



Secretary Kerry listens as Arctic Council Chairman Leona Aglukkaq of Canada relinquishes council chairmanship to the United States during meeting of its eight member nations and seven Permanent Representatives, April 2015 (State Department)

The Arctic Domain

A Narrow Niche for Joint Special Operations Forces

By Kevin D. Stringer

Global climate change has catapulted the Arctic into the center of geopolitics, as melting Arctic ice transforms the region from one of primarily scientific interest into a maelstrom of competing commercial, national security, and environmental concerns.¹ Security in the Arctic encompasses a broad spectrum of activ-

ities, ranging from resource extraction and trade to national defense.² With the thawing of the ice, and Russia's expanding strategic interests in the polar region, the Arctic takes on profound importance for the international security of a number of North Atlantic Treaty Organization (NATO) and neutral Nordic states. Even if the recent reduction in Arctic ice is only a cyclical phenomenon, it still poses defense challenges in the present for these nations.³

While coast guard and naval forces will have primacy for this domain, special operations forces (SOF), principally

maritime and air, can play a narrow but significant role in the areas of special reconnaissance (SR) and related sovereignty assertion and platform seizure missions to support polar national security objectives. SOF are ideally suited to this harsh and complex environment given their expertise, training, and resilience, which are not found in conventional military forces or law enforcement organizations. This article illustrates the growing relevance of the Arctic domain, examines Russia's expanding national interest in polar matters, and shows the potential role of SOF for several niche missions in this increasingly

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relevant region. Danish and Finnish examples are highlighted to illustrate that the United States, in partnership with the other Arctic NATO and neutral nations, should focus on customizing an appropriate SOF segment to perform specified tasks, given future uncertainties in this unique ecosystem.

Climate Change, Resources, and Territorial Disputes

The Arctic covers more than one-sixth of the Earth's total land mass plus the Arctic Ocean.⁴ The geopolitical significance of the Arctic Ocean increases because of growing shortages of land-based raw materials, its expected resource wealth, new conveyor and transport technologies, and progressive climatic amelioration.⁵ According to the Intergovernmental Panel on Climate Change, the Arctic warms nearly twice as fast as the rest of the world. Along with rising temperatures, the Arctic has experienced a dramatic decrease in the annual extent of sea ice. This decline in sea ice coverage is particularly pronounced in September.⁶ Estimates show that approximately 41 percent of the permanent Arctic ice has completely disappeared, "and every year a further million square miles or so vanishes, shrinking the ice cap to around half of the size it covered in the mid-twentieth century."⁷ In fact, the U.S. Navy's "Arctic Roadmap" predicts ice-free conditions for a portion of the Arctic by the summer of 2030.⁸ These spectacular changes in the Arctic environment will have a range of economic, political, and security consequences.

Arctic climate change makes the region the subject of growing international attention. The melting of the ice cap has led to speculation that new economic opportunities are opening in a region that has been frozen for centuries. Beyond commercial conjecture, the diminishment of Arctic sea ice has led to increased human activities in the Arctic and has heightened interest in, and concerns about, the region's future. The Arctic Ocean seabed is rich in mineral resources, most notably natural gas and oil. However, forecasts of greater economic

activity raise concerns of competing Arctic sovereignty claims: increased commercial shipping through the Arctic; aggressive oil, gas, and mineral exploration; threats to endangered Arctic species; and expanding military operations in the region that could lead to conflict.⁹

The primary catalyst for greater Arctic activity in the wake of the receding ice cap is the potential economic value inherent in the region. For energy resources, *Science* magazine indicated that 30 percent of the world's undiscovered natural gas and 13 percent of its undiscovered oil might be found north of the Arctic Circle.¹⁰ A 2008 U.S. Geological Survey appraisal of undiscovered oil and gas north of the Arctic Circle reinforced this view with the assertion that the "extensive Arctic continental shelves may constitute the geographically largest unexplored prospective area for petroleum remaining on Earth."¹¹ While more research is needed to define the resource potential accurately, the Arctic stands out as one of the most promising energy venues in the world.¹² Furthermore, the Arctic is an important commercial fishing ground, especially for the largest populations (salmon, cod, and coalfish).¹³ Beyond natural resources, professional tourism, particularly polar cruises, will become more attractive as the ice melts.¹⁴ Finally, new maritime routes from Asia to the Atlantic will create opportunities to save vast fuel costs for the shipping industry. Use of the Northwest Passage over North America could shorten transport routes between Asia and the U.S. East Coast by 5,000 miles. The Northern Sea Route over Eurasia is also important because it shortens shipping routes between northern Europe and northeast Asia by 40 percent compared with the existing routes through the Suez or Panama canals, and takes thousands of miles off sea routes around Africa or Latin America.¹⁵

