All material compiled from open-source documents.

THE KALININGRAD DILEMMA: A NUCLEAR FLASHPOINT

Christopher D. Reinecke Capt, United States Air Force

Submitted in fulfillment of the requirements for

AIR UNIVERSITY ADVANCED RESEARCH (NEXT GENERATION INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE)

in part of

SQUADRON OFFICER SCHOOL VIRTUAL – IN RESIDENCE AIR UNIVERSITY MAXWELL AIR FORCE BASE February 2021

Advisor: Lt Col John Isacco

ACSC/Dept of Leadership

Maxwell AFB, AL

"Opinions, conclusions, and recommendations expressed or implied within are solely those of the author and do not necessarily represent the views of the Air University, the United States Air Force, the Department of Defense, or any other US government agency."

Abstract

When planning contingency operations for a Baltic scenario against Russia, the North Atlantic Treaty Organization (NATO) must carefully consider how best to tackle the stronghold in Kaliningrad Oblast. The nuclear-capable and anti-access and area denial (A2AD) forces stationed in the region present a significant roadblock to NATO efforts to engage in the Baltics and are of great strategic value to Russia. Russian statements, policy, and signaling indicate that likely any conventional attack against the Kaliningrad forces will check boxes for a nuclear response. It is uncertain if such retaliation is guaranteed, but the possibility cannot be ignored. It is recommended to consider diplomatic and cyber warfare options in a Baltic scenario to mitigate the risk of nuclear warfare.

Introduction

Kaliningrad Oblast (hereinafter referred to as Kaliningrad) provides Russia a strategic foothold in the Baltics and northern Europe. The location, being detached geographically from the Russian mainland, has sea access and creates a narrow chokepoint with Belarus for North Atlantic Treaty Organization (NATO) forces traveling between Poland and Lithuania. Russia has a significant military presence in Kaliningrad not only because its remoteness makes it hard to defend, but also because its proximity to NATO countries makes it an ideal staging ground for disruption of NATO activities.

NATO is planning for possible scenarios where Russia threatens, invades, or attacks the Baltic states. These plans must include how to tackle the problem of Kaliningrad. Russia's strategic and nuclear-capable forces in the region have a high price for their destruction, so much so that a nuclear response could be justified by Russia. This analysis considers what is known about Russia's nuclear weapons policy and how various NATO attack scenarios could trigger a nuclear weapons response. It is likely that any conventional attack against Kaliningrad could prompt at least the consideration of a Russian nuclear response, as any such action would cross Russia's insinuated and declared nuclear deterrent red lines.

Russian Public Nuclear Weapons Policy

International Speculation

Russian nuclear doctrine is largely unknown due to it being a closely held secret, so this analysis will focus on what is publicly known or has been skepticized. Even Russia's public statements and policies have been heavily debated. It is very important to note that declaratory policies can provide a glimpse into Russia's doctrine, but may only serve as signaling or

warnings to other countries. (Kofman 2020) A Kremlin spokesman implied nuclear use **only if provoked**: "Russia can never and will never initiate [the use of nuclear weapons]." (TASS 2020)
A common NATO perception about Russia is **escalate to de-escalate**: threat of or actual first use of nuclear weapons to "de-escalate" a conflict on terms favorable to Russia. (Office of the Secretary of Defense 2018) Since the Kremlin's statement and the mainstream external viewpoint are at odds, perhaps policy documents and other sources can help to clarify use cases.

2020 Deterrence Policy

In June 2020, Russian President Vladimir Putin signed a new public policy for nuclear deterrence. The document states that Russia's stance on nuclear weapons is defensive in nature to prevent aggression against the Russian Federation or its allies. (Bugos 2020) Four conditions that would provoke nuclear weapons use include:

- 1) Reliable data on a launch of ballistic missiles against Russia and/or its allies;
- 2) In response to nuclear weapon or other types of weapons of mass destruction usage against the territories of the Russian Federation and/or its allies;
- 3) Attacks by an adversary against critical governmental or military sites of the Russian Federation, disruption of which would undermine nuclear forces response actions;
- 4) Aggression against the Russian Federation involving the use of conventional weaponry which threatens the existence of the state itself. (Bugos 2020)

Item 3 is particularly interesting because it states "nuclear forces" broadly rather than the more specific "strategic nuclear forces." This language allows the possibility of a nuclear response to any attack on a vast number of Russian military facilities, bases, and units due to many of those forces being dual-capable (conventional and nuclear capability). (Schneider 2020)

Other Nuclear Signaling

The published nuclear red lines promote a defensive narrative, but maintain enough ambiguity to provide Russian decisionmakers flexibility. To further understand the messaging, it is important to also consider military exercises and posturing. In 2014, Russia conducted an unprecedented number of nuclear-related exercises and drills for both strategic and non-strategic nuclear weapons forces. Additionally, Russia routinely patrols nuclear-capable bombers beyond its airspace. (Durkalec 2015) President Putin also stated in November 2020 that the nuclear triad remains the primary, key guarantee of Russia's security. (Stickings 2020) This statement is supported by the significant modernization of its nuclear forces and weapons systems. (Office of the Secretary of Defense 2018) It is apparent that Russia is serious about establishing deterrence.

