Militarization of the Barents Region. Throughout the Cold War period, the Arctic, and particularly the Kola Peninsula, played a crucial role in Soviet security policy and defense strategy. The Barents and Norwegian Seas were seen as important operation and transit areas for nuclear submarines and naval surface vessels. The northern air space was routinely patrolled by maritime patrol aircraft, fighter jets and long-range bombers, and significant groupings of land forces were located on both sides of the Iron Curtain's northern extension. All of this was a testimony to the region's perceived strategic significance, in the East as well as in the West. At the height of the Cold War, the Kola Peninsula was one of the most heavily militarized parts of the world.

The military dimension has in other words been central to the history of the Kola Peninsula, the Barents Region, and the circumpolar Arctic. However, it should be noted that the build-up of naval, air defense, and ground forces in the northwestern corner of the Soviet Union/Russia was not motivated by military or other threats in the region itself. The security challenges on the country's southern and eastern frontiers have traditionally been at least as severe and pressing as those in the northwest. The historical reason for why one of the world's largest naval fleets was based on the remote Kola Peninsula was rather the favorable ice conditions in the southern Barents Sea, the easy access to the Atlantic and Arctic Oceans, and the geographical proximity to potential military targets on other continents, especially North America. These conditions made, and still make, the area well suited for strategic naval operations.

Early Beginnings: Imperial Russia. The history of tsarist Russia's presence in the Arctic dates back to the late 15th century, when the armies of Ivan III conquered Novgorod and expanded the territories of Muscovy to the Barents and White Seas, giving Russia its first access to a sea coast. Towards the end of the 16th century, Russia established the Great Mangazeya Route from the White Sea to the Ob and Yenisei rivers, opening the way to the riches of Western and Central Siberia. Exploration continued throughout 17th century, and when the Russian Navy was created in 1696, most of Russia's Arctic coastline from the White Sea to the Bering Strait had been explored by Russian mariners. Russian White Sea coast settlers, or Pomors, were particularly active in these endeavors.

Throughout the tsarist period, Russian naval officers contributed tremendously to the exploration and mapping of Russia's northern coastline. One of them was Vice Admiral Stepan Osipovich Makarov (1849–1904), a highly respected naval officer, oceanographer, and polar enthusiast. Under his auspices, Russia built the world's first icebreaker, the "Yermak", with which he conducted two Arctic expeditions, in 1899 and 1901. At the beginning of the 20th century, Makarov concluded that Russia was a "building whose façade was facing the Arctic Ocean", and that it was "decorated with rich natural resources". The admiral was apparently well ahead of his time in recognizing the economic and strategic significance of Russia's northern frontier.

World War II and the Convoy Traffic. The Soviet Northern Fleet, established in 1937, was put to its first severe test in World War II. The Fleet was still being built up when the war broke out, and its operational capabilities were not yet fully developed, at least not in comparison to those of its Cold War successor. The defense of the country's northwestern flank and support of the 14th Army were among its major wartime tasks, in addition to the protection of the country's sea lines of communication. Northern Fleet units also participated

in land operations, including the Kirkenes–Petsamo operation in 1944, and air warfare (the 121st Fighter Aviation Regiment).

In the period from August 1941 to May 1945, a total of 78 convoys travelled from the United Kingdom and the United States to Russia's northwestern ports of Murmansk and Arkhangelsk, delivering vital supplies of food, military equipment, and munitions to the Soviet Union under the Lend-Lease program. Along with British, American, and Canadian naval vessels, the destroyers of the Soviet Northern Fleet played a major role in the anti-submarine and anti-aircraft defense of allied convoys heading to Murmansk. The Arctic convoy traffic tied up significant naval forces on the German as well as on the allied side, and it had significant impact on the course of events in the north as well as in other parts of Russia. Besieged Leningrad was among the destinations for supplies from the convoys.

The Soviet – U.S. Arms Race. The growing ideological tension between East and West after World War II lead to a large-scale militarization of the Barents Region and other parts of the Arctic. The fact that the shortest air route between the industrial heartlands and populated centers of the Soviet Union and the United States went across the Arctic Ocean had far-reaching implications for the defense strategies of the superpowers during the Cold War. A characteristic feature of Soviet and American deterrence strategy in this period was the development of long-range nuclear weapons that could be launched across the Arctic Ocean, either from locations on land (intercontinental ballistic missiles), from the sea (ballistic missiles carried by nuclear submarines), or from the air (bombs or cruise missiles carried by long-range bomber planes).

A central figure in the Soviet Union's efforts to build and maintain a large, ocean-going navy was Admiral Sergei Gorshkov, who was Commander-in-Chief of the Soviet Navy in the period from 1956 to 1986. His role in the history of the Soviet Navy was in many ways similar to that of Admiral Hyman Rickover in the history of the U.S. Navy. The two managed to create powerful naval forces that could be used as foreign policy instruments as well as for nuclear deterrence purposes. Nuclear-powered ballistic missile submarines (SSBNs), many of which were based on the Kola Peninsula, made up a substantial part of these forces. In 1986, the Soviet Northern Fleet consisted of no less than 180 nuclear-powered submarines of different classes, most of which were built at the Sevmash naval yard in Severodvinsk.

