



INFORMATION SERIES

Issue No. 587

May 20, 2024

The 2024 Edition of the Federation of American Scientists' Report on Russian Nuclear Weapons: Flaws and Fallacies

Dr. Mark B. Schneider

Dr. Schneider is a Senior Analyst with the National Institute for Public Policy. Before his retirement from the Department of Defense Senior Executive Service, Dr. Schneider served as Principal Director for Forces Policy, Principal Director for Strategic Defense, Space and Verification Policy, Director for Strategic Arms Control Policy and Representative of the Secretary of Defense to the Nuclear Arms Control Implementation Commission. He also served in the senior Foreign Service as a Member of the State Department Policy Planning Staff.

Introduction

The Federation of American Scientists (FAS) is an American think tank that advocates for what it calls "minimal deterrence." It does not support the U.S. strategic nuclear triad or nonstrategic nuclear weapons and calls for the complete elimination of the U.S. ballistic missile submarine force.¹ Correspondingly, it has an apparent tendency to downplay the size and significance of the Russian nuclear arsenal. In the absence of detailed U.S. government information since the end of the Cold War on the Russian nuclear threat, the latest FAS report on Russia's nuclear weapons receives considerable attention; much of the global media regard it as authoritative on Russian nuclear warhead numbers, a status it does not deserve.²

The annual FAS report is the product of a great deal of research. Much of it is accurate, but on the critical question of the number of Russian nuclear weapons, it provides almost no sourcing for its numerous numbers.³ It is possible that Russia has 5,580 nuclear weapons, as FAS assesses, but it is also possible that Russia has at least twice that number.⁴ For example, in 2020, noted Russian journalist Pavel Felgenhauer wrote that, "Indeed, taking into account non-



INFORMATION SERIES Issue No. 587 | May 20, 2024

strategic (tactical) nuclear weapons, which no one has ever verifiably counted, Russia may have more (maybe twice as many overall) than all the other official or unofficial nuclear powers taken together."⁵

Since 2020, the FAS estimate of the number of Russian nuclear weapons has declined from 5,977 to 5,580.⁶ However, no evidence for this decline is cited. Indeed, the Biden Administration has repeatedly said that the number of Russian nuclear weapons is *increasing*.⁷

The 2024 FAS report does a disservice to its readers by suggesting that it is possible to know the exact number of Russian nuclear weapons, even if this is hedged by words like "about" and "approximately."⁸ I extensively discussed the problems with the FASs analysis in the October 2023 National Institute for Public Policy Occasional Paper entitled How Many Nuclear Weapons Does Russia Have? The Size and Characteristics of the Russian Nuclear Stockpile. In that study I conclude that: 1) the range of uncertainty concerning the number of Russian nuclear weapons is measured in the thousands; 2) there is almost no documentation of the numerous nuclear warhead numbers cited in the FAS report; 3) the FAS assessment of the maximum number of warheads for each type of Russian strategic missile is mainly based on more than 30 year old START Treaty data declarations (which do not necessarily reflect the maximum warhead loadings) and are for some missile types that no longer exist because of Russian nuclear modernization; 4) the FAS analysis ignores verification problems with the New START Treaty, particularly with regard to mobile ICBMs, 5) the FAS analysis ignores the potential impact of Russia's "suspension" and violation of the New START Treaty and the complete lack of on-site inspections since March 2020, which raise the possibility that most or all of Russia's strategic nuclear forces could have been covertly uploaded; and 6) there is a lack of sourcing for the FAS assertion that Russia deploys only 200 nuclear weapons at its heavy bomber bases (one-third to one-quarter of what Russian bombers could carry), although it acknowledges that Russia has enough nuclear warheads to arm its entire bomber force.9 This analysis will focus on the new elements in the 2024 edition of the FAS assessment.

Russian Strategic Nuclear Weapons

Previous versions of the FAS Russia nuclear report contained two sets of numbers for Russian nuclear capabilities. One was what the authors thought Russia actually had and another which was inaccurately said to be the maximum Russian potential. The 2024 edition of the report dropped this latter claim but there are only minor changes from the 2023 version.

