

THE ARCTIC MARITIME FRONTIER

Russia, China, and the Coming Struggle
for the World's Last Strategic Ocean



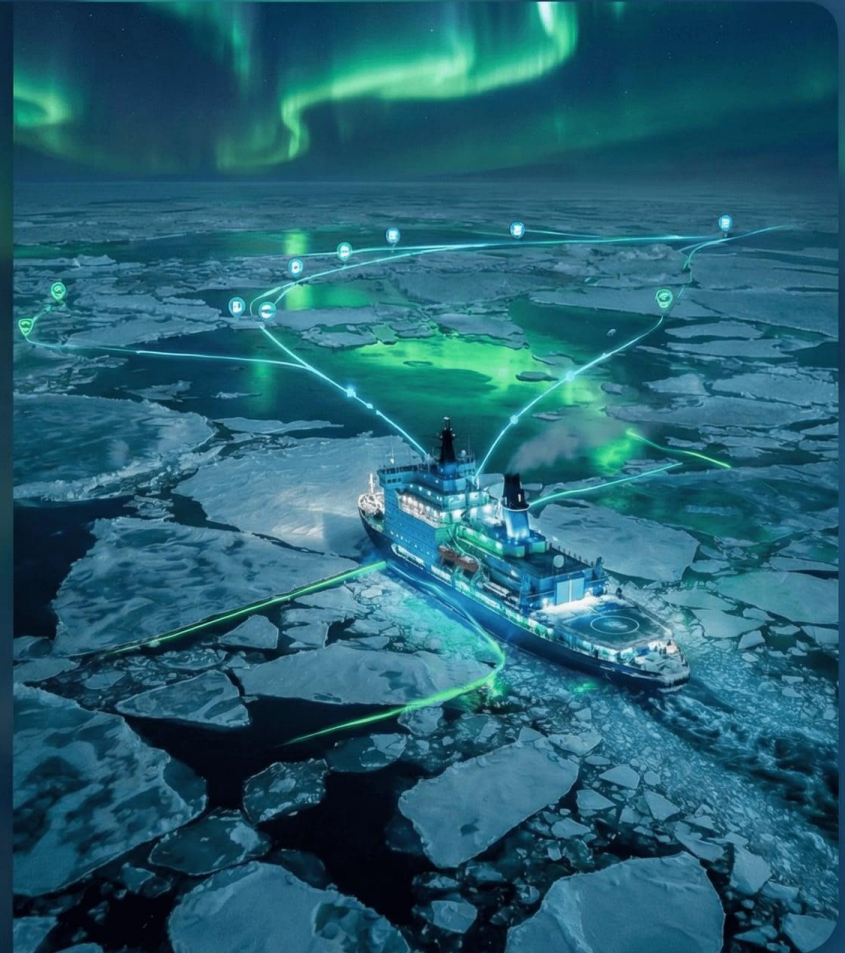
THE ARCTIC IS NO LONGER A BARRIER — IT IS A BATTLEFIELD

Accelerating Ice Melt Has Transformed the World's Last Frozen Sanctuary Into a Strategic Chokepoint

- The Northern Sea Route (NSR) reduces Asia-Europe shipping time to ~two weeks (half of Suez Canal).
- The region holds half the world's undiscovered oil and gas reserves, plus critical minerals.
- Russia operates 32 military bases and 30+ icebreakers (7 nuclear-powered).
- China declared itself a "Near-Arctic State," investing in the "Polar Silk Road."
- The U.S. owns more Arctic coastline than any NATO ally but has lagged in strategic focus.



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THE NORTHERN SEA ROUTE: A CHOKEPOINT THAT COULD RESHAPE GLOBAL TRADE

Whoever Controls the Northern Sea Route Controls the Shortest Maritime Link Between the Atlantic and Pacific Oceans

- Like the Suez Canal, Strait of Hormuz, and Malacca Strait, it is a chokepoint through which enormous economic value flows with no equivalent alternative at comparable cost.
- A PLAN submarine operating in the Arctic would need ballistic missiles with a range of only 5,000 miles to reach virtually any point in the United States and Europe.
- Unlike the Atlantic, where Russian submarines face persistent NATO surveillance, the Arctic gives submarines “more freedom to maneuver”.
- Russia already exports natural gas and oil directly to China via the NSR, generating revenue that funds its military build-up.





RUSSIA'S ARCTIC MILITARY BUILD-UP: THREE DECADES OF DELIBERATE INVESTMENT

Russia Has Built 32 Arctic Military Bases and Operates the World's Only Nuclear-Powered Icebreaker Fleet

- The Northern Fleet at Severomorsk houses Russia's nuclear-powered ballistic missile submarines (SSBNs) underpinning its second-strike deterrent.
- Russia's fleet of 30+ diesel-electric and 7 nuclear-powered icebreakers can operate in Arctic waters year-round.
- 32 Arctic military bases as of 2025, with more under development.
- Exercises explicitly designed to 'rehearse repelling military threats and ensure the security of sea lanes'.
- Enables military logistics and submarine deployment across the entire Arctic basin.