Possible Russian Nuclear Response Triggers

These "red line" triggers for Russian nuclear weapons use are derived from public policy and statements, perceived doctrine, and the possible NATO actions against the forces present at Kaliningrad. There are a few caveats to this analysis:

- These scenarios attempt to establish instances when Russia *may* decide to respond with nuclear weapons.
- Such a decision in a real scenario will be predicated on more variables and uncertainty than can be accounted for in these hypothetical scenarios.
- This paper makes no assumptions about what type of nuclear response would be elicited from Russia such as type of weapon(s), launch platform, targets, and so on.
- The scenario target analysis does not assume how NATO attacks these targets but simply how an attack against these targets may cross red lines.

Scenario 1 – NATO Preemptive Strike

In the days of ramped up tensions or substantial information leading to a Russian invasion of the Baltics, NATO could conduct a preemptive attack against targets in Kaliningrad. Russia's response will depend on the targets themselves, but on its face, the preemptive strike will either immediately convince Russia to back down from aggression or will obligate Russia to immediately escalate. Kaliningrad's status as a strategic military region would likely be covered under the 2020 deterrence policy item 3), which may allow Russia to justify subsequent action to protect its nuclear forces.

Scenario 2 – NATO Cyber Attack

Following a Russian invasion of the Baltics, NATO could conduct a cyber attack to temporarily disable or permanently destroy the air defense and nuclear forces in Kaliningrad to give NATO the ability to respond by conventional means in the Baltics. A cyber attack that seeks to temporarily disable these forces is not likely to prompt nuclear retaliation from Russia because the attack does not pose an existential threat to the country. However, a cyber attack that permanently destroys its targets would trigger deterrence policy item 3) in the same way a conventional attack would. Due to the covert nature of cyber attacks, Russia would need to successfully attribute the aggressor and justify a nuclear response.

Scenario 3 – NATO Conventional Ballistic Missile Strike

NATO could either preemptively or in response to a Russian invasion of the Baltics launch ballistic missiles against Kaliningrad. Obviously, an unfathomable nuclear ballistic missile would trigger a number of red lines, but an attack with conventional ballistic missiles would cross the line with 2020 deterrence policy item 1). The Russian policy is ambiguous if the ballistic missiles were exclusively launched from land or sea, or is a hard line against both. It is

likely the intent of this policy line is specific to strategic nuclear weapons, which would drive a Russian second-strike attack. It would be unlikely that Russia would see the launch of a single or a few missiles as the doomsday scenario that requires immediate massive retaliation. Still, the policy is vague so that Russian leaders have wiggle room, which may fall prey to fears of overwhelming, highly accurate conventional ballistic missiles, thus triggering deterrence item 4) if Kaliningrad is estimated to be vital to Russia's existence.

Scenario Targets – Anti-Access and Area Denial (A2AD)

Kaliningrad has S-300 and S-400 air defense systems which could aid in establishing no-fly zones in at least a 250km radius around the region, stretching into a large chunk of Poland and the Baltic states. (Weinberger 2016) Likely, Russia views its air defenses as a strategic asset (Davis, et al. 2019), so destruction of these defenses likely triggers deterrence item 3).

Additionally, Kaliningrad is home to a 6000km range Voronezh-DM early warning radar. (RIA Novosti 2011) (Missile Defense Project 2017) The early warning radar system is also likely considered to be a strategic asset with the key purpose of detecting ballistic missile launches, reentry vehicles, and aircraft. Its destruction potentially triggers deterrence items 1) and 3).

Scenario Targets - Nuclear Capable Assets

The deployment of 500km range, nuclear-capable Iskander-M missiles to Kaliningrad caused great concern to NATO. (Missile Defense Project 2018) These missiles are road-mobile, can hit targets into Germany, and are solid-fueled so that they can be launched very rapidly. Attacking these missiles would clearly trigger deterrence item 3) and possibly also item 4) if Russia perceives that the loss of these missiles puts the country's existence in danger. To that last point, Russia does have a large nuclear arsenal which may help mitigate some risk from the destruction

of the Iskanders. Similarly, to the missiles, destruction of dual-capable naval and air assets stationed in Kaliningrad could trigger deterrence item 3).

In 2018, Russia appeared to deepen or otherwise harden a possible nuclear weapons storage bunker in Kaliningrad. (Said-Moorhouse 2018) The destruction of a possible nuclear weapons storage bunker would not only pose a significant radiation risk to the region, but would also certainly trigger deterrence item 3). Nuclear fallout resulting from the any detonation of stored warheads or lofting of radiological material from the weapons could trigger deterrence item 2).

