streams for military specifications.⁴⁷ This notion may initially seem implausible, but based on Maritime Administration NPRN criteria, Nome presents a compelling case for designation as a Strategic Port, particularly given evolving Arctic threats and the DOW's explicit identification of the Arctic as a strategic priority region. To be sure, the multitude of NPRN criteria–related requirements presents challenges, some demonstrated in this article, and warrants comprehensive analysis. Additionally, DOW can effectively improve presence capabilities through quarterly destroyer visits during ice-free months, while showing allies and adversaries that America can project power into Arctic waters. At a minimum, critical infrastructure substantial capital requirements must include shore power for Arleigh Burke-class destroyers, 15-million-gallon fuel storage, and emergency repair capabilities for Polar Security Cutters.

Coast Guard aviation must deploy to Nome seasonally, and for extended periods of time, reducing Bering Sea and Chukchi Sea rescue response. In 2024, Coast Guard aviation maintained a forward presence in Kotzebue for only 3 weeks, entirely unsatisfactory for the traffic in the neighboring waters. An Arctic Maritime Operations Center is essential to coordinate the 150-plus daily vessel transits now occurring through an essentially unmonitored Bering Strait. Prepositioned spill response equipment and ice-capable rescue vessels would help prevent another disaster on the scale of MV Selendang Ayu in waters where backup is days away.48

An additional policy consideration is an executive order establishing an Arctic Infrastructure Task Force, cochaired by the deputy secretaries of War and Homeland Security, which would break traditional stovepipes that have paralyzed Arctic policy for decades. Such a task force could potentially include representative advisors from the North American Aerospace Defense Command

and the Canadian Coast Guard. A \$50 million Community Impact Fund, managed with Alaska Native Corporations, would address legitimate local concerns about housing, health services, and cultural preservation. Finally, support for public-private partnerships could generate annual funding from cruise ships and transpolar shipping for the purposes of creating sustainable operations funding.

Conclusion

In October 2024, the U.S. Army Corps of Engineers canceled the solicitation for the Port of Nome Modification Project's first phase of construction, citing costs well above statutory cost limits and exceeding allocated funds made available by the Infrastructure Investment and Jobs Act. 49 Only one company placed a bid on the project.⁵⁰ Although the project has not formally been canceled, the project delays frustrate Arctic policy experts who recognize the region's escalating geopolitical significance. As countries such as China and Russia continue to expand their presence in the region, the United States once again finds itself lagging in the Arctic. Protecting the "great highways" that Rear Admiral Mahan articulated over 100 years ago proved the basis for American success at sea since World War II. SLOC defense ensured success during the Cold War and continues to deter adversaries across the globe today.

In regions where commercial and military maritime activity increases at an expeditious rate, the United States especially must maintain the capability to control the newfound SLOCs, sustain freedom of navigation, and deter adversaries from harming U.S. national strategic interests. As the new North Pacific and Arctic SLOCs open, evidence suggests the current U.S. SLOC nodes in Alaska and elsewhere cannot support the sustained presence, proximity, or capability required to successfully react to emergencies in the High North, be they environmental, lifesaving, or securitybased in nature. Expanding the Port of Nome for U.S. Navy, Coast Guard, and commercial use would significantly





enhance America's ability to protect the region as a key SLOC hub. The ability to eliminate days' worth of travel to respond to events and the capability to use different domains suddenly made available through an increased infrastructure presence would show the United States is serious about its role as an Arctic nation.

The October 2024 solicitation failure should serve as a catalyst for renewed urgency rather than resignation. Congressional appropriators, defense planners, and Arctic stakeholders must recognize that the cost of inaction—measured in permanent loss of Arctic access and freedom of navigation—justifies the infrastructure investment required. The strategic arithmetic is straightforward: an investment today prevents far more expensive strategic disadvantages tomorrow. Through coordinated action among the city of Nome, its corresponding Alaska Native Corporations, and the State of Alaska, the U.S. Government can create a new SLOC node in Nome that will support the national strategic objectives within America's Arctic maritime domain. JFQ

Notes

¹ Joseph Clark, "U.S., Partners Committed to Defensive Operations in Red Sea," DOD News, https://www.defense.gov/News/News-Stories/Article/Article/3631623/uspartners-committed-to-defensive-operations-in-red-sea/.

² Clark, "U.S., Partners Committed to Defensive Operations in Red Sea."

³ Government Accountability Office, "U.S. Arctic Interests," n.d., https://www.gao.gov/u.s.-arctic-interests.