The 2024 FAS report states, "The current version of the RSM-54 SLBM might be the Layner (SS-N-23 M3), a variant of the previous version—the Sineva (SS-N-23 M2).... In 2006 US intelligence estimated that the missile could carry up to 10 warheads, but it lowered the estimate to 4 in 2009. The average number of warheads carried on each missile has probably been limited to 4 multiple independently targetable reentry vehicles (MIRVs) to meet the New START limits."¹⁰ The FAS provides no source for the reported 2006 and 2009 assessments. The credibility of open source assessments concerning the Layner in 2006 and 2009 is very low since the U.S. government then said virtually nothing about Russian nuclear forces in unclassified



INFORMATION SERIES Issue No. 587 | May 20, 2024

publications. Moreover, in the 2006-2009 period, *the Layner did not exist*. The Layner (sometimes translated as the Liner) did not become public until 2011 when it was announced by the missile's manufacturer, the Makeyev Design Bureau, which said that it could carry 50 to 100 percent more warheads than the six warhead Bulava-30 SLBM.¹¹ The first test of the Layner was reportedly in 2011.¹²

The apparent FAS source for a four warhead Layner is a 2011 blog item by Russian expatriate Pavel Podvig. However, the statement by Podvig actually notes that the Layner "…is indeed a ten-warhead version of the R-29RM Sineva missile."¹³ In December 2022, Russian state-run *Sputnik News* reported that the Sineva and Layner SLBMs "are armed with between 4 and 12 MIRV warheads, with firepower of between 100 and 500 kilotons."¹⁴ The Layner is important because it has the largest *rapid* and *covert* upload potential of any *current* Russian strategic nuclear missile.

In October 2023, the bipartisan Congressional Strategic Posture Commission observed that Russia has committed "...violations of almost every arms control agreement it has ratified."¹⁵ Yet, as in previous editions, the 2024 FAS report apparently generated its strategic nuclear warhead numbers on the assumption that Russia is complying with the limitations of the New START Treaty. The apparent basis for this assumption is that Russia has stated that it still intends to abide by New START's limits, despite Putin's "suspension" of the Treaty and the lack of any on-site inspections for four years.¹⁶ Yet, Russia has every reason to dissemble about this in order to dissuade the United States from uploading its strategic forces in response. In addition, there is ample evidence of Russian New START violations. For example, open sources (ignored in the FAS reports), including Russian state media and statements by senior Russian officials and generals, indicate that Russia is giving its non-heavy bombers and fighters the capability to carry long-range nuclear_capable cruise missiles.¹⁷ This would make them New START Treaty accountable and put Russia above all of the New START Treaty limits.¹⁸

Other numbers in the 2024 FAS report suggest a similar downplaying of Russian nuclear forces. For example, the report states that, "In November 2022, high-resolution images of the Sarmat's payload bus revealed that the missile could theoretically carry up to 14 warheads in two tiers of seven warheads each."¹⁹ The source that the FAS cites does not deal with the Sarmat but rather the SS-18, the missile it will replace. The Russian Ministry of Defense says that the Sarmat can carry 20 warheads.²⁰

The new and improved Russian systems are generally assessed by the FAS as having the same warhead potential as the old ones they replace. Almost all Russian press reports about the new systems credit them with the ability to carry more warheads than the systems they will replace.²¹

The 2024 FAS report states that Russia could increase its deployed warheads by 60 percent by violating the New START Treaty.²² Yet Russian upload potential is apparently much higher than this. Even former Under Secretary of State Rose Gottemoeller, the chief negotiator of the New START Treaty, has acknowledged that some estimates of Russian upload potential suggest Russia could add "up to a thousand warheads, to their existing deployments of ICBMs without deploying a single additional missile."²³ It is possible that it could be about twice this



INFORMATION SERIES Issue No. 587 | May 20, 2024

much and it may have already been covertly accomplished since the end of on-site inspections in March 2020.

Russian Non-Strategic (Tactical) Nuclear Weapons

The 2024 FAS report starts by recognizing that, "The poor performance and loss of a significant portion of Russian conventional forces in the war against Ukraine and the depletion of its weapon stockpiles will likely deepen Russia's reliance on nuclear weapons for its national defense."²⁴ The Biden Administration has repeatedly made the same assessment. Despite this, the 2024 FAS report reduced its estimate of the number of Russian non-strategic (tactical nuclear warheads) to 1,558 from 1,816 in 2023 and 1,912 in 2022.²⁵ There is no apparent reason for such a reduction when Russia is expanding its reliance on nuclear weapons.