CHINA'S POLAR SILK ROAD: COMMERCIAL COVER FOR MILITARY AMBITION

China's Arctic Research Voyages and Icebreaker Deployments Simultaneously Feed Its Strategic Military Programmes

- China defines the Arctic as a “new security domain” and promotes the Polar Silk Road.
- Military-civil fusion ensures research voyages and seabed mapping feed strategic military programmes.
- Xue Long-class icebreaker voyages yield data informing nuclear submarine navigation.
- Tan Suo San Hao research vessel built in just 10 months, demonstrating rapid platform development.
- NATO confirms Russia and China are conducting “more and more joint patrols” near Alaska.
- Chinese vessels operate “not for peaceful purposes” but “to gain a military advantage.”



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THE SINO-RUSSIAN ARCTIC ALLIANCE: A COORDINATED CHALLENGE TO WESTERN DOMINANCE

In the Arctic, Russia and China Are Replicating the Coordinated Authoritarian Pressure Visible in Ukraine and the Middle East

- **Mid-2025:** Russian and Chinese navies conducted a joint naval patrol in the North Pacific proximate to Alaskan shores.
- A Russian strategist publicly proposed regular Chinese basing of submarines at Russian Arctic ports.
- China supports Russia's claim to sovereign control over the Northern Sea Route — a legal alignment against Western freedom of navigation.
- The U.S. is already dependent on China's shipbuilding and critical minerals industries, and the Arctic scrambles open the door for further control.

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“In Ukraine, China funds the war effort, Iran supplies weapons and North Korea offers manpower. In the Arctic and the high north, we see a similar trend.”

— General Grynkewich, NATO SACEUR

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THE ICEBREAKER GAP: AMERICA'S MOST DANGEROUS ARCTIC VULNERABILITY

**Russia Has 37 Icebreakers. China Has 5.
The United States Has Two — One of Which
Is Over 50 Years Old.**

- The United States' structural deficit in Arctic capability is a critical maritime security vulnerability.
- **Russia: 37+** icebreakers (7 nuclear-powered).
- **China: 5** icebreakers.
- **United States: 2** icebreakers (0 nuclear-powered).
- The **Polar Star**, one of America's only two heavy icebreakers, is over 50 years old and requires annual maintenance.
- This gap allows Russian and Chinese activity to “surge near Alaska's western flank” without effective counter.



AMERICA IS RACING TO CLOSE THE GAP — BUT IT WILL TAKE A DECADE

\$8.6 BILLION IN NEW ICEBREAKER INVESTMENT IS MEANINGFUL — BUT MODERN HEAVY ICEBREAKERS TAKE A DECADE TO BUILD

- **\$4.3 billion** for up to three new heavy Polar Security Cutters.
- **\$3.5 billion** for new medium Arctic Security Cutters.
- **\$816 million** for lighter icebreaking vessels.
- **Goal:** 40 new icebreakers in total.
- The **ICE Pact** signed with Finland and Canada creates a shipbuilding consortium to share expertise and industrial capacity.
- **Critical limitation:** Modern heavy icebreakers take roughly a decade to design, build, and commission — the gap will remain acute through the late 2020s and into the 2030s.

