Russia’s Nuclear Activity in 2019: Increasing Strength And Pressure

Dr. Maxim Starchak
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Introduction

Russia is one of the two countries with the largest stockpile of nuclear weapons. Thus, the activity of its nuclear carriers is extremely sensitive for global security and should be precisely monitored by the global community, experts, and politicians. After the annexation of Crimea in 2014, Russia intensified its military policy, including its nuclear component. In this way, Russia copies the Union of Soviet Socialist Republics (USSR)—its demonstration of force through the development and deployment of nuclear capabilities is intended to provoke fear and exert pressure. This is one of the key strategies that Russia uses to show its strength and ensure that it is an important player on the world stage. As nuclear weapons are one of the few advantages Russia has in the global arena, they will always be not only a military but also a political mechanism for exerting pressure in foreign affairs. 2019 was no exception and showed that Russia’s nuclear activity continues to evolve.

However, as opposed to in Soviet times, Moscow’s current conventional forces are no match for that of the United States or NATO. 1 This has forced the Kremlin to place greater emphasis on nuclear weapons in its strategic doctrine and force posturing vis-à-vis the United States and NATO, making it even more important for the global community to remain vigilant and maintain a detailed understanding of the capabilities of Russia’s nuclear arsenal.

Strategic Missile Forces

In 2019, the intensity of the Strategic Missile Forces (SMF) exercises increased. According to Lieutenant General Sergey Siver, deputy commander of the SMF, the intensity of combat training activities significantly increased, numbering more than 200 exercises. 2 It was assumed that the number of exercises would increase by 1.5 times compared to 2018 3—that is, it is likely that no more than 230 nuclear training exercises were carried out, given that the Ministry of Defense would have reported otherwise.

Strategic Missile Forces exercises

Source: Russian Defense Ministry and the author’s estimates
In 2019, the SMF increased the amount of time missile systems spent on patrol. According to Sergey Karakaev, the SMF commander, the duration has been increasing regularly since 2014 and regiments now spend forty days on patrol. In 2014, the summer training period increased to thirty-two days. A year later, in 2015, the winter patrol period increased to a month. This trend continued and in 2019 alone the patrol time increased by at least eight to ten days. An increased time spent on patrol is not necessarily related to an introduction of new weapons, since the latest weapons began to enter service long before 2014. Rather, it indicates a political decision to strengthen combat training of nuclear forces and their overall combat readiness.

As for missile launches, the number has seen a general downward trend, from a high of ten in 2014 to five in 2019. At the end of 2018, for the first time, the Ministry of Defense reported neither the number of launches in the outgoing year nor plans for 2019. This is likely explained by the fact that 2018 saw the fewest number of launches in many years—only two. Since 2013, the SMF has planned to perform somewhere between ten to sixteen launches annually, but they lagged behind schedule due to industry delays, test base unpreparedness, and the extremely high cost of conducting launches. Thus, the SMF expected to launch only six intercontinental ballistic missiles (ICBMs) in 2020.

The readiness of the Strategic Missile Forces as Russia’s main nuclear force for combat operations in 2019 continued to grow. Both the number and formats of combat training events and the duration of combat alert duty have increased. Despite the fact that it is not possible to achieve regular launches of the planned number of missiles, launches of all types of missile systems in service are carried out regularly.

Strategic Bombers

In 2019, long-range aviation crews flew about 20,000 hours, with the average flight time of a crew clocking in at over 100 hours. Flights on strategic deterrence were conducted monthly. Compared to 2018, the number of flights did not increase, but a trend that began after 2013 continued: aircrafts began flying a little deeper and started to appear in places they had not been seen before.

In January 2019, two Tu-160 bombers flew into the Air Defense Identification Zone during a planned flight over neutral waters in the Arctic. Because details of the flight were shared with the public, one even performed a night refueling over neutral waters for the first time—this new public display designed to attract attention. In July, two Tu-95MS planes flew over the Sea of Japan. The South

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Korean Joint Chiefs of Staff argued that the two Russian military planes violated South Korean airspace, specifically the so-called anti-aircraft defense identification area (which Russia does not recognize). Despite the tensions, Russia continues to behave provocatively.

