



## Research

# A Weak Arctic Posture Threatens America's Ability to Lead

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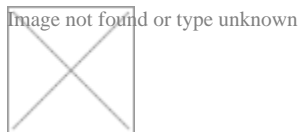
## Summary

- The Arctic has received very little attention from the U.S. policymakers and the administration despite growing in economic and geostrategic importance as a result of receding sea ice levels.
- The federal government must uphold its constitutional responsibility to provide for the nation's common defense by asserting American leadership in the Arctic.
- The United States should develop regional defenses and promote democratic norms in the wake of increased Russian and Chinese activity in the Arctic.

## Introduction

With over 1,000 miles of Alaska's Arctic coastline, the United States stands to benefit from the region's increasingly accessible natural resource deposits and commercial maritime transit routes. However, many Americans do not understand the significance of this relatively unexplored frontier.

With the exception of the Cold War, the United States has invested very few resources in order to secure its position as a global leader in Arctic affairs. By failing to properly develop the region's defense and commercial infrastructure, America will lose the ability to assert itself in this increasingly important area of geopolitical concern. Doing so will cede leadership to other nations – namely Russia – and continue a dangerous trend of reactive, rather than proactive engagement on the part of the American political and military establishment.



Source: [Wikimedia](#)

## A Changing Arctic Climate

The Arctic is warming at an unprecedented rate. Early climate models indicated that the Arctic would experience ice-free summers starting at the end of the 21<sup>st</sup> century, but current estimates now [project](#) that this phenomenon will begin as early as mid-century, if not sooner.

The eight Arctic nations – the United States, Russia, Canada, Norway, Sweden, Finland, Denmark (via Greenland), and Iceland – as well as China, South Korea, Japan, and other countries stand to benefit from these monumental climatic shifts as new opportunities for resource extraction and trans-oceanic shipping emerge. Many in the international community have therefore called for development of the region’s defense and commercial infrastructure.

## The Emerging Arctic Energy Market

According to a 2008 United States Geological Survey [report](#), “The extensive Arctic continental shelves may constitute the geographically largest unexplored prospective area for petroleum remaining on Earth.” This high volume of untapped reserves – 84 percent of which may lie in offshore deposits – could amount to 13 percent of global undiscovered [oil](#) and 30 percent of global undiscovered [natural gas](#).

Although Russia holds a large claim over these resources as a result of its vast Arctic coastline, the U.S. Department of the Interior’s Bureau of Ocean Energy Management [estimates](#) that Alaska’s outer continental shelf contains 26.21 billion barrels of undiscovered oil and 131.45 trillion cubic feet of undiscovered natural gas.

A recent [report](#) issued by the National Petroleum Council – a body of individuals appointed by the Secretary of Energy to advise the federal government on matters concerning energy, the environment, security, and the economy – states that exploration of and eventual output from these untapped reserves “may provide a material impact to U.S. oil production in the future, potentially averting decline, improving U.S. energy security, and benefitting the local and overall U.S. economy.”

## Developing Arctic Infrastructure

Potential for near-term escalation of conventional warfare in the Arctic region remains low. A number of unique security challenges have nevertheless emerged as countries respond to the region’s burgeoning economic and geostrategic opportunities with the development of commercial and defense infrastructure.

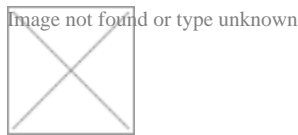
From an immediate threat outlook, additional infrastructure is required to provide for safe transit through Arctic sea lanes. Unprecedented opportunity for natural resource extraction also warrants additional infrastructure to support potential oil spill and other environmental disaster cleanup initiatives. Ship casualties in Arctic Circle waters ranging from structural damage to complete destruction have [skyrocketed](#) from just three in 2005 to 55 in 2014. Until countries invest in Arctic infrastructure to deal with increased transit and commercial development, these ship casualties will only become worse.

### United States

America’s political and military leadership appears underprepared to lead in the Arctic. The U.S. Coast Guard, which is responsible for conducting maritime patrols such as search and rescue operations, faces a number of

increasingly severe challenges as sequestration and inconsistent congressional budgeting have undermined its efforts to modernize and expand its fleet of polar icebreakers and surveillance aircraft. Together, these assets are the key tools for any nation seeking to project power and operate in the Arctic.