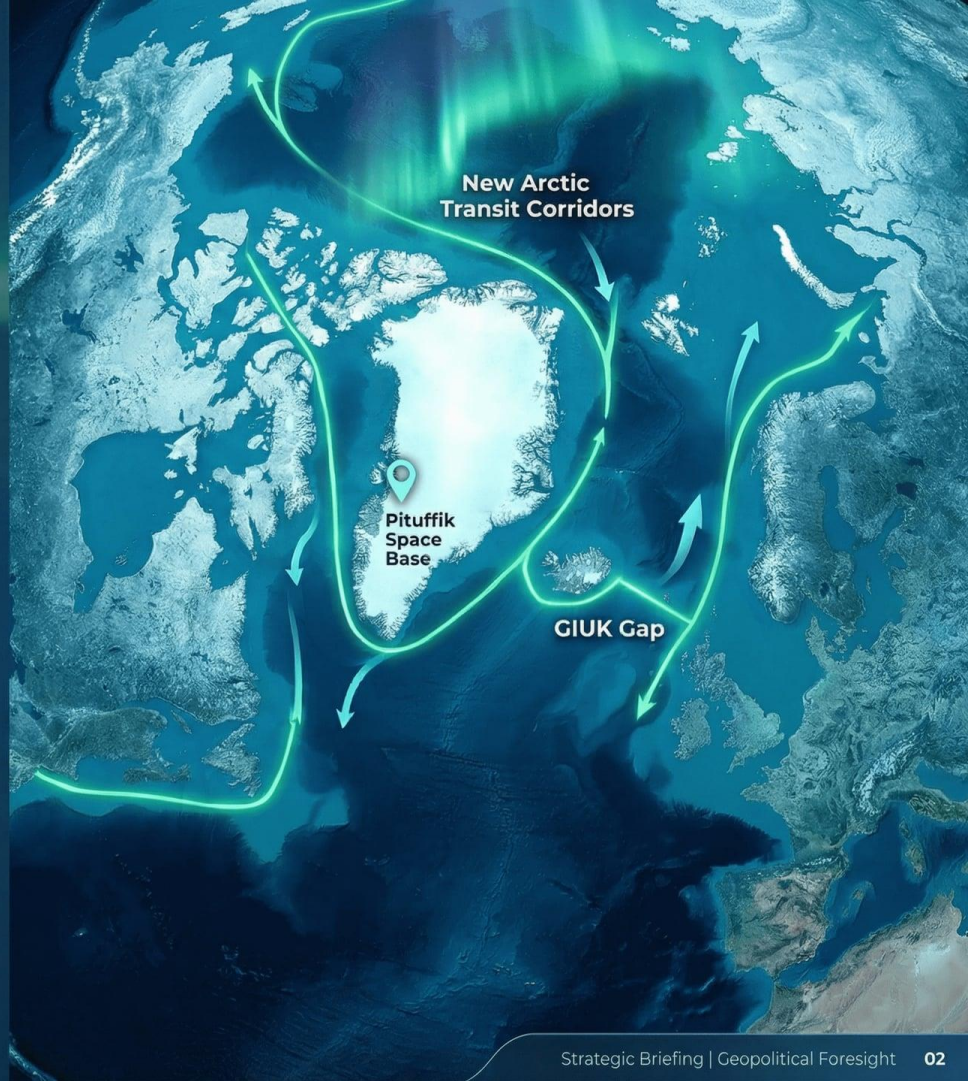
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Greenland: The Strategic Prize That Commands the Arctic's Western Approaches

Whoever Controls Greenland Commands the Air and Sea Approaches to Both the Arctic Ocean and the North Atlantic

- Greenland sits astride key sea and air lanes between North America and Europe.
- Hosts Pituffik Space Base — critical for missile warning and space surveillance.
- Commands the approaches to both the North Atlantic and the Arctic Ocean.
- Russian submarines transiting from the Northern Fleet to the North Atlantic pass through the GIUK Gap (Greenland-Iceland-United Kingdom).
- An increasingly ice-free Arctic creates additional transit corridors that bypass the GIUK Gap entirely, increasing Greenland's strategic value.



LEGAL AMBIGUITY: RUSSIA AND CHINA ARE EXPLOITING THE GOVERNANCE VACUUM

Russia Claims Sovereign Control Over the Northern Sea Route — and China Is Backing That Claim Against Western Maritime Law

- Russia requires foreign vessels to obtain permission and use Russian icebreaker escorts on the NSR.
- China supports Russia's position, creating a Sino-Russian legal alignment against Western maritime law.
- The Arctic Council has been effectively paralysed since Russia's invasion of Ukraine.
- The Pentagon's 2024 Arctic Strategy identified joint Russian-Chinese military exercises as direct threats to U.S. freedom of navigation.
- The governance vacuum means the Arctic lacks the institutional framework to manage escalation.



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THE RESOURCE STAKES: HALF THE WORLD'S UNDISCOVERED OIL, GAS, AND CRITICAL MINERALS

The Arctic Holds the Resources That Will Define the Strategic Competition of the 21st Century

- Half of the world's undiscovered oil and gas reserves are estimated to lie beneath Arctic waters and permafrost.
- The region's rare earth and critical mineral endowments are central to every advanced weapons system, battery technology, and semiconductor.
- Both Russia and China are actively positioning to control these resources as part of their long-term strategic competition with the United States.
- Russia is already exporting natural gas and oil directly to China via the NSR, generating revenue that funds its military build-up while bypassing Western sanctions.
- Former DHS Secretary Noem warned that the Arctic scramble has "opened the door for China to seize control of even more of the world's mineral resources."



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THE ARCTIC CANNOT BE AN AFTERTHOUGHT ANY LONGER

Closing a 50-Year Deficit in Arctic Capability Requires Sustained Investment, Allied Coordination, and Strategic Clarity Beyond Any Single Administration

- The Arctic is rapidly becoming the next front in the contest between democratic and authoritarian maritime powers.
- Russia's three-decade investment in Arctic military infrastructure. China's systematic integration of the Polar Silk Road into its global strategic framework.
- Growing operational coordination in waters approaching Alaskan shores.
- The icebreaker gap, governance vacuum, and legal ambiguities create a grey zone adversaries are prepared to exploit.

“Closing a 50-year deficit in Arctic capability requires sustained investment, allied coordination, coordination, and strategic clarity over a timeframe that transcends any single administration.”