According to the 2024 FAS report, "Rumors emerged in early 2022 that some in the Intelligence Community believe the number of Russian non-strategic nuclear weapons could increase significantly—potentially doubling—by 2030."²⁶ In reality, in December 2017, Bill Gertz reported, "Russia is aggressively building up its nuclear forces and is expected to deploy a total force of 8,000 warheads by 2026 along with modernizing deep underground bunkers, according to Pentagon officials. The 8,000 warheads will include both large strategic warheads and thousands of new low-yield and very low-yield warheads to circumvent arms treaty limits and support Moscow's new doctrine of using nuclear arms early in any conflict."²⁷ In August 2019, then-Deputy Assistant Secretary of Defense for Nuclear Matters Rear Admiral (ret.) Peter Fanta confirmed the Gertz story stating that, "The Russians are going to 8,000 plus warheads."²⁸

To its credit, the FAS authors reported the "rumors," despite the fact they undercut the report's conclusion about Russia non-strategic nuclear weapons reduction. However, what the report characterized as a "rumor" is what FAS Director Hans Kristensen had previously noted was a clear statement by, "STRATCOM Maj Gen Ferdinand Stoss (J5) [who] says Russia has up to 2,000 non-strategic nukes today and could potentially have twice that many by 2030."²⁹ The other "rumor" was a *Politico* story which did not report that the number of Russian non-strategic nuclear weapons was doubling but rather that Russia had *already* reached 4,000 non-strategic nuclear weapons, citing "a former senior GOP government official who still works on nuclear security issues." ³⁰

The high estimates of Russian non-strategic nuclear weapons are about 10,000.³¹ The official Russian position is that it has reduced its non-strategic or tactical nuclear weapons 75 percent from Cold War levels, which equates to a residual force of more than 5,000 Russian tactical nuclear weapons,³² more than three times the FAS reported number of 1,558.

Russian Nuclear First Use Doctrine and Nuclear Threats

The FAS Russia reports also appear to underplay the significance of Russian nuclear doctrine with regard to Moscow's nuclear threats and potential first use of nuclear weapons. From the standpoint of its credibility, the 2024 report's timing could not have been worse; its publication



INFORMATION SERIES Issue No. 587 | May 20, 2024

was bracketed by the most explicit and extreme nuclear threats President Putin has made in his long history of doing so since 2007. Just before the FAS report was published, President Putin, in the Russian equivalent of the U.S. State of the Union address, said, "[Western nations] must realise that we also have weapons that can hit targets on their territory. All this really threatens a conflict with the use of nuclear weapons and the destruction of civilization."³³ Also, just prior to the FAS report's publication, The Financial Times said it had obtained Russian "classified papers" which "describe a threshold for using tactical nuclear weapons that is lower than Russia has ever publicly admitted, according to experts who reviewed and verified the documents."³⁴ Just after the appearance of the FAS report, *The New York Times* reported that in 2022 the Central Intelligence Agency told President Biden that if Ukraine threatened to take back Crimea, the "likelihood of [Russian] nuclear use might rise to 50 percent or even higher."³⁵ Also immediately after the FAs report, Putin, speaking about his war against Ukraine, said that, "...Russia's nuclear forces are in full readiness. From the military-technical viewpoint, we're prepared," and that Russia's nuclear Triad was "more modern than any other triad."³⁶ Soon after this, in his re-election victory speech, he warned "that a direct confrontation between Russia and NATO would be 'one step away from a full-scale World War III'."³⁷

To its credit, the 2024 FAS report quoted the full content of paragraph 19 of President Putin's June 2020 nuclear deterrence decree, which outlines the conditions under which Russia believes the first use of nuclear weapons is justified.³⁸ (The 2023 version listed only two of the four nuclear first use criteria in paragraph 19.) However, the 2024 edition neglected to inform its readers that each of the subparagraphs of Article 19 allows for the *first use of nuclear weapons*.³⁹ It also ignored paragraph 4 which links Russia nuclear weapons to protecting "the sovereignty and territorial integrity of the state."⁴⁰