Conclusion

Likely, any conventional attack against Kaliningrad will result in tripping Russia's red lines for nuclear weapons use, but may or may not actually elicit such a response. Recent public declarations and policy provide signaling about potential red lines, which would almost certainly be crossed due to the strategic importance of the region and its forces. To reduce the chances of a Russian nuclear response, NATO should consider the following:

- Use diplomatic means to convince Russia to remove nuclear forces from Kaliningrad.
- Warn Russia of an impending attack against Kaliningrad. Provide sufficient time for Russia to evacuate its nuclear forces.
- Leverage a cyber attack to disable rather than destroy forces to the fullest extent possible.
- Attack the minimum number of targets possible to achieve objectives.
- Deter Russian nuclear attack with NATO nuclear bomber presence flights in the area.

The Kaliningrad dilemma puts NATO at a significant disadvantage, whereas Russia holds escalation superiority. (Davis, et al. 2019) For this reason, NATO must tread carefully while planning for a possible Baltic contingency.

Bibliography

- Bugos, Shannon. 2020. "Russia Releases Nuclear Deterrence Policy." *Arms Control Today* 50 (6): 41-42. http://aufric.idm.oclc.org/login?url=https://www-proquest-com.aufric.idm.oclc.org/scholarly-journals/russia-releases-nuclear-deterrence-policy/docview/2425620560/se-2?accountid=4332.
- Davis, Paul K, J Michael Gilmore, David R Frelinger, Edward Geist, Christopher K Gilmore,

 Jenny Oberholtzer, and Danielle C Tarraf. 2019. *Exploring the Role Nuclear Weapons Could Play in Deterring Russian Threats to the Baltic States*. Santa Monica, CA: RAND

 Corporation. Accessed February 02, 2021.

 https://www.rand.org/pubs/research_reports/RR2781.html.
- Durkalec, Jacek. 2015. Nuclear-Backed "Little Green Men:" Nuclear Messaging in the Ukraine Crisis. Warsaw: The Polish Institute of International Affairs. Accessed January 29, 2021. https://www.files.ethz.ch/isn/193514/Nuclear%20Backed%20%E2%80%9CLittle%20Green%20Men%E2%80%9D%20Nuclear%20Messaging%20in%20the%20Ukraine%20Crisis.pdf.
- Kofman, Michael. 2020. *Russian Policy on Nuclear Deterrence (Quick Take)*. June 04. Accessed January 26, 2021. https://russianmilitaryanalysis.wordpress.com/2020/06/04/russian-policy-on-nuclear-deterrence-quick-take/.
- Missile Defense Project. 2017. "Russia Adds 3 New Radars to Missile Early Warning System."

 *Missile Threat** (Center for Strategic and International Studies). Accessed February 02,

 2021. https://missilethreat.csis.org/russia-adds-3-new-radars-missile-early-warning-system/.

- Missile Defense Project. 2018. "Russia Deploys Iskander Missiles to Kaliningrad." *Missile Threat* (Center for Strategic and International Studies). Accessed February 02, 2021. https://missilethreat.csis.org/russia-deploys-iskander-missiles-kaliningrad-2/.
- Office of the Secretary of Defense. 2018. "Nuclear Posture Review." Accessed January 26, 2021. https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF.
- RIA Novosti. 2011. "Russia's Baltic Radar to be Fully Operational by 2014." *Rossiiskaya Gazeta*. Accessed February 02, 2021.

 https://www.webcitation.org/6CcAqdfhP?url=http://en.rian.ru/news/20111215/17028435

 0.html.
- Said-Moorhouse, Lauren. 2018. "Russia May Have Upgraded Nuclear Bunker in Kaliningrad, Report Says." *CNN*. Accessed February 02, 2021. https://www.cnn.com/2018/06/18/europe/russia-kaliningrad-nuclear-bunker-intl/index.html.
- Schneider, Mark B. 2020. Russian Strategic and Hypersonic Naval Nuclear Weapons. November 18. Accessed February 02, 2021.

 https://www.realcleardefense.com/articles/2020/11/18/russian_strategic_and_hypersonic_naval_nuclear_weapons_650130.html.
- Stickings, Tim. 2020. "Putin Announces Nuclear Attack-Proof Command Post Where He Will Be Able to Control Military Forces in the Event of WWIII." *Daily Mail*. Accessed January 29, 2021. https://www.dailymail.co.uk/news/article-8938489/Putin-announces-nuclear-attack-proof-command-post.html.

- TASS. 2020. "Russia Will Never Initiate Use of Nuclear Weapons, Kremlin Says." *Russian News Agency*, June 3. Accessed January 29, 2021. https://tass.com/politics/1163559.
- Weinberger, Kathleen. 2016. Russian Anti-Access and Area Denial (A2AD) Range: August 2016.

 August 29. Accessed February 2, 2021. https://www.iswresearch.org/2016/08/russian-anti-access-and-area-denial.html.