Obviously, the Arctic emerges as an increasingly attractive market for investment and trade, based largely on the opening of new Arctic sea lines and the access they provide.¹⁶ Considering the aforementioned commercial opportunities, Arctic politics center increasingly on access to natural resources and sailing

routes, with the security interests of Arctic nations closely related to their territorial boundaries and exclusive economic zones (EEZ). Since commercial objectives are often seen as potentially conflicting rather than shared, a "zone of peace" in the sense of an Arctic security community has not yet developed.¹⁷ This situation is exacerbated by the geography of the Arctic as a semi-enclosed sea encircled by littoral states, since extensions of continental shelves and delimitations of maritime boundaries invariably lead to overlapping sovereignty claims, which can cause interstate friction.¹⁸ This is not a new phenomenon, though. The Canadian archipelago, for example, has been investigated, mapped, and claimed by different nations in the past.¹⁹ Overall, the combination of melting Arctic sea ice, potential polar riches, and conflicting territorial claims creates the conditions for heightened interstate tensions among all the players. This state of affairs is further magnified by increased, yet unpredictable, Russian actions in the region.

A Russian Threat?

The Arctic is vital to Russia's relevance in world affairs. In addition to possessing the longest Arctic coastline, Russia encompasses at least half of the Arctic in terms of area, population, and probably mineral wealth.²⁰ As such, with its geographical location and the length of its northern coastline, Russia is a key regional player, and its future geopolitical and economic power in international matters is directly linked to its potential exploitation of valuable Arctic resources.²¹ Moreover, the Arctic has always played a significant role for the Russian military, particularly its navy.²² Consequently, Russia has a stake in essentially all contentious Arctic issues: delimitation of territory; ownership and management of economic resources, particularly natural resource deposits; and the prevention of conflict between the military forces of the Arctic coastal states, all of which are improving, to one degree or another, their Arctic-oriented defense capabilities.²³

Russia's North is one of the country's richest areas. Its value derives from the

vast quantities of precious raw materials to be found there including oil, gas, gold, diamonds, nickel, copper, platinum, iron, and timber. While the northern region of Russia is home to less than 10 percent of the population, its contribution to national revenue is about one-fifth of overall gross domestic product. Approximately 60 percent of raw materials exports come from the north of the country. Estimates show that 90 percent of Russia's gas and 60 percent of its oil can be found in the polar region. The total value of these mineral resources in Russia's North exceeds \$22.4 trillion according to Western estimates. By comparison, the total value of U.S. mineral resources is \$8 trillion.²⁴

For Russia, the melting sea ice in the Arctic creates huge opportunities regarding accessing the oil and gas fields located within its EEZ. Of all the great powers, Russia will benefit most from Arctic changes.²⁵ As such, Moscow is keen to capitalize on natural resource development and shipping in the region by exploiting areas such as the Barents Sea, 540 kilometers off the coast of the Kola Peninsula and home to one of the world's biggest proven offshore gas fields.²⁶ Yet such exploitation will hinge on its ability to project elements of national military power into the region.

Militarily, Russia's ambitions remain lofty, and contrary to the 1990s, the political willingness and money to increase defense spending now exist. This increase in military activity in the Arctic, and Russia's assertiveness and increasingly confrontational rhetoric in foreign policy issues, are most probably only the beginning of a more visible Russian presence in the region.²⁷ Russia seeks to project its sovereign authority through improved border control to provide safety and security, especially in the Northern Sea Route (NSR), and to maintain credible forces to secure critical infrastructures. Russia also strives to maintain, develop, and project a convincing military force—primarily naval, aerial, and missile assets—in the region to be able to react in various politico-military scenarios as well as to deter the expansion of unwanted foreign military presence into the (Russian) Arctic.²⁸ The primary maritime instrument of