A frequently cited Coast Guard [report](#) states that adequate U.S. presence and capability in the polar regions requires at least three heavy and three medium polar icebreakers. Currently, the Coast Guard only operates one of each – the *Polar Star* heavy icebreaker, which can break through thick Arctic ice year-round, and the *Healy* medium icebreaker, which is used in support of Arctic scientific research. The Coast Guard also has one inactive heavy icebreaker, the *Polar Sea*, which is need of repair. Navy officials [indicate](#) that icebreakers “are the only means of providing assured surface access in support of Arctic maritime security and sea control missions.”



Source: [Wikimedia](#)

Facing a major challenge in maintaining the 39-year-old *Polar Star*, the Coast Guard is now attempting to [acquire](#) a new heavy icebreaker. With a price tag of approximately \$1 billion, one polar icebreaker would consume the [entire](#) Coast Guard annual acquisition budget. Any new procurement would require significant support from both the federal and legislative branches. However, the Obama Administration has [cut](#) five-year funding for icebreaker acquisition by 81 percent since Fiscal Year (FY) 2013. Rather than receiving the previously budgeted \$508 million through FY 2015, the program has only been allocated \$9.6 million. The president’s FY 2016 budget request did not help the situation, requesting a mere \$4 million for acquisition of an additional heavy polar icebreaker. Such delay in funding creates an uncertain and dire operating climate for the Coast Guard.

In an attempt to remedy the glaring capability gap, the Obama Administration [announced](#) in September 2015 that it would jumpstart production of an additional polar icebreaker by two years to FY 2020. If procured that year, the additional polar icebreaker would not come into service until 2024 or 2025. Given that the *Polar Star*’s service life is expected to end between 2019 and 2022, current projections of Coast Guard assets and capabilities [indicate](#) that “there will be a period of perhaps two to six years during which the United States will have no operational heavy polar icebreakers” if the *Polar Star* is not further extended or the *Polar Sea* repaired.

Even if the Coast Guard were to acquire an adequate fleet of icebreakers to escort ships through polar sea ice, the Navy may still be unable to operate in certain Arctic conditions. According to a [war game](#) published by the United States Naval War College (USNWC), “Strategic and operational planners will simply need to accept that certain areas in the Arctic remain off-limits to U.S. warships unless the commander is willing to accept risks, the ice recedes away from the area of interest, or ships are produced with additional ice strengthening.”

The USNWC war game further notes that U.S. Arctic capability gaps also concern the lack of air and ground support in Alaska’s Arctic, “to include military hangars and fuel storage, as well as roads from Fairbanks to [northern] airfields and supply nodes.” Coupled with the fact that there are no naval installations in Alaska’s Arctic that can accommodate icebreakers, such lack of regional infrastructure – including poor communications and satellite capabilities – significantly delays the response time of emergency responders and defense entities.

The state of Alaska and Army Corps of Engineers do have a [plan](#) to make one port just outside of the Arctic Circle more accessible to icebreakers.

Outdated maps of America's Arctic waters also exacerbate these capability gaps, forcing ships to rely on half-century old estimates of the region's operating environment when in transit. Updated mapping of Alaska's Arctic shoreline will not be [completed](#) until at least 2035.

## Canada

The Canadian Rangers provide the bulk of the Army's ground presence in the Arctic. This reserve force is [comprised](#) of approximately 5,000 soldiers operating over 170 patrols throughout Canada's northern provinces and territories. Because of the Rangers' small size and lack of resources, Canada's Arctic Response Company Groups and Army Initial Reaction Unit assist it in providing northern ground support. Collectively, these forces provide a focused, yet [limited](#) presence in the Arctic.

Like the United States, Canada has inadequate Arctic maritime forces. Although it [maintains](#) six icebreakers (two medium and four light), none of them are equipped to operate year-round in the Arctic environment. Their warships are also not properly hardened for Arctic transit and the Navy's fleet of Arctic Offshore Patrol Ships is still years from reaching operational status.

The Canadian Air Force's Arctic presence is strengthened by its aerial situational awareness capabilities. It will procure three additional RADARSAT II satellites by 2018. These systems [enhance](#) marine surveillance, ice monitoring, disaster management, environmental monitoring, resource management, and mapping around the world. Canada's fleet of 18 CP-140 Aurora surveillance aircraft also regularly operates in the Arctic and are currently receiving extensive upgrades. The Air Force relies on a small fleet of CF-18 aircraft that operate out of four northern forward operating bases to deter Russian incursion into its sovereign airspace.