The flight of two Russian Tu-160 strategic missile carriers to the Chukotka Anadyr airfield—only a twenty-minute flight to Alaska—is also worth mentioning. On August 14, 2019, the missile carriers’ crews covered over six thousand kilometers, without landing, for more than eight hours. Tu-160s were an uncommon sight at Anadyr airfield, only showing up for the first time during an exercise in 2018. Although Shoigu stated that this relatively surprising 2019 flight was not an attempt to tease the United States, it is clear that the decision to send the Tu-160s to the airfield, one of the closest to United States, was intended to show Russia’s ability to deploy strategic bombers close to US territory. Also in August, two Russian Tu-160s appeared over the Baltic Sea after the end of the BALTOPS-2019 NATO exercise. Given that the long-range aircraft flight time has not changed since 2018, this appearance was likely planned by the Russian Ministry of Defense to demonstrate force and intensify the provocation of NATO.

Additionally, Russia’s long-range air force continues to demonstrate its strategic capabilities. Every year, Russia expands its geopolitical reach further into the most distant parts of the world under cover of partnerships with various countries. In October 2019, the longest flight of the year was performed by two Russian Tu-160 strategic bombers headed to the Republic of South Africa. The long-range aircraft flew over the Indian Ocean and the Caspian and Arabian Seas, with the flight lasting over thirteen hours and covering more than 11,000 kilometers. Similar Tu-160 flights to foreign countries are becoming a common practice. In December 2018, two Russian Tu-160s flew to Venezuela. Perhaps Tu-160s will soon fly to another BRICS country, like Brazil or India.

Also in 2019, Tu-95MS long-range strategic missile carriers from the Russian Aerospace Forces and Xian H-6 strategic bombers from the Chinese Aerospace Forces jointly patrolled the Asia-Pacific region for the first time. This was a political step intended to show that Russia and China can pursue a joint nuclear deterrence policy. Clearly, Russia wanted to show the United States that it has an ally in the region, particularly in such a sensitive sphere, and to flaunt its military potential.

The number of scheduled air patrol flights has generally increased in recent years. In 2019, long-range aircrafts performed forty-eight air patrol flights, an increase of 33 percent from 2018. Strategic bombers demonstrate their activity in the immediate vicinity of the borders of the United States and other NATO countries, exerting pressure.
on the West not only through the frequency of flights and their periodic provocation but also by involving China in joint patrols. At the same time, the average crew flight time remained at 100 hours for a second year. This number may be lower than expected because there are currently not many Long-Range Aviation crews with access to perform air patrols outside the country. It is also likely that the lack of strategic bombers on combat duty and the high cost of long-term strategic bomber flights makes it impossible for Long-Range Aviation to maintain constant high activity.

**Ballistic Missile Submarines**

NATO and the US noted that Russia increased its submarine activity in 2019. General Tod Walters, head of the US European Command, explained their process:

We drew attention to the underwater actions of Russia in the summer-autumn of 2018 and compared this to what Russia did in the summer-autumn of 2019. And we saw an increase of 50% in the number of resources under water that Russia allocated, including operations to patrol submarines outside its borders.

In 2019, the submarines’ time spent underway (offshore time) increased to 3,000 days (similar to 2017) as confirmed by Commander in Chief of the Russian Navy Admiral Nikolay Evmenov and Vice Admiral Alexander Moiseev, the Northern Fleet (NF) commander. Moiseev stated that NF submarine time spent underway exceeded the indicators planned for 2019 by 41 percent. The increase in submarine time spent underway is likely associated with the expansion of the geography of combat training areas, primarily with long-distance trips to the Atlantic and the North Pole.

An aerial view shows the Russian nuclear missile cruiser Pyotr Veliky (Peter the Great) and nuclear submarine Dmitry Donskoy moored on the eve of the the Navy Day parade in Kronshtadt, a seaport town in the suburb of St. Petersburg, Russia, July 28, 2017. REUTERS/Anton Vaganov
However, the increase in the intensity of ballistic missile submarines (SSBNs) was less active due to the fact that only one Typhoon-class submarine—*Dmitry Donskoy* (equipped with Bulava missiles\(^5\)), after repair and modernization\(^5\)—was included in the fleet in 2019. Estimates show that Russian strategic submarines also went on deterrent patrols at least nineteen times during the year.