Russian power is its Northern Fleet. While dramatically reduced from its Cold War size, the Russian Northern Fleet is the largest of the five Russian fleets and is the single most substantial combat naval force permanently deployed in the marine Arctic.²⁹ Apart from the Russian Northern Fleet, not a single Arctic state deploys combat naval forces in the marine Arctic, although the coast guards of these states do patrol the area. Furthermore, Arctic state ability to redeploy naval forces from other areas of operations is either limited or nonexistent since none of the other polar nations has warships designed for operation in the extreme Arctic conditions.³⁰

According to Russian national security documents, Moscow plans to establish special Arctic military formations to “protect the country's national interests and to guarantee military security in different military and political situations.”³¹ To guard critical lines of transportation such as the NSR and to secure northern borders, then-Russian Defense Minister Anatoliy Serdyukov in July 2011 announced plans to create two special army brigades to be based in the Arctic cities of Murmansk and Arkhangelsk. This concept derived from Russian studies of specialist Arctic troops in Finland, Norway, and Sweden.³²

This rising role of the Arctic in Russian security policy and Moscow's preparation to defend its rights to natural assets with force if needed has been accentuated by official government statements.³³ For example, in a national security document released in May 2009, the Kremlin stated that “in a competition for resources, it can't be ruled out that military force could be used for resolving problems.”³⁴ The Russian government reinforced this view with the statement that “although it deplores the notion of an arms race in the high north and does not foresee a conflict there, it intends to protect its Arctic interests.”³⁵ Of greater concern, however, are the security perspectives and military doctrine underlying Russia's military buildup and modernization in the Arctic. While the strategic thinking of the Russian political elite is not monolithic, a “defense-driven”

zero-sum orientation dominates recent Russian strategy.³⁶ Such policy statements, combined with a series of Russian actions such as the resumption of strategic bomber flights over the Arctic, cyber attacks on Estonia, the Russo-Georgian War of 2008, the 2014 annexation of the Crimea, and Russian support for the insurgency in Eastern Ukraine, all contribute to growing uneasiness over future Russian intentions in the Arctic region. Among the Arctic neutral states, for instance, Sweden notes an increasing regional instability and the likelihood of crises in both the Baltic Sea and Arctic regions, which require an overall re-evaluation of Swedish defense policy.³⁷ Similarly, rising Russian activities in the Kola Peninsula and the increasing strategic importance of the Barents Sea are forcing Finland to carefully reevaluate its defense of adjacent Lapland.³⁸ This overall security situation leads to a discussion of the role of SOF in this austere but potentially volatile environment.

The SOF Niche

There is debate about the future of security developments in the Arctic. Some observers postulate a remilitarization of the Arctic and the occurrence of “armed clashes” in the region sooner rather than later. Others state that both the logic of this argument and the evidence supporting it are flimsy, arguing that there is no reason to expect that matters relating to military security will rise to the top of the Arctic agenda soon.³⁹ While some have argued that terrorism and hijacking may constitute security concerns in the region, others maintain that such threats are chimerical, given the challenges of distance and geography and the difficulty of navigating in a polar environment.⁴⁰ Even if a direct military conflict may be unlikely, tensions with Russia may still precipitate some level of U.S. and NATO engagement in the Arctic, and SOF, with their unique capabilities and small footprint, may be the deterrent and surveillance force of choice.

In the harsh polar ecosystem, the military becomes the tool of national

Attack submarine USS *New Mexico* surfaces at Ice Camp Nautilus in Arctic Ocean during Ice Exercise 2014 (DOD/Joshua Davies)



policy almost by default. The Arctic is a complex environment, and a report by the Arctic Institute noted that “the armed forces, beyond their responsibility for handling all contingencies, are also the only agencies with both the requisite monitoring instruments and the physical capabilities to operate in such a vast and inhospitable region.”⁴¹ A further concern is that the Arctic is an environment of extreme operational challenges, even for armed forces with longstanding Arctic experience.⁴² These problems range from limited communications due to magnetic and solar phenomena that reduce radio signals to environmental degradation of personnel, weapons systems, and navigation equipment. Considering the nature of SOF, with their recruitment of more experienced personnel, a rigorous selection process, high resilience, and extensive training to achieve proficiency in applicable mission sets, these elite units offer the innovative, low-cost, and small-footprint approach needed to achieve nuanced national security objectives in a challenging region.⁴³