## Russia

Of all the Arctic nations, Russia undoubtedly maintains the largest Arctic military infrastructure. It established an Arctic regional command in 2014 and has begun building 10 airfields and 13 air-defense radar stations throughout the region. Russia currently [operates](#) 17 icebreakers – four heavy, six medium (with three more under construction), and seven light.

Russia has installed a variety of anti-aircraft missile regiments, missile system batteries, and coastal defense missile battalions in the Arctic. It is also developing extensive Arctic airlift capabilities, with an expected 2017 completion date for the Tiksi airport in Northeast/Central Russia. This facility will [reportedly](#) be outfitted with MiG-31 aircraft, one of the planes Russia has used to [violate](#) sovereign airspace of Arctic nations. Russia has also moved forward in constructing runways on numerous Arctic islands to increase its intelligence, surveillance, and reconnaissance capabilities in the region.

This buildup is meant to assist Russia in securing its claims to the Arctic's vast natural resources and potentially lucrative shipping routes. A stronger Arctic presence will also act as force multiplier for the Russian Navy, allowing it to reassign resources through what is becoming an increasingly accessible trans-oceanic route.

## China

As a rising geopolitical power and the world's [largest](#) energy consumer, China sees the Arctic as a critical source for gaining access to natural resources and economical shipping routes. Having previously taken a more [aggressive tone](#) against notions of Arctic sovereignty, the country now advocates for peaceful cooperation with Arctic nations. China is currently conducting a five-year assessment of polar resources and governance in order to advance its cooperative agenda. Through its Arctic Research Center in Shanghai, China collaborates with Nordic nations on scientific research. It also works with international partners at the Chinese Arctic Yellow River Station in Norway.

China further cooperates with Arctic nations by participating in both bilateral and multilateral scientific missions. It currently operates the *Xuelong* (Snow Dragon) light research icebreaker, which conducted a trans-Arctic voyage from Shanghai to Iceland in August 2012, and is building a second, more advanced research icebreaker that is expected to enter into service in 2016. China claims these assets will primarily be used for Arctic scientific research.

China is also a member or observer of numerous Arctic-related regional associations and multilateral organizations. Most recently, it was admitted to the Arctic Council (which the United States currently chairs) as an observer nation. The Chinese are expected to continue advocating for their status as a self-described “near-Arctic” nation in these multilateral forums, despite being nearly 1,000 miles away from the Arctic Circle at its closest border.

## Multilateral Cooperation in the Arctic

The international community has demonstrated an interest in maintaining stability in the Arctic, placing an emphasis on establishing multilateral lines of communication and cooperation. In particular, the Arctic Council and the International Maritime Organization have proven to be most effective in terms of fostering cooperative engagement between the Arctic nations. These organizations have produced a variety of international agreements, namely: the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic; and the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic; and the Polar Code, which creates standards for ships operating in the region. Although significant in terms of fostering ties between the Arctic nations, these agreements largely outline existing responsibilities that any country ought to follow under international maritime laws and norms.

Recently, the Arctic nations [announced](#) the formation of the Arctic Coast Guard Forum, “an operationally-focused, consensus-based organization with the purpose of leveraging collective resources to foster safe, secure and environmentally responsible maritime activity in the Arctic.” The United States currently chairs this forum in tandem with its chairmanship of the Arctic Council.

Some believe current economic and environmental conditions in the Arctic do not provide sufficient opportunity for cooperation. According a [report](#) published by The Arctic Institute, “Sharing responsibility or handing over tasks to other countries is often not even an option, as states are struggling to even provide capabilities in their own Arctic maritime domains.” Diplomatic complications may also emerge as countries must identify how they seek to engage with Russia in Arctic affairs following the country’s annexation of Crimea and repeated incursions into the sovereign airspace of Arctic nations.

# Leading from Behind in the Arctic

At current standing, the United States lacks both the capabilities and political will to lead in the Arctic operating environment. The American political and military establishment must therefore reevaluate its northern posture so as to foster greater stability and economic prosperity in the region. Failing to do so could ultimately threaten U.S. national security objectives, prompting reactive and potentially hostile engagement in the future.

Both Congress and the administration must uphold their responsibility to provide for the common defense by ensuring that the nation is prepared to lead wherever American interests are at stake. Doing so will require an intensive and immediate development of America's Arctic defense infrastructure coupled with sustained promotion of democratic norms through both multilateral organizations and bilateral agreements.