There are also recognizable, primary submarine activities: In April and October 2019, during exercises at the Pacific fleet training area, nuclear-powered strategic missile submarines (in one case, SSBN *Alexander Nevsky*, Borei-class and SSBN *Ryazan*, Delta III-class and in the other case, SSBN *Alexander Nevsky* and SSBN *Vladimir Monomakh*, Borei-class) drilled a training duel.\(^20\) In May 2019, three nuclear-powered submarines—SSBN *Tula* and *Novomoskovsk*, Delta IV-class and cruise missile submarine *Severodvinsk*, Yasen-class—worked out a full range of tasks for ice navigation, including searching for an ice-hole, surfacing in the ice and using weapons under ice. This is especially important as exercises with weapons from under the ice have not been held for a long time. This activity not only tests the effectiveness of weapons, but also demonstrates Russia’s ability to deal with enemy submarines, even in difficult Arctic conditions.

At the end of October, the Norwegian broadcasting company NRK,\(^21\) citing sources in military intelligence, reported that ten Russian submarines (the Russian Defense Ministry announced the training of twelve submarines\(^22\)), of which eight were nuclear, participated in an operation in the North Atlantic aimed at overcoming NATO defense on the GIUK Gap\(^23\) and performing a hidden approach for the US East Coast. Although there is no data on the participation of strategic submarines in this task, it indicates an increase in the activity of the Russian submarine fleet.\(^24\) A strategic maneuver of this kind proves that Russia’s submarine forces are returning to the practices of the 1980s, when the same maneuvers were conducted regularly. Russia has demonstrated that its military abilities are comparable with the Soviets’, which means that it has regained oceanic power.

In 2019, there were five submarine-launched ballistic missiles (SLBMs) launches from strategic submarines: two R30 Bulava, one R29R, and two R29RMU Sineva. For the first time in many years, a SLBM was launched from the *Karelia*, a Delta IV-class submarine. For the first time during tests, a launch was performed from the *Knyaz Vladimir*, the first upgraded Borei-A class submarine. It should also be noted that on August 24, during combat training, the SSBN *Tula*, Delta IV-class fired a Sineva intercontinental ballistic missile from the North Pole area at the Chizha test range in the Arkhangelsk region in difficult ice conditions.\(^25\) According to Commander of the Northern Fleet Alexander Moiseev, Russian submarine forces are the only ones that conduct launches from under the Arctic ice.\(^26\) The launches themselves are standard policy for testing and operation qualities maintenance, and are not always an indicator of

![Russian SSBN Deterrent Patrols](image-url)

*Source: Author estimated data based on the Federation of American Scientists and the Russian Defense Ministry*
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The increase in the activity of Russian submarines in 2019 is due to the fact that SSBNs and other submarines have apparently increased the range of their campaigns. This is evidenced, for example, by the operation to break the GIUK Gap, the duration of which was estimated at sixty days.²⁷ However, the increase in the intensity of their exits to the sea was not as high. In 2019, existing SSBNs continued to carry out anti-submarine training and missile launches, but there are not more of them. To increase the intensity, it is necessary to have a larger number of SSBNs on alert. However, Borei-A are being produced slowly, and Delta-IV class submarines are periodically in the process of being repaired. It appears that the Russian navy will continue to operate SSBNs at the current level of intensity in the future.

Influence on the West

Russia’s nuclear weapons are a clear mechanism for deterring Western countries. Russia is weaker than the Western bloc in terms of conventional weapons and therefore seeks to compensate with nuclear weapons. Russian President Vladimir Putin’s words indicate how this might threaten NATO countries. According to him, Russia has resumed strategic aviation flights in response to US and NATO actions.²⁸ By this, he means the West’s expansion of military bases in Eastern Europe and missile defense system development. In particular, since 2007, Putin has threatened to target Russian nuclear missiles at new territories in reaction to missile defense system deployment.²⁹ In addition, following the US withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty and potential missile deployment, Putin proposed the creation and deployment of arms that could target not only the countries where the United States would deploy their weapons but also the United States itself.³⁰ Obviously, Russia is resorting to nuclear forces because it cannot respond to NATO countries proportionally. Instead, Russia constructs a possible response to NATO’s military activity, thus engaging in nuclear deterrence, as outlined in Russia’s nuclear doctrine.