While the first decade of the 21st century has seen an enormous increase in the use of U.S. and NATO SOF for the campaigns in Iraq and Afghanistan, SOF focus has skewed to direct-action operations. These operations are defined as short-duration strikes and other small-scale offensive actions that are conducted in hostile, denied, or diplomatically sensitive environments, and which employ specialized military capabilities to seize, destroy, capture, exploit, recover, or damage designated targets.⁴⁴ The most visible of such activities was the elimination of Osama bin Laden in the May 2011 raid on his compound in Pakistan. This emphasis on direct action has come at a price, however, causing SOF units to neglect a number of other useful mission sets. The commander of the Colorado-based U.S. Special Operations Command North, Rear Admiral Kerry Metz, stated that over the past decade of war in the Middle East, “we’ve gotten out of [the habit of doing] the routine work up in the Arctic area. SOF as an entity has not focused on that area, and I think over the

next few years, we’re going to have to sort of return to those roots.”⁴⁵ Similarly, then-Major General Brad Webb, commander of U.S. Special Operations Command Europe, affirmed, “while Africa may be the challenge for this generation the Arctic will be the challenge for the next.”⁴⁶ For the Arctic, the tasks of special reconnaissance, sovereignty operations, and platform seizure missions come to the forefront for SOF employment.

Special Reconnaissance and Sovereignty Assertion

Considering Arctic climate dynamics and increased human activity on polar air, land, and sea routes, the assertion of sovereignty and the need for “on the surface” situational awareness takes on strategic significance. This requirement is compounded by key challenges that include shortfalls in ice and weather reporting and forecasting and limitations in command, control, communications, computers, intelligence, surveillance, and reconnaissance due to lack of assets and harsh environmental

conditions.⁴⁷ Yet politically, sovereign presence and domain awareness are essential prerequisites for Arctic national security. For example, Norwegian Defense Minister Ine Eriksen Søreide stated that she did not want to remilitarize the [Arctic] border, but “at the same time we do have, and want to have, situational awareness for our own country and the alliance.”⁴⁸ Similarly, since 2006, Canadian Prime Minister Stephen Harper has placed enormous emphasis on “exercising sovereignty over Canada’s North . . . our number one Arctic foreign policy priority.”⁴⁹ While these objectives can be partially attained with satellite, ship, and aerial platforms, a comprehensive knowledge of the Arctic physical environment can be achieved only by an actual human presence on the ground.

Hence, with increased activity in and over Arctic waters, a military’s knowledge base will need to be improved significantly concerning the evolving operational environment in the Arctic (including newly accessible uncharted waterways), as will the military’s ability to conduct search and rescue, disaster response and relief, and environmental security operations, among other essential missions, within the Arctic region. In this context, building a greater capacity for maritime domain awareness (MDA) looms as an especially critical requirement and obligation for forces assigned to the Arctic.⁵⁰ One option to achieve MDA is through the conducting of “on the surface” SR missions by SOF elements. Special reconnaissance entails reconnaissance and surveillance actions normally conducted in a clandestine or covert manner to collect or verify information of strategic or operational significance, employing military capabilities not normally found in conventional forces. SR may include collecting information on human activities or securing data on the meteorological, hydrographic, or geographic characteristics of a particular area.⁵¹ For the Arctic, Denmark provides an excellent model for the use of SOF in SR and sovereignty operation roles, with Finland offering additional considerations for this mission.

Although the Danish armed forces currently undertake important tasks in the Arctic, including enforcement of sovereignty, Denmark’s military posture there will inevitably have to adjust to take on new roles and capabilities, such as wider ranging patrol and domain awareness missions within Greenland, a desirable territory rich in both oil and precious metals.⁵² The launch of the Danish Defense Force (DDF) Greenland-headquartered Joint Arctic Command in October 2012 initiated plans to expand training and deployment of special operations forces to reinforce Denmark’s sovereignty over its Arctic territories, which extend to 1.6 million square miles.⁵³ The Arctic command organization took over responsibility for the SOF Arctic defense unit known as the Sirius Patrol, which has spearheaded the DDF’s long-range reconnaissance patrols in Greenland since 1941, often operating in temperatures as low as -67°F, while overseeing sovereignty enforcement in the remote reaches of Greenland. These multiple, two-man teams with dogs operate for long periods over 160,000 square kilometers of Arctic terrain to provide real-time presence, reporting, and surveillance to assert Danish sovereignty over its polar realm. Many of the DDF’s core SOF, past and present, have sharpened their survival and reconnaissance skills on Sirius missions.⁵⁴