The 2024 FAS report also appears to have ignored substantial evidence that the classified version of Russian nuclear doctrine allows for pre-emptive nuclear strikes, which includes a 2014 statement by General of the Army (ret.) Yuri Baluyevskiy who said the "conditions for preemptive nuclear strikes...is contained in classified policy documents."⁴¹ The leaked Russian documents obtained by the *Financial Times* reportedly speak about responding with nuclear weapons to "an imminent enemy attack using conventional weapons."⁴² This clearly constitutes pre-emptive nuclear war. In 2009, Russia announced that it would classify its nuclear doctrine.⁴³ In 2009, Sergei Patrushev, Secretary of the Russian National Security Council, said that, "In situations critical to national security, options including a preventative nuclear strike on the aggressor are not excluded."⁴⁴ In 2008, General Baluyevskiy, then-Chief of the General Staff, threatened "...that to defend the sovereignty and territorial integrity of Russia and its allies, military forces will be used, including preventively, including with the use of nuclear weapons."⁴⁵ In 2003, then-Defense Minister Colonel General Sergei Ivanov suggested that Russia had classified plans for nuclear pre-emption, saying that "...everything that we plan does not necessarily have to be made public."⁴⁶

The 2024 FAS report argues that it was not clear if "....Putin's views aligned with those of his more hawkish or more dovish military and political peers..."⁴⁷ This is a curious comment; President Putin appears to have personally made more nuclear threats, of many different types,



INFORMATION SERIES Issue No. 587 | May 20, 2024

than any of his subordinates. In 2015, President Putin declared, "Fifty years ago, I learnt one rule in the streets of Leningrad: if the fight is inevitable, be the first to strike."⁴⁸ In 2021, President Putin personally threatened to destroy the U.S. and NATO National Command Authorities with his hypersonic nuclear-capable missiles.⁴⁹ In 2022, he started his war against Ukraine with a strongly implied threat of nuclear war, an announced nuclear alert and a major nuclear exercise.⁵⁰ Secretary of State Antony Blinken said, Putin's "Provocative rhetoric about nuclear weapons is the height of irresponsibility."⁵¹ The numerous Russian nuclear threats would likely not have happened if President Putin did not think they enhanced Russian power. Putin is reportedly surrounded by yes men.⁵²

The extreme nuclear threats by Dmitri Medvedev, Deputy Chairman of the Russian National Security Council and former President and Prime Minister, are discounted in the 2024 FAS report because he is not "part of the chain of command that would be involved in a decision to employ nuclear weapons."⁵³ This confuses nuclear attack execution with involvement in nuclear decision-making. The two are not the same. The recent statements by President Putin quoted above are consistent with the most "hawkish" statements by Medvedev.

In 2007, Putin personally announced the resumption of provocative "patrols" by Russian nuclear-capable bombers.⁵⁴ Putin tried to maximize its impact by saying that 14 bombers had simultaneously taken off.⁵⁵ In 2015, NATO Secretary General Jens Stoltenberg observed, "Russia has also significantly increased the scale, number and range of provocative flights by nuclear-capable bombers across much of the globe. From Japan to Gibraltar. From Crete to California. And from the Baltic Sea to the Black Sea."⁵⁶ These provocative flights continue. Taken together, the number and stridency of Russian nuclear threats against the United States and the West exceeds anything experienced during the Cold War.

Conclusion

An accurate assessment of Russian nuclear weapons capability and doctrine is critically important. Unfortunately, today, such accurate assessments appear not to be forthcoming from the U.S. government or from the FAS reports. This is made worse by the uncritical press treatment of the FAS reports. While the long-term threat from China may be greater, Moscow is dangerous because of President Putin's views about nuclear weapons and his history of bad decision-making. As British journalist Con Coughlin has pointed out, "Nothing Putin has said in the wake of his election success should disabuse anyone of the view that the Kremlin clearly means business in terms of escalating its confrontation with the West."⁵⁷

Putin must be deterred. The United States and NATO clearly have the economic and technical resources to do so. However, despite the significant increase in NATO defense spending since Putin's 2022 invasion of Ukraine, the current security situation is risky. The Biden Administration's defense budget cuts and its aversion to nuclear deterrence are dangerous elements of the current crisis.