⁴ Distances Between United States Ports, 2025 (14th) ed. (Washington, DC: National Oceanic and Atmospheric Administration [NOAA], 2025), https://nauticalcharts.noaa. gov/publications/docs/distances.pdf.

⁵ "Sea Route from Port of Nome, United States, to Port of Seattle, United States," *Ports*, n.d., http://ports.com/sea-route/port-of-nome,united-states/port-of-seattle,united-states/#/?a=0&b=0&c=Port%20of%20 Nome,%20United%20States&d=Port%20of%20 Seattle,%20United%20States.

⁶ Alfred Thayer Mahan, *The Influence of Sea Power Upon History*, 1660–1783 (London: Sampson, Low, Marston & Company, 1892), 25.

⁷ Julian Stafford Corbett, *Some Principles of Maritime Strategy* (London: Longsman, Green, and Co., 1911), 91.

8 Geoffrey Till, Seapower: A Guide for the Twenty-First Century, 3rd ed. (London: Routledge, 2013), 8.

⁹ Nicholas J. Spykman, America's Strategy in World Politics (London: Routledge, 1942), 79.

10 G.H. Pearsall, The Effects of The World War II Submarine Campaigns of Germany and the United States: A Comparative Analysis (Newport, RI: Naval War College, 1994), https://apps.dtic. mil/sti/tr/pdf/ADA283407.pdf.

¹¹ Daniel E. Benere, A Critical Examination of the U.S. Navy's Use of Unrestricted Submarine Warfare in the Pacific Theater During WWII (Newport, RI: Naval War College, 1992), https://apps.dtic.mil/sti/ tr/pdf/ADA253241.pdf.

12 Benere, A Critical Examination of the U.S. Navy's Use of Unrestricted Submarine Warfare in the Pacific Theater During WWII.

¹³ John H. Noer, Maritime Economic Interests & the Sea Lines of Communication Through the South China Sea: The Value of Trade in Southeast Asia, with David Gregory (Alexandria, VA: Center for Naval Analyses, 1996), https://apps. dtic.mil/sti/tr/pdf/ADA362458.pdf.

14 Bradford Dismukes, "The Return of Great-Power Competition: Cold War Lessons About Strategic Antisubmarine Warfare and Defense of Sea Lines of Communication," Naval War College Review 73, no. 3 (Summer 2020), 33-58, https://www.jstor.org/ stable / 48739548.

15 Dismukes, "The Return of Great-Power Competition," 42.

16 Joint Force Command-Norfolk, n.d., "About Us," https://jfcnorfolk.nato.int/ about-us.

¹⁷ Trent J. Lythgoe, "An Army Overseas Expeditionary Maneuver Through the Maritime Domain," Military Review (March-April 2018), 72-80, https://www.armyupress. army.mil/Journals/Military-Review/English-Edition-Archives/March-April-2018/Lythgoe-Maneuver-through-Maritime/.

18 Lythgoe, "An Army Overseas Expeditionary Maneuver Through the Maritime Domain."

19 Sam J. Tangredi, "Sea Basing-Concept, Issues, and Recommendations," Naval War College Review 64, no. 4 (Autumn 2011), 28-41, https://digital-commons.usnwc.edu/ nwc-review/vol64/iss4/5.

²⁰ Tangredi, "Sea Basing," 32.

²¹ Mahan, The Influence of Sea Power Upon History, 1660-1783, 514.

22 "Port of Alaska," Don Young Port of Alaska, 2020, https://www.portofalaska.com/ wp-content/uploads/PortOfAlaska_fact_sheet_ Sept2020.pdf.

23 "Port of Alaska."

²⁴ "About Port of Alaska," Don Young Port of Alaska, 2023, https://www.portofalaska. com/about-us/.

25 "Tides & Currents," NOAA, n.d., https://tidesandcurrents.noaa.gov/ stationhome.html?id=9455920.

²⁶ "Facilities & Services," City of Unalaska, Alaska, n.d., https://www.ci.unalaska.ak.us/ portsandharbors/page/facilities-services.

²⁷ Report Card for Alaska's Infrastructure 2021 (Reston, VA: American Society of Civil Engineers, 2021), https:// infrastructurereportcard.org/wp-content/ uploads/2016/10/2021-Alaska-Report-Card Final.pdf.

28 National Strategy for the Arctic Region (Washington, DC: The White House, 2022), https://bidenwhitehouse.archives.gov/wpcontent/uploads/2022/10/National-Strategyfor-the-Arctic-Region.pdf.

²⁹ National Strategy for the Arctic Region. ³⁰ National Strategy for the Arctic Region.