In the northern waters, the U.S. and NATO devoted significant resources to the tracking and trailing of Soviet submarines. A large part of the anti-submarine warfare (ASW) operations were concentrated in natural "choke points" such as the Greenland-Iceland-UK (GIUK) gap. Here, and in the Norwegian Sea, between Andøya and Bear Island, the U.S. Navy had laid out a chain of underwater listening posts, known as the Sound Surveillance System, or SOSUS. The Soviets had similar systems in waters adjacent to their submarine bases on the Kola Peninsula and Kamchatka in order to detect intruders. In these waters, the underwater "cat and mouse" games between NATO and Soviet/Russian nuclear submarines went on for several decades. As late as in the early 1990s, there were at least two collisions between American and Russian nuclear submarines in the Barents Sea, just off the coast of the Kola Peninsula.

Seen from a naval perspective, the westernmost part of the Russian Arctic has traditionally been of far greater military significance than the shallow and seasonally ice-infested waters north of Siberia and the Russian Far East. This is also the case today, even though the Arctic ice cover has diminished. Russia's naval bases on the Kola Peninsula offer convenient access for surface and subsurface vessels into the North Atlantic via the Barents and Norwegian Seas. Russia's nuclear submarines can also sail northwards into the Arctic Ocean through the Barents or Kara Seas. The deep and partly ice-covered waters of the Arctic Ocean offers plenty of hiding places for nuclear submarines, which can stay submerged for weeks and

months at the time and hide in the creaking noise of the marginal ice zone. Upon launch orders, they can go to the surface, push through several meters of ice, and launch their missiles from almost any position in the central Arctic Basin.

Submarine Patrols and Inter-Theater Maneuvers. According to Russian sources, the Soviet/Russian submarine fleet conducted approximately 4600 patrols in the period from 1965 to 1993. A significant part of them started and ended at the Northern Fleet's bases on the Kola Peninsula. In the year 1985 alone, the nuclear submarines of the Northern Fleet conducted approximately 80 patrols. Ten years later, the number of annual patrols had fallen to 18, and it continued to fall throughout the late 1990s and early 2000s. Despite a slight increase in the late 2000s, the number of patrols is still fairly limited, typically between five and ten per year for the strategic submarines (SSBNs).

The Arctic Ocean and its adjacent seas were also considered important in terms of the inter-theater maneuverability between the Northern Fleet and the Pacific Fleet. In the Cold War period, the Soviet Navy experimented with icebreaker-supported convoys of naval vessels along the Northern Sea Route. The success of these endeavors was limited, as the thin-hulled vessels were often damaged by drift ice, and sometimes got stuck for the winter. The coastal waters along the Siberian coast are shallow and not suited for large surface vessels. Some of the straits are but a few meters deep.

Starting in 1950, inter-fleet transits north of Siberia were also made by diesel-electric submarines, and the first successful under-ice transit by a nuclear submarine took place in 1963. Since then, Soviet and Russian nuclear submarines have sporadically used the Arctic Ocean as a transit area for strategic submarines. The most recent trans-Arctic cruise took place in 2008, by a Delta III submarine ("Ryazan"). Its under-ice transit from the Kola Peninsula to Kamchatka was reported to have taken 30 days.

Air and Missile Defense. The Cold War-era militarization of the Barents Region and other Arctic land areas did also have an air and space dimension. It was important for the superpowers to have the ability to detect and repel incoming attacks across the Arctic airspace. For this reason, a network of radar stations, known as the Distant Early Warning (DEW) line, was build across the North American continent. Like the U.S., the Soviet Union feared an attack across the Arctic, either by strategic bombers or inter-continental ballistic missiles (ICBMs), and the country therefore invested significant resources in the development of strategic surveillance and air defense capabilities in the north. The capabilities included interceptor and surveillance aircraft as well as a comprehensive early warning system combining ground- and space-based assets.

The Soviet early warning system, known as *Sistema Preduprezhdeniya o Raketnom Napadnii*, or SPRN, entered into service in the late 1960s and was further developed throughout the 1970s and 80s. It consisted of long-range radars designed for the detection of incoming ICBMs. For instance, the country's northwestern strategic direction (the Barents-Baltic area) was covered by radars located in Olenogorsk on the Kola Peninsula and Skrunda near Riga, Latvia. These radars also provided early warning information to the Moscow anti-ballistic missile (ABM) system.

As an additional deterrence measure, the Soviet Union also established a network of forward bomber bases, stretching from the Kola Peninsula in the west to Chukotka in the east. All of the long-range bomber airfields in the Arctic, some of which were located on remote islands such as Franz Josef Land, Novaya Zemlya, and Severnaya Zemlya, had runways that were more than four kilometers long, in order to allow for heavy bombers to take off fully fueled and with full weapons load.