INFORMATION SERIES Issue No. 587 | May 20, 2024

The war threat the United States and its allies now face is more than from just Putin alone. As the U.S. Strategic Posture Commission has pointed out, the most serious threat the United States faces today is the possibility of a simultaneous attack from both Russia and China.⁵⁸ It is interesting that in March 2024 Admiral John C. Aquilino, commander of the Indo-Pacific Command stated, "All indications point to the [People's Liberation Army] meeting President Xi Jinping's directive to be ready to invade Taiwan by 2027."⁵⁹ This is only a year after German intelligence reportedly projected a possible Russian "attack on NATO-member countries."⁶⁰ With both Moscow and Beijing flexing their military muscles and making nuclear threats against those who would seek to stymie their expansionist goals, there is a real risk of opportunistic or coordinated aggression. The United States and its European and Asian allies unfortunately are ill-prepared to deter such aggression, or defeat it should deterrence fail.

¹ Hans M, Kristensen, Robert S. Norris, and Ivan Oelrich, *From Counterforce to Minimal Deterrence* (Washington, D.C.: Federation of American Scientists, April 2009), Occasional Paper No. 7, pp. 43-44, available at

https://nuke.fas.org/norris/nuc_10042901a.pdf.

² Mark B. Schneider, *How Many Nuclear Weapons Does Russia Have? The Size and Characteristics of the Russian Nuclear Stockpile, Occasional Paper*, Vol. 3, No. 8 (Fairfax, VA: National Institute Press, August 2023), available at https://nipp.org/wp-content/uploads/2023/09/Vol.-3-No.-8.pdf.

³ Ibid., pp. xvi, 78, 86, 91, 95.

⁴ Ibid., pp. 123-210.

⁵ Pavel Felgenhauer, "Putin Delivers More Restrained National Address as Moscow Announces Partial Troop Withdrawal," *Eurasia Daily Monitor*, Vol. 18, Iss. 65 (April 22, 2021), available at

https://jamestown.org/program/putin-delivers-more-restrainednational-address-as-moscow-announces-partial-troop-withdrawal/.

⁶ Hans M. Kristensen, Matt Korda, Eliana Johns and Mackenzie Knight, "Russian nuclear weapons, 2024," *Bulletin of the Atomic Scientists* 2024, Vol. 80, No. 2, p. 119, available at https://doi.org/10.1080/00963402.2024.2314437; Hans M. Kristensen and Matt Korda, "Russian Nuclear Weapons, 2022," *Bulletin of the Atomic Scientists*, Vol. 78, No. 2 (February 25, 2022), p. 100, available at

https://www.tandfonline.com/doi/epdf/10.1080/00963402.2022.2038907?needAccess=true.

⁷ U.S. Department of Defense, 2022 Nuclear Posture Review (Washington, D.C.: Department of Defense, 2022), p. 4, available at https://media.defense.gov/2022/Oct/27/2003103845/-1/-1/1/2022-NATIONAL-DEFENSE-STRATEGY-NPR-MDR.PDF; Idrees Ali, "Russia is Expanding its Nuclear Arsenal, U.S. Defense Secretary Says," Reuters, December 9, 2022, available at https://www.reuters.com/world/russia-is-expanding-its-nucleararsenal-us-defense-secretary-says-2022-12-09/; Office of the Director of National Intelligence, Annual Threat Assessment of the U.S. Intelligence Community (Washington, D.C.: Office of the Director of National Intelligence, February 6, 2023), pp. 12, 14, available at https://www.dni.gov/index.php/newsroom/reportspublications/reports-publications-2023/item/2363-2023-annual-threatassessment-of-the-u-s-intelligence-community.

⁸ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., pp. 118-120, 130, 132, 134.

⁹ Schneider, How Many Nuclear Weapons Does Russia Have? The Size and Characteristics of the Russian Nuclear Stockpile, op. cit.

¹⁰ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., p. 119.

¹¹ Pavel Podvig, "Multiple warheads of the Liner SLBM," *Russia Forces.org*, August 9, 2011, available at https://russianforces.org/blog/2011/08/multiple_warheads_of_the_liner.shtml; "Liner missile won't substitute