³¹ Troy J. Bouffard and Edward M. Soto, "U.S. Arctic Deepwater Port: Value-Added Capabilities in Support of National Security," in On Thin Ice?: Perspectives on Arctic Security, ed. Duncan Depledge and P. Whitney Lackenbauer (Peterborough, Ontario: North American and Arctic Defence and Security Network, 2021), 109, https://www.naadsn.ca/wp-content/ uploads/2021/04/Depledge-Lackenbauer-On-Thin-Ice-final-upload.pdf.

32 "Nome: The Nation's Arctic Port," City of Nome, Alaska, https://www.nomealaska. org/sites/default/files/fileattachments/port_ of_nome/page/1981/pon_brochure_-_2025_ revised 1.pdf.

33 "Nome."

34 "Port of Nome Modification Project," U.S. Army Corps of Engineers, n.d., https:// www.poa.usace.army.mil/Library/Reports-and-Studies/Port-of-Nome-Modification-Project/.

35 "Port of Nome Modification Project."

³⁶ Water Resources Development Act of 2007, Pub. L. 110-114, 110th Cong., 1st sess., November 8, 2007, 22, https://www.congress.gov/110/ plaws/publ114/PLAW-110publ114.pdf.

37 Memorandum by Lieutenant General Todd T. Semonite, Chief of Engineers, U.S. Army Corps of Engineers, "Port of Nome Modifications, Nome, Alaska," May 29, 2020, https://www.poa.usace.army.mil/Portals/34/ docs/civilworks/publicreview/portofnome/ SIGNEDChiefsReportPortofNome20200529. pdf?ver=2020-06-02-190412-287.

38 Memorandum by Lieutenant General Todd T. Semonite, 2.

39 Bouffard and Soto, "U.S. Arctic Deepwater Port," 110.

40 Emily Schwing, "'Like a Highway Going Right Past Us': Nome Grapples With Its Future as Arctic Shipping Traffic Increases," Alaska Public Media, October 24, 2023, https:// alaskapublic.org/2023/02/23/like-a-highwaygoing-right-past-us-nome-grapples-with-itsfuture-as-arctic-shipping-traffic-increases/.

⁴¹ Diana Haecker, "Port of Nome Project on Ice as Corps Cancels Call for Contractor Bids, Nome Nugget, October 17, 2024, https://www.nomenugget.com/news/portnome-expansion-project-ice-corps-cancels-callcontractor-bids.

42 Tim Newcomb, "Port of Nome Modification Project Returns With Scaled Down Phasing," ENRWest, March 17, 2025, https://web.archive.org/ web/20250725200231/https://www. enr.com/articles/60466-port-of-nomemodification-project-returns-with-scaleddown-phasing.

43 Kathy J. Kuletz et al., "Seasonal Spatial Patterns in Seabird and Marine Mammal Distribution in the Eastern Chukchi and Western Beaufort Seas: Identifying Biologically Important Pelagic Areas, Progress in Oceanography 136 (August 2015), 175-200, https://doi.org/10.1016/j. pocean.2015.05.012.

44 Dave Baxter, "Port of Churchill Expanding and Expecting Business to Boom," The Winnipeg Sun, March 3, 2025, https:// winnipegsun.com/news/provincial/port-ofchurchill-expanding-and-expecting-businessto-boom.

45 "Akureyri," World Ports Directory, n.d., https://ports.marinelink.com/ports/port/ akurevri.

46 "Termination Letter Report—Kotzebue Harbor Feasibility Study, Navigation Improvements at Cape Blossom, Kotzebue, Alaska (0130789)," U.S. Army Corps of Engineers-Alaska District, February 11, 2020, https://www.poa.usace.armv.mil/Portals/34/ docs/civilworks/publicreview/kotzebueharbor/ KotzebueTerminationLetterReportFeb2020.pdf.

⁴⁷ National Port Readiness Network, U.S. Department of Transportation-Maritime Administration, https://www.maritime.dot.gov/ ports/national-port-readiness-network-nprn.

⁴⁸ David Rosen, "AST3 Bean and the Selendang Ayu Disaster 20 Years Ago!" National Coast Guard Museum, January 15, 2025, https://nationalcoastguardmuseum. org/articles/selendang-avu/.

49 Alex DeMarban, "\$663M Arctic Port Delayed, Frustrating Nome Officials and Alaska Congressional Delegation," Anchorage Daily News, October 29, 2024, https://www.adn. com/business-economy/2024/10/29/663marctic-port-delayed-frustrating-nome-officialsand-alaska-congressional-delegation/.

50 DeMarban, "\$663M Arctic Port Delayed, Frustrating Nome Officials and Alaska Congressional Delegation."