Demilitarization? Since the end of the Cold War, the security environment in the Barents Sea region and the circumpolar Arctic has undergone a series of profound changes. Efforts have been made to overcome the old East-West divide and replace the logic of Cold War antagonism with a new logic based on common values and shared interests. Cross-border cooperation arrangements have been established, powerful commercial actors such as Gazprom, Rosneft and Lukoil have made their appearance on the northern scene, and their relations with the military have become more pragmatic. Whereas the Arctic in previous times was seen primarily as a theater of military operations, it is today increasingly seen as an arena for cross-border cooperation and economic activities such as the extraction and transportation of oil and natural gas.

This is not to say that the Barents Region has become, or is likely to become, "demilitarized". The Arctic is still considered relevant to Russia's military security, particularly as an arena for nuclear deterrence operations. The ice-free naval ports on the Kola Peninsula are still hosting Russia's most important grouping of naval forces – the Northern Fleet. The inventory of the Fleet has been reduced to a mere fraction of what it was in the mid 1980s, but its relative importance has grown. With the dissolution of the Soviet Union in 1991, Russia lost access to many of its former naval ports and shipyards in the Baltic and Black Sea regions, and Russia became more of a "northern" country. As of January 2011, as much as 67 percent of Russia's 576 sea-based strategic nuclear warheads are based on the Kola Peninsula. The rest of the country's sea-based nuclear warheads are found on strategic submarines based in the Russian Far East, at Vilyuchinsk on Kamchatka. These, too, occasionally venture into Arctic waters.

Even though the Barents Region has not been "demilitarized" after the end of the Cold War, the scope and character of the military activity in the region has changed in important ways. The same can be said about the nature of civil-military relations. The military sphere and the civilian sphere are more closely related today than they were at any point during the Cold War. The Northern Fleet's previous position of dominance and relative autonomy has been replaced by a new state of affairs, in which the military acts as one of many actors in the region. The region's new role as an arena for petroleum activities and extensive commercial ship traffic is also affecting the way the Navy operates. The defense of Russia's economic interests in the Arctic, as well as the anti-terrorist protection of new industrial infrastructure in the region, is likely to become an important part of the Northern Fleet's future task portfolio.

The changes currently taking place in the region are also requiring a higher degree of military-to-military dialogue and cooperation at the interstate and regional levels. Thus, for instance, the Chief of Norway's Joint National Headquarters at Reitan outside Bodø cooperates closely with the Commander or the Russian Northern Fleet and the Head of the Federal Security Service (FSB) in Murmansk. Joint military exercises, such as the "Pomor" naval exercises, are held on a regular basis. The Norwegian-Russian coast guard cooperation is also extensive. These and other measures have contributed to a lowering of the tension level in the Barents Region, a heightening of the level of trust, and a strengthening of Russia's ability to operate together with military units from NATO countries.

Current Military Capabilities. At present, the Russian Northern Fleet has eight operational ballistic missile submarines (SSBNs) and approximately fourteen operational nuclear-powered attack submarines (SSNs). The SSBNs are mostly of the "Delta IV" class, and most of the SSNs are of the "Akula" class. Most of them were built in the 1980s, but they have been overhauled and upgraded in the 2000s. New Russian SSBNs (the "Borei" class) and SSNs (the "Yasen" class) are under construction, but these programs have been significantly delayed due to technical difficulties and lack of funding. As for surface forces, the current inventory of the Northern Fleet includes one aircraft carrier ("Admiral Kuznetsov"), which in

2012 is due for a major overhaul, a nuclear-powered missile cruiser ("Peter the Great"), a handful of destroyers, as well as numerous medium-sized and smaller vessels. The surface vessels are generally older than the submarines, and many of them are in dire need of repair or replacement.

Upgrades are also needed for the Russian air forces that are based – or operate – in the north. These include local air and air defense forces, maritime patrol aircraft, naval aviation, and the long-range bomber force, which is mainly based at the Engels air force base near Saratov in Southern Russia. In 2007, after a 15-year pause, Russia resumed strategic bomber patrols in the international airspace over the Barents, Norwegian, and Greenland Seas. Among the regular air force units currently stationed in the northwestern region are the 9th fighter aviation regiment in Kilp-Yavr, northwest of Murmansk, and the 458th interceptor aviation regiment in Svatiya, south of Arkhangelsk.

In terms of ground forces, the Barents Region does not appear to be an area of priority, at least if compared to the Southern Military District, where Russia faces a number of difficult and long-term security challenges. Thus, the Barents Region is increasingly seen as Russia's "peaceful corner". The Kola Peninsula still hosts an independent motorized infantry brigade (the 200th), located in Pechenga, not far from the Norwegian border. There is also a motorized infantry brigade (the 138th Guards) in Kamenka, Karelia. Other than that, few ground force units of any significance are located in the Russian northwest, and no new ones are planned.

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