INFORMATION SERIES Issue No. 587 | May 20, 2024

Bulava - source," Rusnavy.com, August 10, 2011, available at http://rusnavy.com/news/newsofday/index.php?ELEMENT_ID=12673&sphrase_id=9111246. ¹² "Russia Finished Development of SLBM Liner," Rusnavy.com, February 24, 2012, available at http://rusnavy.com/news/navy/index.php?ELEMENT_ID=14406&sphrase_id=9111246. ¹³ Podvig, "Multiple warheads of the Liner SLBM," op. cit. 14 "How Many Nuclear Submarines Does Russia Have?," Sputnik News, December 19, 2022, available at https://sputniknews.com/20221205/how-many-nuclear-submarinesdoes-russia-have-1105034535.html. ¹⁵ Madelyn Creedon and Jon Kyl, et al., America's Strategic Posture (Alexandria, VA: Institute for Defense Analyses, 2023), p. 16, available at https://www.ida.org/research-and-publications/publications/all/a/am/americasstrategic-posture. ¹⁶ Mark B. Schneider, "The Death of the New START Treaty," Information Series, No. 560 (Fairfax, VA: National institute Press, August 7, 2023), available at https://nipp.org/information_series/mark-b-schneider-the-death-ofthe-new-start-treaty-no-560-august-7-2023/; Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., pp. 119-130, 132. ¹⁷ Mark B. Schneider, "The Most Serious Russian Violation of the New START Treaty Yet," Real Clear Defense, May 16, 2022, available at https://www.realcleardefense.com/articles/2022/05/16/the most serious russian violation of the new start tre aty_vet_832443.html; Schneider, How Many Nuclear Weapons Does Russia Have? The Size and Characteristics of the Russian Nuclear Stockpile, op. cit., pp. 116-118. 18 Ibid. ¹⁹ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., p. 128. ²⁰ Schneider, How Many Nuclear Weapons Does Russia Have? The Size and Characteristics of the Russian Nuclear Stockpile, op. cit., pp. 64-70. ²¹ Ibid., pp. 49-92, 123-210. ²² Ibid., p. 122. ²³ Rose Gottemoeller, as quoted in U.S. Congress, House of Representatives, The Importance of the New START Treaty (Washington, D.C.: Committee on Foreign Affairs, December 4, 2019), p. 61, available at https://www.congress.gov/116/meeting/house/110302/documents/CHRG-116hhrg38543.pdf. ²⁴ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., p. 118. ²⁵ Kristensen, Korda, and Reynolds, "Russian Nuclear Weapons, 2023," op. cit., p. 175. ²⁶ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., p. 134. ²⁷ Bill Gertz, "Russia Sharply Expanding Nuclear Arsenal, Upgrading Underground Facilities," Washington Free

Beacon, December 13, 2017, available at http://freebeacon.com/national-security/russia-sharplyexpanding-nuclear-arsenal-upgrading-underground-facilities/.

²⁸ Peter Fanta, Deputy Assistant Secretary of Defense for Nuclear Matters, speaking at the Naval Surface Warfare Center Crane Triad Symposium, August 23, 2019, mimeo.

²⁹ Hans Kristensen, Tweet, February 7, 2022, available at ttps://twitter.com/nukestrat/status/1490775556471861262.

³⁰ Bryan Bender, "Nuclear fears mount as Ukraine crisis deepens," *Politico*, January 27, 2022, available at https://www.politico.com/news/2022/01/27/nuclear-fears-mount-ukraine-crisis-deepens-00003088.

³¹ Pavel Felgenhauer, "Kremlin Overrules Own Defense and Foreign Policy Establishment on Arms Control," *Eurasia Daily Monitor*, Vol. 17, No. 149 (October 22, 2020), available at https://jamestown.org/program/kremlin-overrules-own-defense-andforeign-policy-establishment-on-arms-control/.

³² Mark B. Schneider, "Recent Developments in Russian Nuclear Forces," *Real Clear Defense*, January 16, 2024, available at



INFORMATION SERIES Issue No. 587 | May 20, 2024

https://www.realcleardefense.com/articles/2024/01/16/recent_developments_in_russian_nuclear_forces_1005120. html; Schneider, *How Many Nuclear Weapons Does Russia Have? The Size and Characteristics of the Russian Nuclear Stockpile*, op. cit., p. 201.

³³ Nicholas McEntyre and Ronny Reyes, "Putin warns of risk of nuclear war, says Moscow can strike Western targets," *New York Post*, February 29, 2024, available at https://nypost.com/2024/02/29/world-news/putin-warns-west-of-risk-of-nuclear-war-says-moscow-can-strike-western-targets/.