According to its nuclear doctrine, Russia applies nuclear deterrence in response to the development of general-purpose forces by potential adversaries, including nuclear weapons delivery vehicles in Russia’s neighboring

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SLBM launches (R29R, R29RMU2 Sineva, and R30 Bulava)

Source: Based on reports from the Russian Defense Ministry and Navy
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territories, as well as the deployment of various strategic non-nuclear forces (from missile defense to hypersonic systems) by states that perceive Russia as a potential adversary. This underlines that nuclear weapons are of paramount importance to Russia’s national security and that they can be used in a variety of military scenarios. That is why it is no surprise that Russia has intensified its nuclear activities in a situation where relations between Russia and the West are at their most strained since the collapse of the USSR.

Putin has explained on multiple occasions that the resumption of strategic aviation flights in remote patrol areas was prompted by the West’s refusal to engage in dialogue with Russia. And many authorities have indicated that Russia’s nuclear weapons became an instrument to exert pressure on NATO. After the United States withdrew from the INF Treaty, various ideas to deploy Russian missiles in Venezuela and Cuba arose. According to First Deputy Chairman of the Committee on Defense of the State Duma Alexander Sherin, the United States only understands brutal force. That is why the United States would be deterred by Russian arms deployed in Venezuela, and thus more cautious. Meanwhile, Deputy Minister Sergey Ryabkov did not rule out Russia deploying missiles prohibited by the INF Treaty closer to the United States in response to similar actions taken by Washington. Technically, there is nothing surprising about these threats and actions. They fall in line with Russia’s military and nuclear doctrines; however, the multiplication of such threats and the involvement of officials at various levels indicate that the role of nuclear weapons in pressuring NATO has increased.

To exert pressure, Russian bombers are deployed closer to the US borders on Chukotka, Russia conducts joint air patrols with China, and there is increased submarine activity in strategic areas. Russia has already started developing medium-range missiles, and that means that there will soon be talk of the need to test and involve them in different exercises. No one admits to escalation for de-escalation, but this is, in fact, what is going on. Russia is trying to draw attention to itself by demonstrating its nuclear activity on land, in the water, and in the air. In doing so, Russia wants to remind the United States and other NATO countries that

Russian army Tupolev Tu-160 (R) and Tupolev Tu-22M3 fly in formation over St. Basil’s Cathedral during the rehearsal for the Victory Day parade in Moscow, Russia May 4, 2019. REUTERS/Tatyana Makeyeva
it is a nuclear state and must be reckoned with. In this way, Russia draws on the USSR's experience during the Cold War. Demonstration of force through the development and activity of nuclear forces should, according to history, provoke fear, put pressure on the United States, and encourage arms control negotiations (primarily to solve its own problems: stopping ballistic missile defense, NATO’s advance to the East, and space militarization). However, so far, with the collapse of the arms control system, Russia’s nuclear activities are becoming more unpredictable. This increases the risk of clashes between Russia’s military and NATO countries, and leads to the possibility of nuclear confrontation.

Conclusion

In 2019, we witnessed both an increase in combat training and a rise in the quantity of nuclear triad units on active patrol. Russia provokes and tests the military command of NATO and other US allies. Aircraft and submarines continue to approach as closely as possible the borders of other countries. The geography of Russia’s nuclear presence is expanding. However, the industrial and testing abilities of Russia are not capable of meeting the scope and deadlines outlined by the Ministry of Defense. There is no increase in launches of ICBMs.

Political and military maneuvers to increase or maintain high nuclear triad activity are still relevant. Russia strives to demonstrate force aimed at the deterrence of NATO countries and exerts pressure on them. And without nuclear weapons control treaties, nuclear triad activity will likely only increase in the coming years with the introduction of new or upgraded nuclear weapon carriers. Nuclear weapons will continue to be an active mechanism in Russian policy.
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5 It is clear that these plans were not implemented.


18 The submarine was able to carry twenty Bulava nuclear missiles.


23 During the Cold War, the maritime choke points between Greenland, Iceland, and the United Kingdom were key to the defense of Europe. This “GIUK Gap” represented the line that Soviet naval forces had to cross in order to reach the Atlantic and stop US forces heading across the sea to reinforce America’s European allies. It was also the area that the Soviet Union’s submarine-based nuclear forces would have to pass as they deployed for their nuclear strike missions. See: Magnus Nordenman, "Russian Subs Are Reheating a Cold War Chokepoint," Defense One, March 4, 2016, https://www.defenseone.com/ideas/2016/03/russian-subs-are-reheating-cold-war-chokepoint/126428/.


27 Strand, "Hemmelig ubåt-operasjon: «Målet er å vise at Russland kan nå USA».


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