In addition to Denmark, Finland has significant experience in operating in hard winter conditions and is well placed to offer cold climate training and exercises to its international partners.⁵⁵ This hard-won experience is not present within many other Arctic countries, particularly in the United States. Operations in the Arctic require special cold-weather gear, tactics, techniques, procedures, and especially training for the armed forces. Finland’s airmobile special forces training center in Utti (Utin Jääkäriyrykmentti) specializes in performing in severe Arctic conditions, with the ability to operate even when the outside temperature is as low as -40°F. This training in operating in cold climate surroundings is a tangible resource Finland could offer to other NATO or neutral

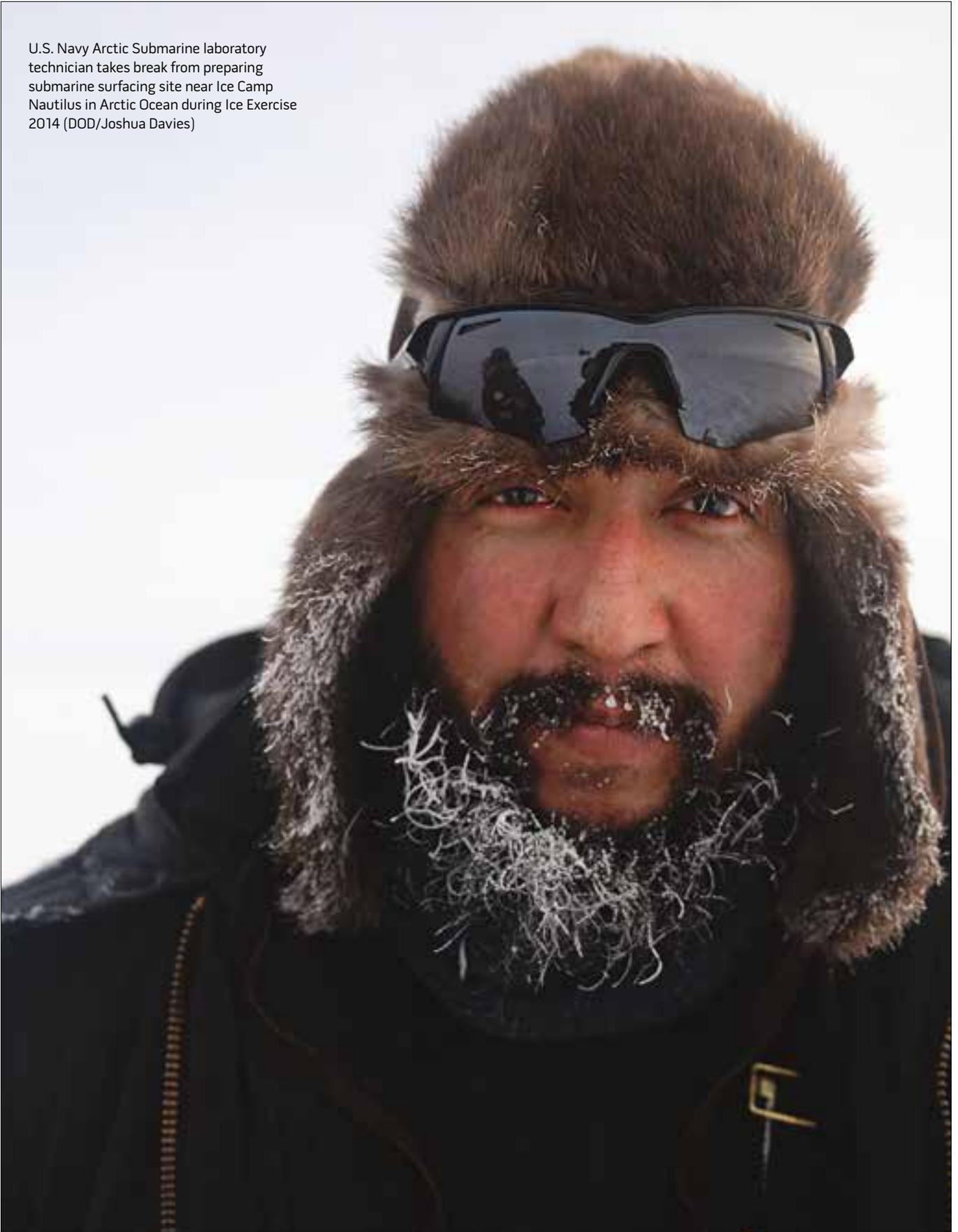
Arctic nations for SOF SR and sovereignty operation missions.⁵⁶ For U.S. SOF, the SR and sovereignty missions would be best placed with selected U.S. Marine Corps Forces Special Operations Command long-range reconnaissance units, trained in Arctic conditions and using Danish and Finnish SOF expertise for extreme polar operations.