³⁴ Max Seddon and Chris Cook, "Leaked Russian Military Files Reveal Criteria for Nuclear Strike," *Financial Times*, February 28, 2024, available at https://www.ft.com/content/f18e6e1f-5c3d-4554-aee5-50a730b306b7.

³⁵ David E. Sanger, "Biden's Armageddon Moment: When Nuclear Detonation Seemed Possible in Ukraine," *The New York Times*, March 9, 2024, available at https://www.nytimes.com/2024/03/09/us/politics/biden-nuclear-russia-ukraine.html?smid=nytcore-ios-share&referringSource=articleShare.

³⁶ Siladitya Ray, "Putin Says Russia Is Ready For Nuclear War If Its Existence Or Independence Is Threatened," *Forbes*, March 13, 2024, available at https://www.forbes.com/sites/siladityaray/2024/03/13/putin-says-russia-is-ready-for-nuclear-war-if-its-existence-or-independence-is-threatened/?sh=144b90a375e8; "Russia ready to use nuclear weapons if threatened, Putin tells state media: In interview, Russian leader holds door open for talks on Ukraine," *The Associated Press*, March 13, 2024, available at https://www.cbc.ca/news/world/putin-nuclear-weapon-1.7142223.

³⁷ Armani Syed, "In First Post-Election Speech, Putin Threatens NATO With World War III," *Time.com*, March 18, 2024, available at https://time.com/6957938/russia-election-putin-speech/.

³⁸ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., p. 122.

³⁹ Mark B. Schneider, "Putin's New Nuclear Doctrine," *Real Clear Defense*, June 23, 2020, available at https://www.realcleardefense.com/articles/2020/06/23/putins_new_nuclear_doctrine_115405.html.

⁴⁰ The President of the Russian Federation, "Basic Principles of State Policy of the Russian Federation on Nuclear Deterrence," Foreign Ministry of the Russian Federation, June 8, 2020, available at

https://www.mid.ru/en/foreign_policy/international_safety/1434131/.

⁴¹ "Russia classifies information on pre-emptive nuclear strikes – military," *BBC Monitoring Former Soviet Union*, September 5, 2014, available at https://infoweb.newsbank.com/apps/news/document-view?p=WORLDNEWS&docref=news/15026981A8DD9FC8.

⁴² Seddon and Cook, "Leaked Russian Military Files Reveal Criteria for Nuclear Strike," op. cit.

⁴³ "Army; Closed Part of New Military Doctrine to Define Legal Aspects of Forces' Employment, Nuclear Weapons – Gen. Staff," *Interfax*, August 14, 2009 (Transcribed by World News Connection).

⁴⁴ David Nowak, "Report: New Russian military doctrine to allow preventative nuclear strikes." *The Canadian Press*, October 14, 2009, available at

https://dialog.proquest.com/professional/professionalnewsstand/docview/360095794/fulltext/18DB25146AB75A 85406/21?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=18DB25146AB75A85406/2& t:cp=maintain/resultcitationblocksbrief&t:zoneid=transactionalZone_dcb041fbb294b.

⁴⁵ "Russia says could use nuclear weapons," *NBC News*, January 20, 2008, available at https://www.nbcnews.com/id/wbna22743091.

⁴⁶ Mark B. Schneider, *The Nuclear Forces and Doctrine of the Russian Federation* (Fairfax, VA: National Institute Press, 2006), p. 3, available at https://nipp.org/wp-content/uploads/2021/05/Russian-nuclear-doctrine-NSF-for-print.pdf.

⁴⁷ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., p. 123.

⁴⁸ "Meeting of the Valdai International Discussion Club," *Kremlin.ru*, October 22, 2015, available at http://en.kremlin.ru/events/president/news/50548.

⁴⁹ Mark B. Schneider, "While Massing Troops Against Ukraine, Putin Threatens the U.S. National Command Authority," *Real Clear Defense*, December 15, 2021, available at



INFORMATION SERIES Issue No. 587 | May 20, 2024

https://www.realcleardefense.com/articles/2021/12/15/while_massing_troops_against_ukraine_putin_threatens_t he_us_national_command_authority_807894.html; "Putin warns new missiles could target 'decision-making centres'," *AFP*, February 20, 2019, available at https://www.france24.com/en/20190220-putin-warns-new-missiles-could-target-decision-making-centres.