Platform Seizure Missions

Under the designation of counterterrorism tasks, hostage rescue and recovery operations are normally sensitive crisis missions in response to terrorist threats and incidents. Adapted to the Arctic—and given the low probability of terrorist activity there considering the distances involved, Arctic geography, and the overall polar environment—these missions are more likely to involve the protection of Arctic weather stations, military bases, petroleum infrastructure such as oil rigs, pipelines, terminals, and refineries, and even ships in the region from adversarial state, criminal, or environmental protester activity.⁵⁷ Such action is likely to involve the retaking of an occupied installation, offshore platform, or cruise ship, potentially with nonlethal means. In Denmark, for example, more resources will be directed at the army’s and navy’s main SOF units, the Hunter (*Jægerkorpsset*) and Frogman (*Frogmandskorpset*) corps, for this purpose. Both units, which have been extensively deployed in Afghanistan, are spending more hours on mission-specific training that requires honing the skills necessary to deal with a broad range of tasks, from assaulting enemy ships and using stealth to restoring control and sovereignty over Danish fixed oil and gas installations in the Arctic, by air or sea.⁵⁸ For the United States, Navy SEALs already have this capability in their core mission and need only to attain Arctic proficiency for this contingent polar operation. Again, leveraging Arctic-capable partner-nation SOF expertise and linking this role to the previously discussed SR task would be the most effective method for exercising this competence.

Both the SR and platform seizure tasks will require air SOF units in

U.S. Navy Arctic Submarine laboratory technician takes break from preparing submarine surfacing site near Ice Camp Nautilus in Arctic Ocean during Ice Exercise 2014 (DOD/Joshua Davies)





Two F-15C Eagles return to simulated air combat portion of Arctic Challenge exercise over Norway, helping boost interoperability among NATO, the United States, United Kingdom, and members of Nordic Defense Cooperation (U.S. Air Force/Christopher Mesnard)

support. Possible units of action for this assignment are U.S. Air Force Special Operations, MC-130P aircraft squadrons, and related CV-22 tiltrotor units, coupled with selected SOF pararescuemen and combat rescue officers from the special tactics squadrons. By locating such assets at Thule Air Base in Greenland and Joint Base Elmendorf-Richardson in Alaska, selected air SOF units could provide air coverage and support for most of the North American Arctic and Northwest Passage. Although the Air Force has assets in its conventional Service with similar profiles and equipment, air SOF may be better suited for a niche Arctic mission because of

their ability to train selected crews to specialize in Arctic air and survival as well as their overall organizational linkage to SOF maritime units performing the other SR, sovereignty, and platform seizure missions in the polar environment.

While direct military conflict may be unlikely in the Arctic, the uncertainty about the direction in which developments in the region will unfold and, as a result, the uncertainty about the precise nature of the challenges and threats deriving from those developments, justify the increased attention of the international community toward the Arctic.⁵⁹ Simultaneously, Russia's bellicose actions in other regions, overall martial rhetoric,

and polar military presence make its intentions unclear, and thus a key player to watch in Arctic affairs.⁶⁰ As the ice recedes and maritime passages open, the potential for territorial conflict and state-on-state confrontations could increase. Hence, this is an ideal niche situation for low-profile, small-footprint maritime and air SOF teams to monitor the region and provide presence, strategic reconnaissance, and surveillance for sovereignty purposes, as well as platform seizure or recovery capacity in readiness. For the United States, these Arctic missions require a mix of specialized maritime and air SOF that can leverage the Arctic expertise and capabilities of

benchmark-setting partner nations such as Denmark and Finland, and operate in a unique joint special operations environment. JFQ

Notes

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