⁵⁰ Mark B. Schneider, "Putin's Nuclear Firepower Demonstration in Support of His Invasion of Ukraine," *Real Clear Defense*, March 1, 2022, available at

https://www.realcleardefense.com/articles/2022/03/01/putins_nuclear_firepower_demonstration_in_support_of_ his_invasion_of_ukraine_819309.html; Shannon Bugos, "Putin Orders Russian Nuclear Weapons on Higher Alert," Arms Control Association, March 2022, available at https://www.armscontrol.org/act/2022-03/news/putin-ordersrussian-nuclear-weapons-higher-alert; Schneider, "Russian Use of Nuclear Coercion against NATO and Ukraine," op. cit.

⁵¹ Amanda Macias, "'Height of irresponsibility:' Blinken slams Putin's provocative rhetoric on nuclear weapons," *CNBC News*, March 2, 2024, available at https://www.cnbc.com/2022/03/02/blinken-slams-putins-provocative-rhetoric-on-nuclear-weapons.html.

⁵² Steve Holland and Andrea Shalal, "Putin misled by 'yes men' in military afraid to tell him the truth, White House and EU officials say," *Reuters*, March 31, 2022, available at https://www.reuters.com/world/putin-advisers-too-afraid-tell-him-truth-ukraine-us-official-2022-03-30/.

⁵³ Kristensen, Korda, Johns and Knight, "Russian nuclear weapons, 2024," op. cit., p. 123.

⁵⁴ "Putin revives long-haul bomber flights: [Final Edition]," *Star - Phoenix*, August 18, 2007, available at https://dialog.proquest.com/professional/professionalnewsstand/docview/348761697/fulltext/18DB28B126332691 07D/5?accountid=155509&accountid=155509&site=professionalnewsstand&t:ac=18DB28B12633269107D/1&t:cp=ma intain/resultcitationblocksbrief&t:zoneid=transactionalZone_dcb3a37dd40511.

⁵⁵ "Press Statement following the Peace Mission 2007 Counterterrorism Exercises and the Shanghai Cooperation Organisation Summit," *Kremlin.ru*, August 17, 2007, available at

http://www.en.kremlin.ru/events/president/transcripts/statements/24476/print.

⁵⁶ Jens Stoltenberg, "Adapting to a Changed Security Environment," Speech, Center for Strategic and International Studies, Washington, D.C., May 27, 2015, available at http://www.nato.int/cps/en/natohq/opinions_120166.htm.

⁵⁷ Con Coughlin, "Putin is now openly planning for war against Nato," *Telegraph.com*, March 21, 2024, available at https://www.telegraph.co.uk/news/2024/03/21/putin-now-openly-planning-for-war-against-nato/.

58 Creedon and Kyl, et al., America's Strategic Posture, op. cit., p. vi.

⁵⁹ Bill Gertz, "U.S. Indo-Pacific commander warns of growing danger of war over Taiwan," *The Washington Times*, March 21, 2024, available at https://www.washingtontimes.com/news/2024/mar/21/us-indo-pacific-commander-warns-of-growing-danger-/.

⁶⁰ Eric Mack, "Germany Intelligence: Russia Plotting NATO Attack in 5 Years," *Newsmax*, March 17, 2024, available at https://www.newsmax.com/newsfront/russia-nato-worldwar-iii/2024/03/17/id/1157550/.

The National Institute for Public Policy's *Information Series* is a periodic publication focusing on contemporary strategic issues affecting U.S. foreign and defense policy. It is a forum for promoting critical thinking on the evolving international security environment and how the dynamic geostrategic landscape affects U.S. national security. Contributors are recognized experts in the field of national security. National Institute for Public Policy would like to thank the Sarah Scaife Foundation for the generous support that made this *Information Series* possible.

The views in this *Information Series* are those of the author(s) and should not be construed as official U.S. Government policy, the official policy of the National Institute for Public Policy or any of its sponsors. For additional information



INFORMATION SERIES Issue No. 587 | May 20, 2024

about this publication or other publications by the National Institute Press, contact: Editor, National Institute Press, 9302 Lee Highway, Suite 750 | Fairfax, VA 22031 | (703) 293-9181 | www.nipp.org. For access to previous issues of the National Institute Press Information Series, please visit http://www.nipp.org/national-institutepress/informationseries/.

© National Institute Press, 2024